APPENDIX I

DATA VALIDATION REVIEWS

PART 2

2020

MEMORANDUM

TO: Project File **DATE:** February 5, 2020

FROM: Jessie Compeau

SUBJECT: Laboratory Data Validation Review

PROJECT: American Linen Data Validation

PROJECT #: 1413.001.02.501E

TASK: EIM Data Validation Level EPA2A for 1st Quarter 2020 – Groundwater Samples

LAB: Pace Sample Delivery Groups (SDGs): L1179348, L1179855, L1180338, L1181247, and L1181269

Forty-one (41) groundwater samples (including two field duplicate samples), one equipment blank, and four trip blanks were collected on January 14-16, and 20, 2020 as part of the Remedial Investigation (RI) first quarter of 2020 groundwater sampling event at the Former American Linen Supply Site, in Seattle, Washington. The samples were shipped and delivered to Pace Lab Sciences (Pace) of Mount Juliet, TN for laboratory analysis. Selected samples were analyzed for the following:

- Volatile organic compounds (VOCs) by United States Environmental Protection Agency (USEPA) Method 8260D;
- Total petroleum hydrocarbons as gasoline (TPH-Gx) by NWTPH-Gx per analytical method stipulated by Washington State Department of Ecology;
- VOCs (dissolved gases – methane, ethane, and ethene) by EPA SOP RSK 175;
- Alkalinity by Method 2320 B-2011;
- Anions (chloride, nitrate, and sulfate) by USEPA Method 9056A;
- Total Organic Carbon (TOC) by USEPA Method 9060A; and
- Metals (iron and manganese) by USEPA Method 6020B.

The first quarter of RI sampling was conducted January of 2020. Results are reported in multiple SDGs from Pace. Pace SDGs are reviewed in groups (less than 10 SDGs) for each data validation report. Group 1 analytical results are reported in SDGs L1179348, L1179855, L1180338, L1181247, and L1181269. The quality assurance review of the laboratory data associated with Group 1 is summarized below.

DATA QUALIFICATIONS

Guidelines established by USEPA for a limited data validation review of analytical data along with Pace control limit criteria were used to validate the data. The comments presented in this memorandum refer to the laboratory's performance in meeting the quality control criteria

outlined in the USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (USEPA, 2017) and USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Superfund Methods Data Review (USEPA, 2017). Following Guidelines, non-project-specific laboratory duplicates and matrix spike results were not evaluated as part of this data validation.

DATA VALIDATION

Completeness

All samples were collected and analyzed as requested with the following exception:

- SDG L1181247: A trip blank (TB-012020) is included on the COC but was not submitted. On January 21, 2020 PES confirmed that Pace should proceed without analyzing the trip blank.

- SDG L1181269: Pace was contacted on February 4, 2020 to review gasoline results for samples MW-156-012020 and MW-157-012020. On February 5, 2020 Pace reissued and revised report for SDG L1181269. The revised report includes sample narratives indicating “no discernible petroleum pattern” for two samples (MW-156-012020 and MW-157-012020). Refer to Compound Identification and Quantitation Limits for additional information.

Sample Collection and Preservation

Samples were collected in laboratory-supplied sample containers preserved as appropriate for the individual analyses conducted. The samples were packed on ice in coolers and delivered by courier to the analytical laboratory. The laboratory reported that the coolers were received at a cooler temperature less than the recommended temperature preservation of 6°C. Samples were received in good condition with the following discussion:

- SDG L1179348: Samples MW126-11420, MW-310-11420, MW108-11420, and MW-311-11420 were corrected per PES’s January 15, 2020 request to read MW126-**0**11420, MW-310-**0**11420, MW108-**0**11420, and MW-311-**0**11420. Request for NWTPHGx analysis on the trip blank (Trip-011420) was revised per PES’s January 15, 2020 request.

No data were qualified based upon the sample collection and preservation information.

Holding Times

USEPA Method 8260D:
All samples were analyzed for VOCs within the EPA recommended holding time of fourteen days for preserved waters from the date of collection. All holding time criteria are met.

NWTPH-Gx Method:
All samples were analyzed within the WA State recommended holding time of fourteen days for preserved waters from the date of sample collection. All holding time criteria are met.

Dissolved Gases (Methane, Ethane, and Ethene) by RSK 175:
All samples were analyzed within the WA State recommended holding time of fourteen days for preserved waters from the date of sample collection. All holding time criteria are met.

USEPA Method 6020B:
All samples were analyzed within the USEPA recommended holding time for iron and manganese of 180 days for preserved waters from the date of sample collection. All holding time criteria are met.

General Chemistry (Alkalinity, Chloride, Sulfate, Nitrate, and TOC):
All samples were analyzed within the USEPA recommended holding time for alkalinity (14 days), chloride (28 days), sulfate (28 days), and nitrate (48 hours), and TOC (28 days) for preserved waters from the date of sample collection. All holding time criteria are met.

Initial and Continuing Calibration

Calibration data for this project are not required for this deliverable however Pace's notes indicate the following:

- Multiple SDGs - *USEPA Method 8260D:* Continuing calibration verification (CCV) issues were noted by Pace for multiple compounds associated with analytical batches in each SDG. These compounds are qualified by the laboratory "J0" to indicate that percent difference CCV is outside of laboratory acceptance criteria. **Associated sample results with laboratory qualified (J0) results are estimated and qualified (J/UJ) unless qualified as not detected (U) due to blank contamination.** Refer to method, equipment, and trip blank sections for additional information.

Method Blank Results

USEPA Method 8260D:
Laboratory method blanks were included with the analytical batches per method requirement. The target analytes were not detected in the method blanks at or above the reporting detection limits (RDLs) with the following exceptions:

- SDG L1179348 – Analytical batch WG1411916: Low levels of hexachloro-1,3-butadiene, naphthalene, and 1,2,3-trichlorobenzene are detected in the method blank. No action is taken for hexachloro-1,3-butadiene and 1,2,3-trichlorobenzene as these are not detected in the associated samples. **Associated naphthalene detection in sample MW126-011420 is below the RDL and qualified as not detected (U).**

- SDG L1179348 – Analytical batch WG1412367: Low levels of hexachloro-1,3-butadiene, naphthalene, 1,2,3-trichlorobenzene, and 1,2,4-trimethylbenzene are detected in the method blank. No action is taken for hexachloro-1,3-butadiene and 1,2,4-trimethylbenzene as these are not detected in the associated samples. **The associated naphthalene detection in sample FMW-141-011420 is below the RDL and qualified as not detected (U).**

- SDG L1180338 – Analytical batch WG1413456: Low levels of hexachloro-1,3-butadiene, naphthalene, and 1,2,3-trichlorobenzene are detected in the method blank. No action is taken for hexachloro-1,3-butadiene, naphthalene, and 1,2,3-trichlorobenzene as these are either not detected in the associated samples or detections are far greater than the RDL.

- SDG L1181247 – Analytical batch WG1414927: Low levels of naphthalene, and 1,2,3-trichlorobenzene are detected in the method blank. No action is taken for 1,2,3-trichlorobenzene as this compound is not detected in the associated samples. **The associated naphthalene detection in sample MW-214-012020 is below the RDL and qualified as not detected (U).**

- SDG L1181269 – Analytical batch WG1414927: Low levels of naphthalene and 1,2,3-trichlorobenzene are detected in the method blank. No action is taken for naphthalene and 1,2,3-trichlorobenzene as these are not detected in the associated samples.

NWTPH-Gx Method:
Laboratory method blanks were included with the analytical batches per method requirement. The target analyte (gasoline) was not detected in the method blanks at or above the RDLs with one exception:

- SDG L1179348 – Analytical batch WG1412244: A low level gasoline concentration is detected in the method blank. **The associated gasoline range organic (GRO) detection in sample MW106-011420 is below the RDL and qualified as not detected (U).**

- SDGs L1179348 – Analytical batch WG1413155: Low levels of gasoline are detected in the method and associated trip blank. No action is taken on this basis.

- SDG L1179855 – Analytical batch WG1413155: A low level gasoline concentration is detected in the method blank. No action is taken since gasoline is not detected in the associated samples.

- SDG L1179855 – Analytical batch WG1414185: A low level gasoline (C6-C12) concentration is detected in the method blank and associated trip blank. Quality control gasoline descriptor is C6-C12 whereas the associated result is reported as gasoline range organics-NWTPH. No action was taken other than to notify Pace on the minor discrepancy. No action was taken due to blank contamination.

- SDG L1180338 – Analytical batch WG1413246: A low level gasoline concentration is detected in the method blank and associated trip blank. **The associated gasoline range organic (GRO) detection in the associated sample MW-306-011620 is below the RDL and qualified as not detected (U) due to blank contamination.** No action was taken on the associated trip blank due to method blank contamination.

- SDG L1180338 – Analytical batch WG1414185: A low level gasoline (C6-C12) concentration is detected in the method blank and associated equipment blank. Quality control gasoline descriptor is C6-C12 whereas the associated result is reported as gasoline range organics-NWTPH. No action is taken other than to notify Pace on the minor discrepancy. No action was taken on the associated equipment blank due to method blank contamination.

Dissolved Gases (Methane, Ethane, and Ethene) by RSK 175:
Laboratory method blanks were included with the analytical batches per method requirement. The target analytes (dissolved gases) are not detected in the method blanks at or above the RDLs.

USEPA Method 6020B and General Chemistry (Alkalinity, Chloride, Sulfate, Nitrate, and TOC):
Laboratory method blanks were included with the analytical batches per method requirement. The target analytes were detected in the method blanks below the RDLs. Per Guidance, no action is taken for blank detections less than the RDL when associated sample detections are greater than the RDL. General chemistry and metal blank detections are shown below:

SDG	Batch	Method	Analyte	Method Blank Result	Qualifier	RDL	Units	Associated Result(s) Qualified
L1179348	WG1411429	SM2320B	Alkalinity as CaCO3, Total	3220	J	20000	µg/L	NO
L1179348	WG1411668	9060A	TOC	267	J	1000	µg/L	NO
L1179348	WG1411560	6020B	Manganese	0.406	J	5.00	µg/L	NO
L1179855	WG1412383	SM2320B	Alkalinity as CaCO3, Total	4000	J	20000	µg/L	NO
L1179855	WG1412539	9060A	TOC	219	J	1000	µg/L	NO
L1180338	WG1413034	SM2320B	Alkalinity as CaCO3, Total	4040	J	20000	µg/L	NO
L1180338	WG1413982	9060A	TOC	471	J	1000	µg/L	NO
L1181247	WG1414762	SM2320B	Alkalinity as CaCO3, Total	4420	J	20000	µg/L	NO
L1181247	WG1414453	9056A	Chloride	284	J	1000	µg/L	NO
L1181247	WG1414453	9056A	Sulfate	530	J	5000	µg/L	**YES**
L1181247	WG1415857	9060A	TOC	429	J	1000	µg/L	NO
L1181247	WG1416628	9060A	TOC	420	J	1000	µg/L	NO
L1181269	WG1414762	SM2320B	Alkalinity as CaCO3, Total	4420	J	20000	µg/L	NO
L1181269	WG1414453	9056A	Chloride	284	J	1000	µg/L	NO
L1181269	WG1414453	9056A	Sulfate	530	J	5000	µg/L	NO
L1181269	WG1416628	9060A	TOC	420	J	1000	µg/L	NO

Target analytes were detected in method blanks at low levels with no impact to the associated samples with the following exception:

- SDG L1181247 – Analytical batch WG1414453: A low level of sulfate is detected in the method blank. **Sample MW128-012020 sulfate detection is below the RDL and qualified as not detected (U).**

Trip Blank Results

USEPA Method 8260D and NWTPH-Gx:
Four trip blanks were collected and analyzed. The target analytes (gasoline and VOCs) were not detected in the trip blanks at or above the RDLs with the following exceptions:

- SDG L1179348: Low levels of gasoline and acetone are detected in the trip blank (Trip-011420). **A low level of gasoline is detected in the associated sample MW106-011420 and is qualified as not detected (U) due to method or trip blank contamination. Associated acetone detections in two samples (MW126-011420 and MW-311-011420) and acetone detections are qualified as not detected (U) due to blank contamination.**

- SDG L1179855: A low level of gasoline is detected in the trip blank (TB-011520). No action is taken since gasoline is not detected in the associated samples.

- SDG L1180338: A low level of gasoline is detected in the trip blank (TB-011620). **A low level of gasoline is detected in the associated sample MW-306-011620 and is qualified as not detected (U) due to blank contamination.**

- SDG L1181269: A low level of acetone is detected in the trip blank (TB-012020). The a**ssociated acetone detection in sample MW-156-012020 is qualified as not detected (U) due to blank contamination.**

Field, Rinsate, or Equipment Blank Results

All Analytical Methods:
Equipment blank (EQ-011620 with SDG L1180338) is associated with six samples (MW-306-011620, MW110-011620, MW-316-011620, MW111-011620, MW103-011620, and MW-319-011620). Low levels of gasoline, acetone and chloroform were detected in the equipment blank as well as low levels of TOC, metals (iron and manganese), and alkalinity. No action is taken for low levels of TOC, metals, and alkalinity detections since amounts in the associated samples are far greater than the detections in the equipment blank. No action was taken for chloroform or acetone as these compounds are not detected in the associated samples. Gasoline was not detected in the associated samples with one exception:

- A l**ow-level gasoline detection in the associated sample MW-306-011620 is qualified as not detected (U) due to trip, method, or equipment blank contamination.**

Field Duplicate Analyses

Field duplicate pairs were submitted and analyzed. Field duplicate sample pairs are as follows:

- SDG L1179855: Samples MW-314-011520 and MW-922-011520
- SDG L1181269: Samples BB-8-022020 and MW-923-012020

Target analyte results are comparable and within a relative percent difference (RPD) of 30% (± 1x RDL for groundwater results <5X the RDL) for the field duplicate pair with the following exceptions:

- **SDG L1179855: Samples MW-314-011520 and MW-922-011520 RPD result for ethane is greater than 30% and qualified as estimated (J/UJ).**

Laboratory Duplicate Analyses

USEPA Method 8260D:
Laboratory duplicate samples were not analyzed. Refer to laboratory control sample/sample duplicate (LCS/LCSD) or matrix spike/matrix spike duplicate (MS/MSD) results for precision data.

NWTPH-Gx Method:
Laboratory duplicate samples were not analyzed. Refer to laboratory control sample/sample duplicate (LCS/LCSD) or matrix spike/matrix spike duplicate (MS/MSD) results for precision data. In some cases, only LCS data are available (SDGs L1179348, L1179855, and L1181269). No action is taken other than note that precision data are not available for several analytical batches.

Dissolved Gases (Methane, Ethane, and Ethene) by RSK 175:
Laboratory duplicate sample analyses were performed on client and non-client samples within the analytical batches. The primary/duplicate RPDs for dissolved gas analyses are within the laboratory control limit of 20%.

USEPA Method 6020B:
Laboratory duplicate samples were not analyzed. Refer to LCS/LCSD or MS/MSD results for precision data.

General Chemistry (Alkalinity, Chloride, Sulfate, Nitrate, and TOC):
Laboratory duplicate sample analyses were performed on client samples and/or on non-client samples. The primary/duplicate RPDs for general chemistry parameters are within the laboratory control RPD limits or ± 1x RDL for groundwater results <5X the RDL.

Surrogate Recoveries

USEPA Method 8260D:
The surrogate recovery results for the samples, laboratory control samples, matrix spike samples, and the blanks are within the laboratory surrogate control limits for all the analyses.

NWTPH-Gx Method:
The surrogate recovery results for the samples, laboratory control samples, matrix spike samples, and the blanks are within the laboratory surrogate control limits for all analyses.

Laboratory Control Samples

USEPA Method 8260D:
Laboratory control sample/laboratory control sample duplicate (LCS/LCSD) or laboratory control sample (LCS) were analyzed by USEPA Method 8260D method. The LCS % Rs or LCS/LCSD % Rs and RPDs for the all target compounds are within the laboratory control criteria for waters with the following discussion:

- SDG L1179855 - Analytical batch WG1412735: LCS % recoveries for naphthalene and 1,2,3-trichlorobenzene are above laboratory acceptance criteria and laboratory qualified

(J4). No action is needed because these compounds are not detected in the associated samples.

- SDG L1180338 - Analytical batch WG1413456: LCS % recovery for n-hexane is above laboratory acceptance criteria and laboratory qualified (J4). No action is needed for n-hexane as it is not detected in the associated samples.

NWTPH-Gx Method:
The LCS % Rs or LCS/LCSD % Rs and RPDs for the target compound (gasoline) are within the laboratory control criteria for waters.

Dissolved Gases (Methane, Ethane, and Ethene) by RSK 175:
The LCS/LCSD % Rs and RPDs for the target compound (dissolved gases) are within the laboratory control criteria for waters.

USEPA Method 6020B:
The LCS/LCSD % Rs and RPDs for the target compound (iron and manganese) are within the laboratory control criteria for waters.

General Chemistry (Alkalinity, Chloride, Sulfate, Nitrate, and TOC):
The LCS % Rs for general chemistry parameters are within the laboratory control criteria for waters.

Matrix Spike/Matrix Spike Duplicates

USEPA Method 8260D:
Matrix spike/matrix spike duplicate (MS/MSD) analyses were performed on non-client samples associated with SDG L1179855. Matrix spike analysis was performed on a non-client sample and matrix spike duplicate results are laboratory qualified (J5) to indicate that the recovery is high due to interference. No action is taken in this case since the spike was performed on a non-client sample. Refer to LCS/LCSD results for accuracy and precision data.

NWTPH-Gx Method:
MS/MSD analyses were performed on a non-client sample within one of the analytical batches. The MS/MSD % Rs and RPD were acceptable and within laboratory control limit criteria for water samples. Refer to LCS/LCSD results for accuracy and precision data.

Dissolved Gases (Methane, Ethane, and Ethene) by RSK 175:
MS/MSD analyses were not performed. Refer to LCS results and field duplicate sample for accuracy and precision data.

USEPA Method 6020B:
MS/MSD analyses were performed on client and/or non-client samples within the analytical batches. The MS/MSD % Rs and RPD were acceptable and within laboratory control limit criteria for water samples with the following discussion:

- SDG L1180338: Matrix spike analysis was performed on client sample MW110-011620 and manganese MS/MSD recoveries are laboratory qualified (V) to indicate that the sample amount is greater than four times the spike amount. Per Guidance, no action is necessary. Refer to LCS/LCSD results for accuracy and precision data.

General Chemistry (Alkalinity, Chloride, Sulfate, Nitrate, and TOC):
MS or MS/MSD analyses were performed on client and/or non-client samples within the analytical batches. In cases where MS/MSD spike analyses are not performed refer to LCS/LCSD or laboratory duplicate data for accuracy and precision data. The MS/MSD % Rs and RPDs are acceptable and within laboratory control limit criteria for water samples with the following discussions:

- SDG L1179348: Sulfate spike analysis was performed on sample FMW-129-011420. MS/MSD recoveries for sulfate are laboratory qualified (E) because the spiked amount exceeded the upper limit of the calibration limit. No action is taken other than to note this.

- SDG L1179348: Chloride and sulfate spike analysis was performed on sample MW126-011420. MS recovery for chloride is laboratory qualified (E) because the spiked amount exceeded the upper limit calibration limit. MS recovery for sulfate is laboratory qualified (E, V) because the amount exceeded the upper calibration limit and sample concentration is greater than four times the spike amount. No action is taken other than to note this.

- SDG L1179855: Chloride spike analysis was performed on sample associated with another client SDG (SDG L1179880). MS recovery for chloride is laboratory qualified (E) because the spiked amount exceeded the upper calibration limit. No action is taken other than to note this.

- SDG L1179855: Sulfate spike analysis was performed on sample MW-307-011520. MS recovery for sulfate is laboratory qualified (E) because the spiked amount exceeded the upper calibration limit. No action is taken other than to note this.

- SDG L1181247: Sulfate spike analysis was performed on a non-client sample within the analytical batch. MS recovery for sulfate is laboratory qualified (E) because the spiked amount exceeded the upper calibration limit. No action is taken other than to note this.

Other Quality Control Issues

No laboratory quality control issues were identified in the laboratory report with the following discussions:

- Multiple SDGs: Selected sample narratives for alkalinity results indicate that several sample containers had some headspace and exposure to air may have impacted the reported results. No action was taken other than to note this.

- Electronic data deliverables (EDDs) for these SDGs were provided by the laboratory and data validator qualifiers were entered. In some cases, different chemical synonyms are used between the EDD and the hardcopy however associated Chemical Abstracts Service (CAS) numbers are provided in the EDD to confirm chemical identifications.

Compound Identification and Quantitation Limits

Results of the analyses were reported based on laboratory RDLs for all compounds. RDLs for selected compounds are elevated due to method-required dilutions. No action is taken other than to note this.

Gasoline and gasoline range organics are analyzed for via Volatile Organic Compounds (GC) by Washington State Method NWTPHGx (using a gas chromatograph/flame ionization detector (GC/FID)) and Pace reported gasoline range organic-NWTPH results. Several chlorinated VOC compounds (including cis-1,2-dichloroethene, trans-1,2-dichloroethene, trichloroethene, tetrachloroethene, and vinyl chloride) elute within the gasoline range organics (GRO) retention time range as specified by Washington State (detections falling between the toluene and dodecane range).

Non-petroleum organics (e.g. chlorinated VOC compounds) eluting within the gasoline range contribute to the GRO result and GRO results are likely biased high (J+). PES requested that Pace evaluate chromatograms associated with positive sample detections to confirm the potential presence of gasoline. Per PES's request Pace reviewed selected sample chromatograms against the gasoline standard chromatograms and assigned "no discernible petroleum pattern to GRO results associated with this Task. PES assigned an additional project level qualifier (Z) to GRO results when the chromatogram for the sample does not match a discernible petroleum pattern. Associated chromatograms and qualified samples for this Task are as follows:

Sample ID	Laboratory Identification	Gasoline Range Organic Result (µg/L)	DV Qualifier	Data Validation Comments	Pace Chromatogram Review Notes
MW-156-012020	L1181269-02	2160	Z, J+	Elevated chlorinated VOCs detected within the GRO elution range	No discernible petroleum pattern
MW-157-012020	L1181269-03	1650	Z, J+	Elevated chlorinated VOCs detected within the GRO elution range	No discernible petroleum pattern

Project level qualifiers have been included to the PES's project database (Epiphany) as (ZJ+). Washington State EIM valid values were reviewed. In this case no Washington State EIM valid value descriptor is ideal and the default estimated value (J) has been selected as the best match to qualify GRO (ZJ+) data.

Data Assessment

The laboratory data reported for this project were reviewed based on the criteria outlined in:

- USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (USEPA, 2017); and
- USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Superfund Methods Data Review (USEPA, 2017).

Data qualifiers are assigned and laboratory report pages with qualifiers are attached. All data, including qualified data, are judged to be acceptable for their intended use.

Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	199000		2710	20000	1	01/15/2020 18:21	WG1411429

Sample Narrative:

L1179348-01 WG1411429: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	7340		51.9	1000	1	01/15/2020 20:22	WG1411144
Nitrate	U		22.7	100	1	01/15/2020 20:22	WG1411144
Sulfate	2830	J	77.4	5000	1	01/15/2020 20:22	WG1411144

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	4450		102	1000	1	01/15/2020 22:49	WG1411668

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	372		15.0	100	1	01/16/2020 12:37	WG1411560
Manganese	326		0.250	5.00	1	01/16/2020 12:37	WG1411560

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	292		0.287	0.678	1	01/16/2020 13:22	WG1411726
Ethane	U		0.296	1.29	1	01/16/2020 13:22	WG1411726
Ethene	U		0.422	1.27	1	01/16/2020 13:22	WG1411726

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	4.16 U	J	1.05	25.0	1	01/15/2020 20:41	WG1411916
Acrylonitrile	U		0.873	5.00	1	01/15/2020 20:41	WG1411916
Benzene	U		0.0896	0.500	1	01/15/2020 20:41	WG1411916
Bromobenzene	U		0.133	0.500	1	01/15/2020 20:41	WG1411916
Bromodichloromethane	U		0.0800	0.500	1	01/15/2020 20:41	WG1411916
Bromochloromethane	U		0.145	0.500	1	01/15/2020 20:41	WG1411916
Bromoform	U		0.186	0.500	1	01/15/2020 20:41	WG1411916
Bromomethane	U		0.157	2.50	1	01/15/2020 20:41	WG1411916
n-Butylbenzene	U		0.143	0.500	1	01/15/2020 20:41	WG1411916
sec-Butylbenzene	U		0.134	0.500	1	01/15/2020 20:41	WG1411916
tert-Butylbenzene	U		0.183	0.500	1	01/15/2020 20:41	WG1411916
Carbon disulfide	U		0.101	0.500	1	01/15/2020 20:41	WG1411916
Carbon tetrachloride	U		0.159	0.500	1	01/15/2020 20:41	WG1411916
Chlorobenzene	U		0.140	0.500	1	01/15/2020 20:41	WG1411916
Chlorodibromomethane	U		0.128	0.500	1	01/15/2020 20:41	WG1411916
Chloroethane	U		0.141	2.50	1	01/15/2020 20:41	WG1411916
Chloroform	U		0.0860	0.500	1	01/15/2020 20:41	WG1411916
Chloromethane	U		0.153	1.25	1	01/15/2020 20:41	WG1411916
2-Chlorotoluene	U		0.111	0.500	1	01/15/2020 20:41	WG1411916
4-Chlorotoluene	U		0.0972	0.500	1	01/15/2020 20:41	WG1411916

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,2-Dibromo-3-Chloropropane	U UJ	J0	0.325	2.50	1	01/15/2020 20:41	WG1411916
1,2-Dibromoethane	U		0.193	0.500	1	01/15/2020 20:41	WG1411916
Dibromomethane	U		0.117	0.500	1	01/15/2020 20:41	WG1411916
1,2-Dichlorobenzene	U		0.101	0.500	1	01/15/2020 20:41	WG1411916
1,3-Dichlorobenzene	U		0.130	0.500	1	01/15/2020 20:41	WG1411916
1,4-Dichlorobenzene	U		0.121	0.500	1	01/15/2020 20:41	WG1411916
Dichlorodifluoromethane	U		0.127	2.50	1	01/15/2020 20:41	WG1411916
1,1-Dichloroethane	U		0.114	0.500	1	01/15/2020 20:41	WG1411916
1,2-Dichloroethane	U		0.108	0.500	1	01/15/2020 20:41	WG1411916
1,1-Dichloroethene	U		0.188	0.500	1	01/15/2020 20:41	WG1411916
cis-1,2-Dichloroethene	U		0.0933	0.500	1	01/15/2020 20:41	WG1411916
trans-1,2-Dichloroethene	U		0.152	0.500	1	01/15/2020 20:41	WG1411916
1,2-Dichloropropane	U		0.190	0.500	1	01/15/2020 20:41	WG1411916
1,1-Dichloropropene	U		0.128	0.500	1	01/15/2020 20:41	WG1411916
1,3-Dichloropropane	U		0.147	1.00	1	01/15/2020 20:41	WG1411916
cis-1,3-Dichloropropene	U		0.0976	0.500	1	01/15/2020 20:41	WG1411916
trans-1,3-Dichloropropene	U		0.222	0.500	1	01/15/2020 20:41	WG1411916
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	01/15/2020 20:41	WG1411916
2,2-Dichloropropane	U		0.0929	0.500	1	01/15/2020 20:41	WG1411916
Di-isopropyl ether	U		0.0924	0.500	1	01/15/2020 20:41	WG1411916
Ethylbenzene	0.162	J	0.158	0.500	1	01/15/2020 20:41	WG1411916
Hexachloro-1,3-butadiene	U		0.157	1.00	1	01/15/2020 20:41	WG1411916
2-Hexanone	U		0.757	5.00	1	01/15/2020 20:41	WG1411916
n-Hexane	U		0.305	5.00	1	01/15/2020 20:41	WG1411916
Iodomethane	U		0.377	10.0	1	01/15/2020 20:41	WG1411916
Isopropylbenzene	U		0.126	0.500	1	01/15/2020 20:41	WG1411916
p-Isopropyltoluene	U		0.138	0.500	1	01/15/2020 20:41	WG1411916
2-Butanone (MEK)	U		1.28	5.00	1	01/15/2020 20:41	WG1411916
Methylene Chloride	U		1.07	2.50	1	01/15/2020 20:41	WG1411916
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	01/15/2020 20:41	WG1411916
Methyl tert-butyl ether	U		0.102	0.500	1	01/15/2020 20:41	WG1411916
Naphthalene	1.09 U	~~B J J0~~	0.174	2.50	1	01/15/2020 20:41	WG1411916
n-Propylbenzene	U		0.162	0.500	1	01/15/2020 20:41	WG1411916
Styrene	U		0.117	0.500	1	01/15/2020 20:41	WG1411916
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	01/15/2020 20:41	WG1411916
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	01/15/2020 20:41	WG1411916
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	01/15/2020 20:41	WG1411916
Tetrachloroethene	U		0.199	0.500	1	01/15/2020 20:41	WG1411916
Toluene	U		0.412	0.500	1	01/15/2020 20:41	WG1411916
1,2,3-Trichlorobenzene	U UJ	J0	0.164	0.500	1	01/15/2020 20:41	WG1411916
1,2,4-Trichlorobenzene	U		0.355	0.500	1	01/15/2020 20:41	WG1411916
1,1,1-Trichloroethane	U		0.0940	0.500	1	01/15/2020 20:41	WG1411916
1,1,2-Trichloroethane	U		0.186	0.500	1	01/15/2020 20:41	WG1411916
Trichloroethene	U		0.153	0.500	1	01/15/2020 20:41	WG1411916
Trichlorofluoromethane	U		0.130	2.50	1	01/15/2020 20:41	WG1411916
1,2,3-Trichloropropane	U		0.247	2.50	1	01/15/2020 20:41	WG1411916
1,2,4-Trimethylbenzene	0.291	J	0.123	0.500	1	01/15/2020 20:41	WG1411916
1,2,3-Trimethylbenzene	0.199	J	0.0739	0.500	1	01/15/2020 20:41	WG1411916
1,3,5-Trimethylbenzene	U		0.124	0.500	1	01/15/2020 20:41	WG1411916
Vinyl acetate	U		0.645	5.00	1	01/15/2020 20:41	WG1411916
Vinyl chloride	U		0.118	0.500	1	01/15/2020 20:41	WG1411916
Xylenes, Total	0.441	J	0.316	1.50	1	01/15/2020 20:41	WG1411916
(S) Toluene-d8	*104*			*80.0-120*		*01/15/2020 20:41*	WG1411916
(S) 4-Bromofluorobenzene	*94.8*			*77.0-126*		*01/15/2020 20:41*	WG1411916
(S) 1,2-Dichloroethane-d4	*106*			*70.0-130*		*01/15/2020 20:41*	WG1411916

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Wet Chemistry by Method 2320 B-2011

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Alkalinity	237000		2710	20000	1	01/15/2020 18:29	WG1411429

Sample Narrative:

L1179348-02 WG1411429: Endpoint pH 4.5

Wet Chemistry by Method 9056A

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Chloride	19000		51.9	1000	1	01/15/2020 20:36	WG1411144
Nitrate	U		22.7	100	1	01/15/2020 20:36	WG1411144
Sulfate	26800		77.4	5000	1	01/15/2020 20:36	WG1411144

Wet Chemistry by Method 9060A

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
TOC (Total Organic Carbon)	4580		102	1000	1	01/15/2020 23:09	WG1411668

Metals (ICPMS) by Method 6020B

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Iron	9200		15.0	100	1	01/16/2020 13:15	WG1411560
Manganese	2280		0.250	5.00	1	01/16/2020 13:15	WG1411560

Volatile Organic Compounds (GC) by Method RSK175

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Methane	396		0.287	0.678	1	01/16/2020 13:25	WG1411726
Ethane	U		0.296	1.29	1	01/16/2020 13:25	WG1411726
Ethene	U		0.422	1.27	1	01/16/2020 13:25	WG1411726

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

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Acetone	U		1.05	25.0	1	01/15/2020 21:01	WG1411916
Acrylonitrile	U		0.873	5.00	1	01/15/2020 21:01	WG1411916
Benzene	U		0.0896	0.500	1	01/15/2020 21:01	WG1411916
Bromobenzene	U		0.133	0.500	1	01/15/2020 21:01	WG1411916
Bromodichloromethane	U		0.0800	0.500	1	01/15/2020 21:01	WG1411916
Bromochloromethane	U		0.145	0.500	1	01/15/2020 21:01	WG1411916
Bromoform	U		0.186	0.500	1	01/15/2020 21:01	WG1411916
Bromomethane	U		0.157	2.50	1	01/15/2020 21:01	WG1411916
n-Butylbenzene	U		0.143	0.500	1	01/15/2020 21:01	WG1411916
sec-Butylbenzene	U		0.134	0.500	1	01/15/2020 21:01	WG1411916
tert-Butylbenzene	U		0.183	0.500	1	01/15/2020 21:01	WG1411916
Carbon disulfide	U		0.101	0.500	1	01/15/2020 21:01	WG1411916
Carbon tetrachloride	U		0.159	0.500	1	01/15/2020 21:01	WG1411916
Chlorobenzene	U		0.140	0.500	1	01/15/2020 21:01	WG1411916
Chlorodibromomethane	U		0.128	0.500	1	01/15/2020 21:01	WG1411916
Chloroethane	U		0.141	2.50	1	01/15/2020 21:01	WG1411916
Chloroform	U		0.0860	0.500	1	01/15/2020 21:01	WG1411916
Chloromethane	U		0.153	1.25	1	01/15/2020 21:01	WG1411916
2-Chlorotoluene	U		0.111	0.500	1	01/15/2020 21:01	WG1411916
4-Chlorotoluene	U		0.0972	0.500	1	01/15/2020 21:01	WG1411916

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,2-Dibromo-3-Chloropropane	U	UJ J0	0.325	2.50	1	01/15/2020 21:01	WG1411916
1,2-Dibromoethane	U		0.193	0.500	1	01/15/2020 21:01	WG1411916
Dibromomethane	U		0.117	0.500	1	01/15/2020 21:01	WG1411916
1,2-Dichlorobenzene	U		0.101	0.500	1	01/15/2020 21:01	WG1411916
1,3-Dichlorobenzene	U		0.130	0.500	1	01/15/2020 21:01	WG1411916
1,4-Dichlorobenzene	U		0.121	0.500	1	01/15/2020 21:01	WG1411916
Dichlorodifluoromethane	U		0.127	2.50	1	01/15/2020 21:01	WG1411916
1,1-Dichloroethane	U		0.114	0.500	1	01/15/2020 21:01	WG1411916
1,2-Dichloroethane	U		0.108	0.500	1	01/15/2020 21:01	WG1411916
1,1-Dichloroethene	U		0.188	0.500	1	01/15/2020 21:01	WG1411916
cis-1,2-Dichloroethene	9.63		0.0933	0.500	1	01/15/2020 21:01	WG1411916
trans-1,2-Dichloroethene	U		0.152	0.500	1	01/15/2020 21:01	WG1411916
1,2-Dichloropropane	U		0.190	0.500	1	01/15/2020 21:01	WG1411916
1,1-Dichloropropene	U		0.128	0.500	1	01/15/2020 21:01	WG1411916
1,3-Dichloropropane	U		0.147	1.00	1	01/15/2020 21:01	WG1411916
cis-1,3-Dichloropropene	U		0.0976	0.500	1	01/15/2020 21:01	WG1411916
trans-1,3-Dichloropropene	U		0.222	0.500	1	01/15/2020 21:01	WG1411916
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	01/15/2020 21:01	WG1411916
2,2-Dichloropropane	U		0.0929	0.500	1	01/15/2020 21:01	WG1411916
Di-isopropyl ether	U		0.0924	0.500	1	01/15/2020 21:01	WG1411916
Ethylbenzene	U		0.158	0.500	1	01/15/2020 21:01	WG1411916
Hexachloro-1,3-butadiene	U		0.157	1.00	1	01/15/2020 21:01	WG1411916
2-Hexanone	U		0.757	5.00	1	01/15/2020 21:01	WG1411916
n-Hexane	U		0.305	5.00	1	01/15/2020 21:01	WG1411916
Iodomethane	U		0.377	10.0	1	01/15/2020 21:01	WG1411916
Isopropylbenzene	U		0.126	0.500	1	01/15/2020 21:01	WG1411916
p-Isopropyltoluene	U		0.138	0.500	1	01/15/2020 21:01	WG1411916
2-Butanone (MEK)	U		1.28	5.00	1	01/15/2020 21:01	WG1411916
Methylene Chloride	U		1.07	2.50	1	01/15/2020 21:01	WG1411916
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	01/15/2020 21:01	WG1411916
Methyl tert-butyl ether	U		0.102	0.500	1	01/15/2020 21:01	WG1411916
Naphthalene	U	UJ J0	0.174	2.50	1	01/15/2020 21:01	WG1411916
n-Propylbenzene	U		0.162	0.500	1	01/15/2020 21:01	WG1411916
Styrene	U		0.117	0.500	1	01/15/2020 21:01	WG1411916
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	01/15/2020 21:01	WG1411916
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	01/15/2020 21:01	WG1411916
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	01/15/2020 21:01	WG1411916
Tetrachloroethene	5.90		0.199	0.500	1	01/15/2020 21:01	WG1411916
Toluene	U		0.412	0.500	1	01/15/2020 21:01	WG1411916
1,2,3-Trichlorobenzene	U	UJ J0	0.164	0.500	1	01/15/2020 21:01	WG1411916
1,2,4-Trichlorobenzene	U		0.355	0.500	1	01/15/2020 21:01	WG1411916
1,1,1-Trichloroethane	U		0.0940	0.500	1	01/15/2020 21:01	WG1411916
1,1,2-Trichloroethane	U		0.186	0.500	1	01/15/2020 21:01	WG1411916
Trichloroethene	5.81		0.153	0.500	1	01/15/2020 21:01	WG1411916
Trichlorofluoromethane	U		0.130	2.50	1	01/15/2020 21:01	WG1411916
1,2,3-Trichloropropane	U		0.247	2.50	1	01/15/2020 21:01	WG1411916
1,2,4-Trimethylbenzene	U		0.123	0.500	1	01/15/2020 21:01	WG1411916
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	01/15/2020 21:01	WG1411916
1,3,5-Trimethylbenzene	U		0.124	0.500	1	01/15/2020 21:01	WG1411916
Vinyl acetate	U		0.645	5.00	1	01/15/2020 21:01	WG1411916
Vinyl chloride	U		0.118	0.500	1	01/15/2020 21:01	WG1411916
Xylenes, Total	U		0.316	1.50	1	01/15/2020 21:01	WG1411916
(S) Toluene-d8	*102*			*80.0-120*		*01/15/2020 21:01*	WG1411916
(S) 4-Bromofluorobenzene	*91.9*			*77.0-126*		*01/15/2020 21:01*	WG1411916
(S) 1,2-Dichloroethane-d4	*105*			*70.0-130*		*01/15/2020 21:01*	WG1411916

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Wet Chemistry by Method 2320 B-2011

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Alkalinity	292000		2710	20000	1	01/15/2020 18:36	WG1411429

Sample Narrative:

L1179348-03 WG1411429: Endpoint pH 4.5

Wet Chemistry by Method 9056A

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Chloride	20500		51.9	1000	1	01/15/2020 21:03	WG1411144
Nitrate	U		22.7	100	1	01/15/2020 21:03	WG1411144
Sulfate	13300		77.4	5000	1	01/15/2020 21:03	WG1411144

Wet Chemistry by Method 9060A

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
TOC (Total Organic Carbon)	3170		102	1000	1	01/15/2020 23:26	WG1411668

Metals (ICPMS) by Method 6020B

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Iron	4000		15.0	100	1	01/16/2020 13:19	WG1411560
Manganese	2370		0.250	5.00	1	01/16/2020 13:19	WG1411560

Volatile Organic Compounds (GC) by Method RSK175

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Methane	750		0.287	0.678	1	01/16/2020 13:28	WG1411726
Ethane	U		0.296	1.29	1	01/16/2020 13:28	WG1411726
Ethene	U		0.422	1.27	1	01/16/2020 13:28	WG1411726

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

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Acetone	U		1.05	25.0	1	01/15/2020 21:21	WG1411916
Acrylonitrile	U		0.873	5.00	1	01/15/2020 21:21	WG1411916
Benzene	U		0.0896	0.500	1	01/15/2020 21:21	WG1411916
Bromobenzene	U		0.133	0.500	1	01/15/2020 21:21	WG1411916
Bromodichloromethane	U		0.0800	0.500	1	01/15/2020 21:21	WG1411916
Bromochloromethane	U		0.145	0.500	1	01/15/2020 21:21	WG1411916
Bromoform	U		0.186	0.500	1	01/15/2020 21:21	WG1411916
Bromomethane	U		0.157	2.50	1	01/15/2020 21:21	WG1411916
n-Butylbenzene	U		0.143	0.500	1	01/15/2020 21:21	WG1411916
sec-Butylbenzene	U		0.134	0.500	1	01/15/2020 21:21	WG1411916
tert-Butylbenzene	U		0.183	0.500	1	01/15/2020 21:21	WG1411916
Carbon disulfide	U		0.101	0.500	1	01/15/2020 21:21	WG1411916
Carbon tetrachloride	U		0.159	0.500	1	01/15/2020 21:21	WG1411916
Chlorobenzene	U		0.140	0.500	1	01/15/2020 21:21	WG1411916
Chlorodibromomethane	U		0.128	0.500	1	01/15/2020 21:21	WG1411916
Chloroethane	U		0.141	2.50	1	01/15/2020 21:21	WG1411916
Chloroform	U		0.0860	0.500	1	01/15/2020 21:21	WG1411916
Chloromethane	U		0.153	1.25	1	01/15/2020 21:21	WG1411916
2-Chlorotoluene	U		0.111	0.500	1	01/15/2020 21:21	WG1411916
4-Chlorotoluene	U		0.0972	0.500	1	01/15/2020 21:21	WG1411916

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

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
1,2-Dibromo-3-Chloropropane	U	UJ J0	0.325	2.50	1	01/15/2020 21:21	WG1411916
1,2-Dibromoethane	U		0.193	0.500	1	01/15/2020 21:21	WG1411916
Dibromomethane	U		0.117	0.500	1	01/15/2020 21:21	WG1411916
1,2-Dichlorobenzene	U		0.101	0.500	1	01/15/2020 21:21	WG1411916
1,3-Dichlorobenzene	U		0.130	0.500	1	01/15/2020 21:21	WG1411916
1,4-Dichlorobenzene	U		0.121	0.500	1	01/15/2020 21:21	WG1411916
Dichlorodifluoromethane	U		0.127	2.50	1	01/15/2020 21:21	WG1411916
1,1-Dichloroethane	U		0.114	0.500	1	01/15/2020 21:21	WG1411916
1,2-Dichloroethane	U		0.108	0.500	1	01/15/2020 21:21	WG1411916
1,1-Dichloroethene	U		0.188	0.500	1	01/15/2020 21:21	WG1411916
cis-1,2-Dichloroethene	2.67		0.0933	0.500	1	01/15/2020 21:21	WG1411916
trans-1,2-Dichloroethene	U		0.152	0.500	1	01/15/2020 21:21	WG1411916
1,2-Dichloropropane	U		0.190	0.500	1	01/15/2020 21:21	WG1411916
1,1-Dichloropropene	U		0.128	0.500	1	01/15/2020 21:21	WG1411916
1,3-Dichloropropane	U		0.147	1.00	1	01/15/2020 21:21	WG1411916
cis-1,3-Dichloropropene	U		0.0976	0.500	1	01/15/2020 21:21	WG1411916
trans-1,3-Dichloropropene	U		0.222	0.500	1	01/15/2020 21:21	WG1411916
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	01/15/2020 21:21	WG1411916
2,2-Dichloropropane	U		0.0929	0.500	1	01/15/2020 21:21	WG1411916
Di-isopropyl ether	U		0.0924	0.500	1	01/15/2020 21:21	WG1411916
Ethylbenzene	U		0.158	0.500	1	01/15/2020 21:21	WG1411916
Hexachloro-1,3-butadiene	U		0.157	1.00	1	01/15/2020 21:21	WG1411916
2-Hexanone	U		0.757	5.00	1	01/15/2020 21:21	WG1411916
n-Hexane	U		0.305	5.00	1	01/15/2020 21:21	WG1411916
Iodomethane	U		0.377	10.0	1	01/15/2020 21:21	WG1411916
Isopropylbenzene	U		0.126	0.500	1	01/15/2020 21:21	WG1411916
p-Isopropyltoluene	U		0.138	0.500	1	01/15/2020 21:21	WG1411916
2-Butanone (MEK)	U		1.28	5.00	1	01/15/2020 21:21	WG1411916
Methylene Chloride	U		1.07	2.50	1	01/15/2020 21:21	WG1411916
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	01/15/2020 21:21	WG1411916
Methyl tert-butyl ether	U		0.102	0.500	1	01/15/2020 21:21	WG1411916
Naphthalene	U	UJ J0	0.174	2.50	1	01/15/2020 21:21	WG1411916
n-Propylbenzene	U		0.162	0.500	1	01/15/2020 21:21	WG1411916
Styrene	U		0.117	0.500	1	01/15/2020 21:21	WG1411916
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	01/15/2020 21:21	WG1411916
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	01/15/2020 21:21	WG1411916
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	01/15/2020 21:21	WG1411916
Tetrachloroethene	U		0.199	0.500	1	01/15/2020 21:21	WG1411916
Toluene	U		0.412	0.500	1	01/15/2020 21:21	WG1411916
1,2,3-Trichlorobenzene	U	UJ J0	0.164	0.500	1	01/15/2020 21:21	WG1411916
1,2,4-Trichlorobenzene	U		0.355	0.500	1	01/15/2020 21:21	WG1411916
1,1,1-Trichloroethane	U		0.0940	0.500	1	01/15/2020 21:21	WG1411916
1,1,2-Trichloroethane	U		0.186	0.500	1	01/15/2020 21:21	WG1411916
Trichloroethene	U		0.153	0.500	1	01/15/2020 21:21	WG1411916
Trichlorofluoromethane	U		0.130	2.50	1	01/15/2020 21:21	WG1411916
1,2,3-Trichloropropane	U		0.247	2.50	1	01/15/2020 21:21	WG1411916
1,2,4-Trimethylbenzene	U		0.123	0.500	1	01/15/2020 21:21	WG1411916
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	01/15/2020 21:21	WG1411916
1,3,5-Trimethylbenzene	U		0.124	0.500	1	01/15/2020 21:21	WG1411916
Vinyl acetate	U		0.645	5.00	1	01/15/2020 21:21	WG1411916
Vinyl chloride	2.59		0.118	0.500	1	01/15/2020 21:21	WG1411916
Xylenes, Total	U		0.316	1.50	1	01/15/2020 21:21	WG1411916
(S) Toluene-d8	*100*			*80.0-120*		*01/15/2020 21:21*	WG1411916
(S) 4-Bromofluorobenzene	*93.6*			*77.0-126*		*01/15/2020 21:21*	WG1411916
(S) 1,2-Dichloroethane-d4	*104*			*70.0-130*		*01/15/2020 21:21*	WG1411916

JC 1/30/20

Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	201000		2710	20000	1	01/15/2020 18:44	WG1411429

Sample Narrative:

L1179348-04 WG1411429: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	22600		51.9	1000	1	01/15/2020 14:22	WG1411442
Nitrate	787		22.7	100	1	01/15/2020 14:22	WG1411442
Sulfate	82400		77.4	5000	1	01/15/2020 14:22	WG1411442

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	1420	~~B~~	102	1000	1	01/16/2020 01:03	WG1411668

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	3330		15.0	100	1	01/16/2020 13:23	WG1411560
Manganese	291		0.250	5.00	1	01/16/2020 13:23	WG1411560

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	17.1		0.287	0.678	1	01/16/2020 13:31	WG1411726
Ethane	4.75		0.296	1.29	1	01/16/2020 13:31	WG1411726
Ethene	U		0.422	1.27	1	01/16/2020 13:31	WG1411726

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U		10.5	250	10	01/15/2020 21:42	WG1411916
Acrylonitrile	U		8.73	50.0	10	01/15/2020 21:42	WG1411916
Benzene	U		0.896	5.00	10	01/15/2020 21:42	WG1411916
Bromobenzene	U		1.33	5.00	10	01/15/2020 21:42	WG1411916
Bromodichloromethane	U		0.800	5.00	10	01/15/2020 21:42	WG1411916
Bromochloromethane	U		1.45	5.00	10	01/15/2020 21:42	WG1411916
Bromoform	U		1.86	5.00	10	01/15/2020 21:42	WG1411916
Bromomethane	U		1.57	25.0	10	01/15/2020 21:42	WG1411916
n-Butylbenzene	U		1.43	5.00	10	01/15/2020 21:42	WG1411916
sec-Butylbenzene	U		1.34	5.00	10	01/15/2020 21:42	WG1411916
tert-Butylbenzene	U		1.83	5.00	10	01/15/2020 21:42	WG1411916
Carbon disulfide	U		1.01	5.00	10	01/15/2020 21:42	WG1411916
Carbon tetrachloride	U		1.59	5.00	10	01/15/2020 21:42	WG1411916
Chlorobenzene	U		1.40	5.00	10	01/15/2020 21:42	WG1411916
Chlorodibromomethane	U		1.28	5.00	10	01/15/2020 21:42	WG1411916
Chloroethane	U		1.41	25.0	10	01/15/2020 21:42	WG1411916
Chloroform	U		0.860	5.00	10	01/15/2020 21:42	WG1411916
Chloromethane	U		1.53	12.5	10	01/15/2020 21:42	WG1411916
2-Chlorotoluene	U		1.11	5.00	10	01/15/2020 21:42	WG1411916
4-Chlorotoluene	U		0.972	5.00	10	01/15/2020 21:42	WG1411916

JC 1/30/20

FMW-129-011420

Collected date/time: 01/14/20 11:30

SAMPLE RESULTS - 04

L1179348

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

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,2-Dibromo-3-Chloropropane	U UJ	J0	3.25	25.0	10	01/15/2020 21:42	WG1411916
1,2-Dibromoethane	U		1.93	5.00	10	01/15/2020 21:42	WG1411916
Dibromomethane	U		1.17	5.00	10	01/15/2020 21:42	WG1411916
1,2-Dichlorobenzene	U		1.01	5.00	10	01/15/2020 21:42	WG1411916
1,3-Dichlorobenzene	U		1.30	5.00	10	01/15/2020 21:42	WG1411916
1,4-Dichlorobenzene	U		1.21	5.00	10	01/15/2020 21:42	WG1411916
Dichlorodifluoromethane	U		1.27	25.0	10	01/15/2020 21:42	WG1411916
1,1-Dichloroethane	U		1.14	5.00	10	01/15/2020 21:42	WG1411916
1,2-Dichloroethane	U		1.08	5.00	10	01/15/2020 21:42	WG1411916
1,1-Dichloroethene	U		1.88	5.00	10	01/15/2020 21:42	WG1411916
cis-1,2-Dichloroethene	385		0.933	5.00	10	01/15/2020 21:42	WG1411916
trans-1,2-Dichloroethene	1.60	J	1.52	5.00	10	01/15/2020 21:42	WG1411916
1,2-Dichloropropane	U		1.90	5.00	10	01/15/2020 21:42	WG1411916
1,1-Dichloropropene	U		1.28	5.00	10	01/15/2020 21:42	WG1411916
1,3-Dichloropropane	U		1.47	10.0	10	01/15/2020 21:42	WG1411916
cis-1,3-Dichloropropene	U		0.976	5.00	10	01/15/2020 21:42	WG1411916
trans-1,3-Dichloropropene	U		2.22	5.00	10	01/15/2020 21:42	WG1411916
trans-1,4-Dichloro-2-butene	U		2.57	50.0	10	01/15/2020 21:42	WG1411916
2,2-Dichloropropane	U		0.929	5.00	10	01/15/2020 21:42	WG1411916
Di-isopropyl ether	U		0.924	5.00	10	01/15/2020 21:42	WG1411916
Ethylbenzene	U		1.58	5.00	10	01/15/2020 21:42	WG1411916
Hexachloro-1,3-butadiene	U		1.57	10.0	10	01/15/2020 21:42	WG1411916
2-Hexanone	U		7.57	50.0	10	01/15/2020 21:42	WG1411916
n-Hexane	U		3.05	50.0	10	01/15/2020 21:42	WG1411916
Iodomethane	U		3.77	100	10	01/15/2020 21:42	WG1411916
Isopropylbenzene	U		1.26	5.00	10	01/15/2020 21:42	WG1411916
p-Isopropyltoluene	U		1.38	5.00	10	01/15/2020 21:42	WG1411916
2-Butanone (MEK)	U		12.8	50.0	10	01/15/2020 21:42	WG1411916
Methylene Chloride	U		10.7	25.0	10	01/15/2020 21:42	WG1411916
4-Methyl-2-pentanone (MIBK)	U		8.23	50.0	10	01/15/2020 21:42	WG1411916
Methyl tert-butyl ether	U		1.02	5.00	10	01/15/2020 21:42	WG1411916
Naphthalene	U UJ	J0	1.74	25.0	10	01/15/2020 21:42	WG1411916
n-Propylbenzene	U		1.62	5.00	10	01/15/2020 21:42	WG1411916
Styrene	U		1.17	5.00	10	01/15/2020 21:42	WG1411916
1,1,1,2-Tetrachloroethane	U		1.20	5.00	10	01/15/2020 21:42	WG1411916
1,1,2,2-Tetrachloroethane	U		1.30	5.00	10	01/15/2020 21:42	WG1411916
1,1,2-Trichlorotrifluoroethane	U		1.64	5.00	10	01/15/2020 21:42	WG1411916
Tetrachloroethene	113		1.99	5.00	10	01/15/2020 21:42	WG1411916
Toluene	U		4.12	5.00	10	01/15/2020 21:42	WG1411916
1,2,3-Trichlorobenzene	U UJ	J0	1.64	5.00	10	01/15/2020 21:42	WG1411916
1,2,4-Trichlorobenzene	U		3.55	5.00	10	01/15/2020 21:42	WG1411916
1,1,1-Trichloroethane	U		0.940	5.00	10	01/15/2020 21:42	WG1411916
1,1,2-Trichloroethane	U		1.86	5.00	10	01/15/2020 21:42	WG1411916
Trichloroethene	170		1.53	5.00	10	01/15/2020 21:42	WG1411916
Trichlorofluoromethane	U		1.30	25.0	10	01/15/2020 21:42	WG1411916
1,2,3-Trichloropropane	U		2.47	25.0	10	01/15/2020 21:42	WG1411916
1,2,4-Trimethylbenzene	U		1.23	5.00	10	01/15/2020 21:42	WG1411916
1,2,3-Trimethylbenzene	U		0.739	5.00	10	01/15/2020 21:42	WG1411916
1,3,5-Trimethylbenzene	U		1.24	5.00	10	01/15/2020 21:42	WG1411916
Vinyl acetate	U		6.45	50.0	10	01/15/2020 21:42	WG1411916
Vinyl chloride	U		1.18	5.00	10	01/15/2020 21:42	WG1411916
Xylenes, Total	U		3.16	15.0	10	01/15/2020 21:42	WG1411916
(S) Toluene-d8	*102*			*80.0-120*		*01/15/2020 21:42*	WG1411916
(S) 4-Bromofluorobenzene	*93.9*			*77.0-126*		*01/15/2020 21:42*	WG1411916
(S) 1,2-Dichloroethane-d4	*106*			*70.0-130*		*01/15/2020 21:42*	WG1411916

JC 1/30/20

Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	763000		2710	20000	1	01/15/2020 18:51	WG1411429

Sample Narrative:

L1179348-05 WG1411429: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	10600		51.9	1000	1	01/15/2020 15:01	WG1411442
Nitrate	U		22.7	100	1	01/15/2020 15:01	WG1411442
Sulfate	67800		77.4	5000	1	01/15/2020 15:01	WG1411442

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	8070		102	1000	1	01/16/2020 01:23	WG1411668

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	15400		15.0	100	1	01/16/2020 13:27	WG1411560
Manganese	3340		0.250	5.00	1	01/16/2020 13:27	WG1411560

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	586		0.287	0.678	1	01/16/2020 13:35	WG1411726
Ethane	U		0.296	1.29	1	01/16/2020 13:35	WG1411726
Ethene	U		0.422	1.27	1	01/16/2020 13:35	WG1411726

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U		1.05	25.0	1	01/15/2020 22:02	WG1411916
Acrylonitrile	U		0.873	5.00	1	01/15/2020 22:02	WG1411916
Benzene	U		0.0896	0.500	1	01/15/2020 22:02	WG1411916
Bromobenzene	U		0.133	0.500	1	01/15/2020 22:02	WG1411916
Bromodichloromethane	U		0.0800	0.500	1	01/15/2020 22:02	WG1411916
Bromochloromethane	U		0.145	0.500	1	01/15/2020 22:02	WG1411916
Bromoform	U		0.186	0.500	1	01/15/2020 22:02	WG1411916
Bromomethane	U		0.157	2.50	1	01/15/2020 22:02	WG1411916
n-Butylbenzene	U		0.143	0.500	1	01/15/2020 22:02	WG1411916
sec-Butylbenzene	U		0.134	0.500	1	01/15/2020 22:02	WG1411916
tert-Butylbenzene	U		0.183	0.500	1	01/15/2020 22:02	WG1411916
Carbon disulfide	U		0.101	0.500	1	01/15/2020 22:02	WG1411916
Carbon tetrachloride	U		0.159	0.500	1	01/15/2020 22:02	WG1411916
Chlorobenzene	U		0.140	0.500	1	01/15/2020 22:02	WG1411916
Chlorodibromomethane	U		0.128	0.500	1	01/15/2020 22:02	WG1411916
Chloroethane	U		0.141	2.50	1	01/15/2020 22:02	WG1411916
Chloroform	U		0.0860	0.500	1	01/15/2020 22:02	WG1411916
Chloromethane	U		0.153	1.25	1	01/15/2020 22:02	WG1411916
2-Chlorotoluene	U		0.111	0.500	1	01/15/2020 22:02	WG1411916
4-Chlorotoluene	U		0.0972	0.500	1	01/15/2020 22:02	WG1411916

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
1,2-Dibromo-3-Chloropropane	U UJ	J0	0.325	2.50	1	01/15/2020 22:02	WG1411916
1,2-Dibromoethane	U		0.193	0.500	1	01/15/2020 22:02	WG1411916
Dibromomethane	U		0.117	0.500	1	01/15/2020 22:02	WG1411916
1,2-Dichlorobenzene	U		0.101	0.500	1	01/15/2020 22:02	WG1411916
1,3-Dichlorobenzene	U		0.130	0.500	1	01/15/2020 22:02	WG1411916
1,4-Dichlorobenzene	U		0.121	0.500	1	01/15/2020 22:02	WG1411916
Dichlorodifluoromethane	U		0.127	2.50	1	01/15/2020 22:02	WG1411916
1,1-Dichloroethane	U		0.114	0.500	1	01/15/2020 22:02	WG1411916
1,2-Dichloroethane	U		0.108	0.500	1	01/15/2020 22:02	WG1411916
1,1-Dichloroethene	U		0.188	0.500	1	01/15/2020 22:02	WG1411916
cis-1,2-Dichloroethene	U		0.0933	0.500	1	01/15/2020 22:02	WG1411916
trans-1,2-Dichloroethene	U		0.152	0.500	1	01/15/2020 22:02	WG1411916
1,2-Dichloropropane	U		0.190	0.500	1	01/15/2020 22:02	WG1411916
1,1-Dichloropropene	U		0.128	0.500	1	01/15/2020 22:02	WG1411916
1,3-Dichloropropane	U		0.147	1.00	1	01/15/2020 22:02	WG1411916
cis-1,3-Dichloropropene	U		0.0976	0.500	1	01/15/2020 22:02	WG1411916
trans-1,3-Dichloropropene	U		0.222	0.500	1	01/15/2020 22:02	WG1411916
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	01/15/2020 22:02	WG1411916
2,2-Dichloropropane	U		0.0929	0.500	1	01/15/2020 22:02	WG1411916
Di-isopropyl ether	U		0.0924	0.500	1	01/15/2020 22:02	WG1411916
Ethylbenzene	U		0.158	0.500	1	01/15/2020 22:02	WG1411916
Hexachloro-1,3-butadiene	U		0.157	1.00	1	01/15/2020 22:02	WG1411916
2-Hexanone	U		0.757	5.00	1	01/15/2020 22:02	WG1411916
n-Hexane	U		0.305	5.00	1	01/15/2020 22:02	WG1411916
Iodomethane	U		0.377	10.0	1	01/15/2020 22:02	WG1411916
Isopropylbenzene	0.203	J	0.126	0.500	1	01/15/2020 22:02	WG1411916
p-Isopropyltoluene	U		0.138	0.500	1	01/15/2020 22:02	WG1411916
2-Butanone (MEK)	U		1.28	5.00	1	01/15/2020 22:02	WG1411916
Methylene Chloride	U		1.07	2.50	1	01/15/2020 22:02	WG1411916
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	01/15/2020 22:02	WG1411916
Methyl tert-butyl ether	U		0.102	0.500	1	01/15/2020 22:02	WG1411916
Naphthalene	U UJ	J0	0.174	2.50	1	01/15/2020 22:02	WG1411916
n-Propylbenzene	U		0.162	0.500	1	01/15/2020 22:02	WG1411916
Styrene	U		0.117	0.500	1	01/15/2020 22:02	WG1411916
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	01/15/2020 22:02	WG1411916
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	01/15/2020 22:02	WG1411916
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	01/15/2020 22:02	WG1411916
Tetrachloroethene	U		0.199	0.500	1	01/15/2020 22:02	WG1411916
Toluene	U		0.412	0.500	1	01/15/2020 22:02	WG1411916
1,2,3-Trichlorobenzene	U UJ	J0	0.164	0.500	1	01/15/2020 22:02	WG1411916
1,2,4-Trichlorobenzene	U		0.355	0.500	1	01/15/2020 22:02	WG1411916
1,1,1-Trichloroethane	U		0.0940	0.500	1	01/15/2020 22:02	WG1411916
1,1,2-Trichloroethane	U		0.186	0.500	1	01/15/2020 22:02	WG1411916
Trichloroethene	U		0.153	0.500	1	01/15/2020 22:02	WG1411916
Trichlorofluoromethane	U		0.130	2.50	1	01/15/2020 22:02	WG1411916
1,2,3-Trichloropropane	U		0.247	2.50	1	01/15/2020 22:02	WG1411916
1,2,4-Trimethylbenzene	U		0.123	0.500	1	01/15/2020 22:02	WG1411916
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	01/15/2020 22:02	WG1411916
1,3,5-Trimethylbenzene	U		0.124	0.500	1	01/15/2020 22:02	WG1411916
Vinyl acetate	U		0.645	5.00	1	01/15/2020 22:02	WG1411916
Vinyl chloride	U		0.118	0.500	1	01/15/2020 22:02	WG1411916
Xylenes, Total	U		0.316	1.50	1	01/15/2020 22:02	WG1411916
(S) Toluene-d8	*101*			*80.0-120*		*01/15/2020 22:02*	WG1411916
(S) 4-Bromofluorobenzene	*94.6*			*77.0-126*		*01/15/2020 22:02*	WG1411916
(S) 1,2-Dichloroethane-d4	*107*			*70.0-130*		*01/15/2020 22:02*	WG1411916

JC 1/30/20

Wet Chemistry by Method 2320 B-2011

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Alkalinity	583000		2710	20000	1	01/15/2020 18:59	WG1411429

Sample Narrative:

L1179348-06 WG1411429: Endpoint pH 4.5

Wet Chemistry by Method 9056A

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Chloride	66900		51.9	1000	1	01/15/2020 15:40	WG1411442
Nitrate	U		22.7	100	1	01/15/2020 15:40	WG1411442
Sulfate	24500		77.4	5000	1	01/15/2020 15:40	WG1411442

Wet Chemistry by Method 9060A

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
TOC (Total Organic Carbon)	16300		102	1000	1	01/16/2020 01:50	WG1411668

Metals (ICPMS) by Method 6020B

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Iron	6140		15.0	100	1	01/16/2020 13:30	WG1411560
Manganese	716		0.250	5.00	1	01/16/2020 13:30	WG1411560

Volatile Organic Compounds (GC) by Method RSK175

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Methane	17700		2.87	6.78	10	01/17/2020 11:03	WG1411732
Ethane	73.5		0.296	1.29	1	01/16/2020 13:38	WG1411726
Ethene	673		0.422	1.27	1	01/16/2020 13:38	WG1411726

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

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Acetone	U		10.5	250	10	01/15/2020 22:22	WG1411916
Acrylonitrile	U		8.73	50.0	10	01/15/2020 22:22	WG1411916
Benzene	U		0.896	5.00	10	01/15/2020 22:22	WG1411916
Bromobenzene	U		1.33	5.00	10	01/15/2020 22:22	WG1411916
Bromodichloromethane	U		0.800	5.00	10	01/15/2020 22:22	WG1411916
Bromochloromethane	U		1.45	5.00	10	01/15/2020 22:22	WG1411916
Bromoform	U		1.86	5.00	10	01/15/2020 22:22	WG1411916
Bromomethane	U		1.57	25.0	10	01/15/2020 22:22	WG1411916
n-Butylbenzene	U		1.43	5.00	10	01/15/2020 22:22	WG1411916
sec-Butylbenzene	U		1.34	5.00	10	01/15/2020 22:22	WG1411916
tert-Butylbenzene	U		1.83	5.00	10	01/15/2020 22:22	WG1411916
Carbon disulfide	U		1.01	5.00	10	01/15/2020 22:22	WG1411916
Carbon tetrachloride	U		1.59	5.00	10	01/15/2020 22:22	WG1411916
Chlorobenzene	U		1.40	5.00	10	01/15/2020 22:22	WG1411916
Chlorodibromomethane	U		1.28	5.00	10	01/15/2020 22:22	WG1411916
Chloroethane	U		1.41	25.0	10	01/15/2020 22:22	WG1411916
Chloroform	U		0.860	5.00	10	01/15/2020 22:22	WG1411916
Chloromethane	U		1.53	12.5	10	01/15/2020 22:22	WG1411916
2-Chlorotoluene	U		1.11	5.00	10	01/15/2020 22:22	WG1411916
4-Chlorotoluene	U		0.972	5.00	10	01/15/2020 22:22	WG1411916

JC 1/30/20

MW113-011420

Collected date/time: 01/14/20 13:30

SAMPLE RESULTS - 06

L1179348

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,2-Dibromo-3-Chloropropane	U	UJ J0	3.25	25.0	10	01/15/2020 22:22	WG1411916
1,2-Dibromoethane	U		1.93	5.00	10	01/15/2020 22:22	WG1411916
Dibromomethane	U		1.17	5.00	10	01/15/2020 22:22	WG1411916
1,2-Dichlorobenzene	U		1.01	5.00	10	01/15/2020 22:22	WG1411916
1,3-Dichlorobenzene	U		1.30	5.00	10	01/15/2020 22:22	WG1411916
1,4-Dichlorobenzene	U		1.21	5.00	10	01/15/2020 22:22	WG1411916
Dichlorodifluoromethane	U		1.27	25.0	10	01/15/2020 22:22	WG1411916
1,1-Dichloroethane	U		1.14	5.00	10	01/15/2020 22:22	WG1411916
1,2-Dichloroethane	U		1.08	5.00	10	01/15/2020 22:22	WG1411916
1,1-Dichloroethene	15.0		1.88	5.00	10	01/15/2020 22:22	WG1411916
cis-1,2-Dichloroethene	10300		9.33	50.0	100	01/16/2020 22:58	WG1412367
trans-1,2-Dichloroethene	32.9		1.52	5.00	10	01/15/2020 22:22	WG1411916
1,2-Dichloropropane	U		1.90	5.00	10	01/15/2020 22:22	WG1411916
1,1-Dichloropropene	U		1.28	5.00	10	01/15/2020 22:22	WG1411916
1,3-Dichloropropane	U		1.47	10.0	10	01/15/2020 22:22	WG1411916
cis-1,3-Dichloropropene	U		0.976	5.00	10	01/15/2020 22:22	WG1411916
trans-1,3-Dichloropropene	U		2.22	5.00	10	01/15/2020 22:22	WG1411916
trans-1,4-Dichloro-2-butene	U		2.57	50.0	10	01/15/2020 22:22	WG1411916
2,2-Dichloropropane	U		0.929	5.00	10	01/15/2020 22:22	WG1411916
Di-isopropyl ether	U		0.924	5.00	10	01/15/2020 22:22	WG1411916
Ethylbenzene	U		1.58	5.00	10	01/15/2020 22:22	WG1411916
Hexachloro-1,3-butadiene	U		1.57	10.0	10	01/15/2020 22:22	WG1411916
2-Hexanone	U		7.57	50.0	10	01/15/2020 22:22	WG1411916
n-Hexane	U		3.05	50.0	10	01/15/2020 22:22	WG1411916
Iodomethane	U		3.77	100	10	01/15/2020 22:22	WG1411916
Isopropylbenzene	U		1.26	5.00	10	01/15/2020 22:22	WG1411916
p-Isopropyltoluene	U		1.38	5.00	10	01/15/2020 22:22	WG1411916
2-Butanone (MEK)	U		12.8	50.0	10	01/15/2020 22:22	WG1411916
Methylene Chloride	U		10.7	25.0	10	01/15/2020 22:22	WG1411916
4-Methyl-2-pentanone (MIBK)	U		8.23	50.0	10	01/15/2020 22:22	WG1411916
Methyl tert-butyl ether	U		1.02	5.00	10	01/15/2020 22:22	WG1411916
Naphthalene	U	UJ J0	1.74	25.0	10	01/15/2020 22:22	WG1411916
n-Propylbenzene	U		1.62	5.00	10	01/15/2020 22:22	WG1411916
Styrene	U		1.17	5.00	10	01/15/2020 22:22	WG1411916
1,1,1,2-Tetrachloroethane	U		1.20	5.00	10	01/15/2020 22:22	WG1411916
1,1,2,2-Tetrachloroethane	U		1.30	5.00	10	01/15/2020 22:22	WG1411916
1,1,2-Trichlorotrifluoroethane	U		1.64	5.00	10	01/15/2020 22:22	WG1411916
Tetrachloroethene	U		1.99	5.00	10	01/15/2020 22:22	WG1411916
Toluene	U		4.12	5.00	10	01/15/2020 22:22	WG1411916
1,2,3-Trichlorobenzene	U	UJ J0	1.64	5.00	10	01/15/2020 22:22	WG1411916
1,2,4-Trichlorobenzene	U		3.55	5.00	10	01/15/2020 22:22	WG1411916
1,1,1-Trichloroethane	U		0.940	5.00	10	01/15/2020 22:22	WG1411916
1,1,2-Trichloroethane	U		1.86	5.00	10	01/15/2020 22:22	WG1411916
Trichloroethene	U		1.53	5.00	10	01/15/2020 22:22	WG1411916
Trichlorofluoromethane	U		1.30	25.0	10	01/15/2020 22:22	WG1411916
1,2,3-Trichloropropane	U		2.47	25.0	10	01/15/2020 22:22	WG1411916
1,2,4-Trimethylbenzene	U		1.23	5.00	10	01/15/2020 22:22	WG1411916
1,2,3-Trimethylbenzene	U		0.739	5.00	10	01/15/2020 22:22	WG1411916
1,3,5-Trimethylbenzene	U		1.24	5.00	10	01/15/2020 22:22	WG1411916
Vinyl acetate	U		6.45	50.0	10	01/15/2020 22:22	WG1411916
Vinyl chloride	1410		1.18	5.00	10	01/15/2020 22:22	WG1411916
Xylenes, Total	U		3.16	15.0	10	01/15/2020 22:22	WG1411916
(S) Toluene-d8	*102*			*80.0-120*		*01/15/2020 22:22*	WG1411916
(S) Toluene-d8	*102*			*80.0-120*		*01/16/2020 22:58*	WG1412367
(S) 4-Bromofluorobenzene	*96.2*			*77.0-126*		*01/15/2020 22:22*	WG1411916
(S) 4-Bromofluorobenzene	*101*			*77.0-126*		*01/16/2020 22:58*	WG1412367

JC 1/30/20

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
(S) 1,2-Dichloroethane-d4	*105*			*70.0-130*		*01/15/2020 22:22*	WG1411916
(S) 1,2-Dichloroethane-d4	*107*			*70.0-130*		*01/16/2020 22:58*	WG1412367

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

JC 1/30/20

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

Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Alkalinity	586000		2710	20000	1	01/15/2020 19:05	WG1411429

Sample Narrative:

L1179348-07 WG1411429: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chloride	20800		51.9	1000	1	01/15/2020 15:53	WG1411442
Nitrate	U		22.7	100	1	01/15/2020 15:53	WG1411442
Sulfate	33100		77.4	5000	1	01/15/2020 15:53	WG1411442

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
TOC (Total Organic Carbon)	5410		102	1000	1	01/16/2020 02:10	WG1411668

Metals (ICPMS) by Method 6020B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Iron	15900		15.0	100	1	01/16/2020 13:34	WG1411560
Manganese	1860		0.250	5.00	1	01/16/2020 13:34	WG1411560

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Methane	4460		0.287	0.678	1	01/16/2020 13:42	WG1411726
Ethane	74.1		0.296	1.29	1	01/16/2020 13:42	WG1411726
Ethene	21.6		0.422	1.27	1	01/16/2020 13:42	WG1411726

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	U		26.3	625	25	01/15/2020 22:42	WG1411916
Acrylonitrile	U		21.8	125	25	01/15/2020 22:42	WG1411916
Benzene	4.55	J	2.24	12.5	25	01/15/2020 22:42	WG1411916
Bromobenzene	U		3.33	12.5	25	01/15/2020 22:42	WG1411916
Bromodichloromethane	U		2.00	12.5	25	01/15/2020 22:42	WG1411916
Bromochloromethane	U		3.63	12.5	25	01/15/2020 22:42	WG1411916
Bromoform	U		4.65	12.5	25	01/15/2020 22:42	WG1411916
Bromomethane	U		3.93	62.5	25	01/15/2020 22:42	WG1411916
n-Butylbenzene	U		3.58	12.5	25	01/15/2020 22:42	WG1411916
sec-Butylbenzene	U		3.35	12.5	25	01/15/2020 22:42	WG1411916
tert-Butylbenzene	U		4.58	12.5	25	01/15/2020 22:42	WG1411916
Carbon disulfide	U		2.53	12.5	25	01/15/2020 22:42	WG1411916
Carbon tetrachloride	U		3.97	12.5	25	01/15/2020 22:42	WG1411916
Chlorobenzene	U		3.50	12.5	25	01/15/2020 22:42	WG1411916
Chlorodibromomethane	U		3.20	12.5	25	01/15/2020 22:42	WG1411916
Chloroethane	U		3.53	62.5	25	01/15/2020 22:42	WG1411916
Chloroform	U		2.15	12.5	25	01/15/2020 22:42	WG1411916
Chloromethane	U		3.83	31.3	25	01/15/2020 22:42	WG1411916
2-Chlorotoluene	U		2.78	12.5	25	01/15/2020 22:42	WG1411916
4-Chlorotoluene	U		2.43	12.5	25	01/15/2020 22:42	WG1411916

JC 1/30/20

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,2-Dibromo-3-Chloropropane	U	UJ J0	8.13	62.5	25	01/15/2020 22:42	WG1411916
1,2-Dibromoethane	U		4.83	12.5	25	01/15/2020 22:42	WG1411916
Dibromomethane	U		2.93	12.5	25	01/15/2020 22:42	WG1411916
1,2-Dichlorobenzene	U		2.53	12.5	25	01/15/2020 22:42	WG1411916
1,3-Dichlorobenzene	U		3.25	12.5	25	01/15/2020 22:42	WG1411916
1,4-Dichlorobenzene	U		3.03	12.5	25	01/15/2020 22:42	WG1411916
Dichlorodifluoromethane	U		3.18	62.5	25	01/15/2020 22:42	WG1411916
1,1-Dichloroethane	U		2.85	12.5	25	01/15/2020 22:42	WG1411916
1,2-Dichloroethane	U		2.70	12.5	25	01/15/2020 22:42	WG1411916
1,1-Dichloroethene	U		4.70	12.5	25	01/15/2020 22:42	WG1411916
cis-1,2-Dichloroethene	749		2.33	12.5	25	01/15/2020 22:42	WG1411916
trans-1,2-Dichloroethene	U		3.80	12.5	25	01/15/2020 22:42	WG1411916
1,2-Dichloropropane	U		4.75	12.5	25	01/15/2020 22:42	WG1411916
1,1-Dichloropropene	U		3.20	12.5	25	01/15/2020 22:42	WG1411916
1,3-Dichloropropane	U		3.68	25.0	25	01/15/2020 22:42	WG1411916
cis-1,3-Dichloropropene	U		2.44	12.5	25	01/15/2020 22:42	WG1411916
trans-1,3-Dichloropropene	U		5.55	12.5	25	01/15/2020 22:42	WG1411916
trans-1,4-Dichloro-2-butene	U		6.43	125	25	01/15/2020 22:42	WG1411916
2,2-Dichloropropane	U		2.32	12.5	25	01/15/2020 22:42	WG1411916
Di-isopropyl ether	U		2.31	12.5	25	01/15/2020 22:42	WG1411916
Ethylbenzene	U		3.95	12.5	25	01/15/2020 22:42	WG1411916
Hexachloro-1,3-butadiene	U		3.93	25.0	25	01/15/2020 22:42	WG1411916
2-Hexanone	U		18.9	125	25	01/15/2020 22:42	WG1411916
n-Hexane	U		7.63	125	25	01/15/2020 22:42	WG1411916
Iodomethane	U		9.43	250	25	01/15/2020 22:42	WG1411916
Isopropylbenzene	U		3.15	12.5	25	01/15/2020 22:42	WG1411916
p-Isopropyltoluene	U		3.45	12.5	25	01/15/2020 22:42	WG1411916
2-Butanone (MEK)	U		32.0	125	25	01/15/2020 22:42	WG1411916
Methylene Chloride	U		26.8	62.5	25	01/15/2020 22:42	WG1411916
4-Methyl-2-pentanone (MIBK)	U		20.6	125	25	01/15/2020 22:42	WG1411916
Methyl tert-butyl ether	U		2.55	12.5	25	01/15/2020 22:42	WG1411916
Naphthalene	U	UJ J0	4.35	62.5	25	01/15/2020 22:42	WG1411916
n-Propylbenzene	U		4.05	12.5	25	01/15/2020 22:42	WG1411916
Styrene	U		2.93	12.5	25	01/15/2020 22:42	WG1411916
1,1,1,2-Tetrachloroethane	U		3.00	12.5	25	01/15/2020 22:42	WG1411916
1,1,2,2-Tetrachloroethane	U		3.25	12.5	25	01/15/2020 22:42	WG1411916
1,1,2-Trichlorotrifluoroethane	U		4.10	12.5	25	01/15/2020 22:42	WG1411916
Tetrachloroethene	243		4.98	12.5	25	01/15/2020 22:42	WG1411916
Toluene	U		10.3	12.5	25	01/15/2020 22:42	WG1411916
1,2,3-Trichlorobenzene	U	UJ J0	4.10	12.5	25	01/15/2020 22:42	WG1411916
1,2,4-Trichlorobenzene	U		8.88	12.5	25	01/15/2020 22:42	WG1411916
1,1,1-Trichloroethane	U		2.35	12.5	25	01/15/2020 22:42	WG1411916
1,1,2-Trichloroethane	U		4.65	12.5	25	01/15/2020 22:42	WG1411916
Trichloroethene	235		3.83	12.5	25	01/15/2020 22:42	WG1411916
Trichlorofluoromethane	U		3.25	62.5	25	01/15/2020 22:42	WG1411916
1,2,3-Trichloropropane	U		6.17	62.5	25	01/15/2020 22:42	WG1411916
1,2,4-Trimethylbenzene	U		3.08	12.5	25	01/15/2020 22:42	WG1411916
1,2,3-Trimethylbenzene	U		1.85	12.5	25	01/15/2020 22:42	WG1411916
1,3,5-Trimethylbenzene	U		3.10	12.5	25	01/15/2020 22:42	WG1411916
Vinyl acetate	U		16.1	125	25	01/15/2020 22:42	WG1411916
Vinyl chloride	224		2.95	12.5	25	01/15/2020 22:42	WG1411916
Xylenes, Total	U		7.90	37.5	25	01/15/2020 22:42	WG1411916
(S) Toluene-d8	*103*			*80.0-120*		*01/15/2020 22:42*	WG1411916
(S) 4-Bromofluorobenzene	*93.6*			*77.0-126*		*01/15/2020 22:42*	WG1411916
(S) 1,2-Dichloroethane-d4	*105*			*70.0-130*		*01/15/2020 22:42*	WG1411916

JC 1/30/20

Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	278000		2710	20000	1	01/15/2020 19:12	WG1411429

Sample Narrative:

L1179348-08 WG1411429: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	25900		51.9	1000	1	01/15/2020 16:06	WG1411442
Nitrate	U		22.7	100	1	01/15/2020 16:06	WG1411442
Sulfate	17000		77.4	5000	1	01/15/2020 16:06	WG1411442

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	2820		102	1000	1	01/16/2020 03:08	WG1411668

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	12600		15.0	100	1	01/16/2020 13:38	WG1411560
Manganese	1020		0.250	5.00	1	01/16/2020 13:38	WG1411560

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	33.1 U	~~B J~~	31.6	100	1	01/16/2020 18:19	WG1412244
(S) a,a,a-Trifluorotoluene(FID)	*96.8*			*78.0-120*		*01/16/2020 18:19*	WG1412244

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	39.8		0.287	0.678	1	01/16/2020 13:56	WG1411726
Ethane	U		0.296	1.29	1	01/16/2020 13:56	WG1411726
Ethene	U		0.422	1.27	1	01/16/2020 13:56	WG1411726

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U		1.05	25.0	1	01/15/2020 23:03	WG1411916
Acrylonitrile	U		0.873	5.00	1	01/15/2020 23:03	WG1411916
Benzene	U		0.0896	0.500	1	01/15/2020 23:03	WG1411916
Bromobenzene	U		0.133	0.500	1	01/15/2020 23:03	WG1411916
Bromodichloromethane	U		0.0800	0.500	1	01/15/2020 23:03	WG1411916
Bromochloromethane	U		0.145	0.500	1	01/15/2020 23:03	WG1411916
Bromoform	U		0.186	0.500	1	01/15/2020 23:03	WG1411916
Bromomethane	U		0.157	2.50	1	01/15/2020 23:03	WG1411916
n-Butylbenzene	U		0.143	0.500	1	01/15/2020 23:03	WG1411916
sec-Butylbenzene	U		0.134	0.500	1	01/15/2020 23:03	WG1411916
tert-Butylbenzene	U		0.183	0.500	1	01/15/2020 23:03	WG1411916
Carbon disulfide	U		0.101	0.500	1	01/15/2020 23:03	WG1411916
Carbon tetrachloride	U		0.159	0.500	1	01/15/2020 23:03	WG1411916

JC 1/30/20

MW106-011420

Collected date/time: 01/14/20 14:16

SAMPLE RESULTS - 08

L1179348

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chlorobenzene	U		0.140	0.500	1	01/15/2020 23:03	WG1411916
Chlorodibromomethane	U		0.128	0.500	1	01/15/2020 23:03	WG1411916
Chloroethane	U		0.141	2.50	1	01/15/2020 23:03	WG1411916
Chloroform	U		0.0860	0.500	1	01/15/2020 23:03	WG1411916
Chloromethane	U		0.153	1.25	1	01/15/2020 23:03	WG1411916
2-Chlorotoluene	U		0.111	0.500	1	01/15/2020 23:03	WG1411916
4-Chlorotoluene	U		0.0972	0.500	1	01/15/2020 23:03	WG1411916
1,2-Dibromo-3-Chloropropane	U UJ	J0	0.325	2.50	1	01/15/2020 23:03	WG1411916
1,2-Dibromoethane	U		0.193	0.500	1	01/15/2020 23:03	WG1411916
Dibromomethane	U		0.117	0.500	1	01/15/2020 23:03	WG1411916
1,2-Dichlorobenzene	U		0.101	0.500	1	01/15/2020 23:03	WG1411916
1,3-Dichlorobenzene	U		0.130	0.500	1	01/15/2020 23:03	WG1411916
1,4-Dichlorobenzene	U		0.121	0.500	1	01/15/2020 23:03	WG1411916
Dichlorodifluoromethane	U		0.127	2.50	1	01/15/2020 23:03	WG1411916
1,1-Dichloroethane	U		0.114	0.500	1	01/15/2020 23:03	WG1411916
1,2-Dichloroethane	U		0.108	0.500	1	01/15/2020 23:03	WG1411916
1,1-Dichloroethene	U		0.188	0.500	1	01/15/2020 23:03	WG1411916
cis-1,2-Dichloroethene	U		0.0933	0.500	1	01/16/2020 23:19	WG1412367
trans-1,2-Dichloroethene	U		0.152	0.500	1	01/15/2020 23:03	WG1411916
1,2-Dichloropropane	U		0.190	0.500	1	01/15/2020 23:03	WG1411916
1,1-Dichloropropene	U		0.128	0.500	1	01/15/2020 23:03	WG1411916
1,3-Dichloropropane	U		0.147	1.00	1	01/15/2020 23:03	WG1411916
cis-1,3-Dichloropropene	U		0.0976	0.500	1	01/15/2020 23:03	WG1411916
trans-1,3-Dichloropropene	U		0.222	0.500	1	01/15/2020 23:03	WG1411916
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	01/15/2020 23:03	WG1411916
2,2-Dichloropropane	U		0.0929	0.500	1	01/15/2020 23:03	WG1411916
Di-isopropyl ether	U		0.0924	0.500	1	01/15/2020 23:03	WG1411916
Ethylbenzene	U		0.158	0.500	1	01/15/2020 23:03	WG1411916
Hexachloro-1,3-butadiene	U		0.157	1.00	1	01/15/2020 23:03	WG1411916
2-Hexanone	U		0.757	5.00	1	01/15/2020 23:03	WG1411916
n-Hexane	U		0.305	5.00	1	01/15/2020 23:03	WG1411916
Iodomethane	U		0.377	10.0	1	01/15/2020 23:03	WG1411916
Isopropylbenzene	U		0.126	0.500	1	01/15/2020 23:03	WG1411916
p-Isopropyltoluene	U		0.138	0.500	1	01/15/2020 23:03	WG1411916
2-Butanone (MEK)	U		1.28	5.00	1	01/15/2020 23:03	WG1411916
Methylene Chloride	U		1.07	2.50	1	01/15/2020 23:03	WG1411916
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	01/15/2020 23:03	WG1411916
Methyl tert-butyl ether	U		0.102	0.500	1	01/15/2020 23:03	WG1411916
Naphthalene	U UJ	J0	0.174	2.50	1	01/15/2020 23:03	WG1411916
n-Propylbenzene	U		0.162	0.500	1	01/15/2020 23:03	WG1411916
Styrene	U		0.117	0.500	1	01/15/2020 23:03	WG1411916
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	01/15/2020 23:03	WG1411916
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	01/15/2020 23:03	WG1411916
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	01/15/2020 23:03	WG1411916
Tetrachloroethene	U		0.199	0.500	1	01/15/2020 23:03	WG1411916
Toluene	U		0.412	0.500	1	01/15/2020 23:03	WG1411916
1,2,3-Trichlorobenzene	U UJ	J0	0.164	0.500	1	01/15/2020 23:03	WG1411916
1,2,4-Trichlorobenzene	U		0.355	0.500	1	01/15/2020 23:03	WG1411916
1,1,1-Trichloroethane	U		0.0940	0.500	1	01/15/2020 23:03	WG1411916
1,1,2-Trichloroethane	U		0.186	0.500	1	01/15/2020 23:03	WG1411916
Trichloroethene	U		0.153	0.500	1	01/15/2020 23:03	WG1411916
Trichlorofluoromethane	U		0.130	2.50	1	01/15/2020 23:03	WG1411916
1,2,3-Trichloropropane	U		0.247	2.50	1	01/15/2020 23:03	WG1411916
1,2,4-Trimethylbenzene	U		0.123	0.500	1	01/15/2020 23:03	WG1411916
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	01/15/2020 23:03	WG1411916
1,3,5-Trimethylbenzene	U		0.124	0.500	1	01/15/2020 23:03	WG1411916

JC 1/30/20

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

MW106-011420

Collected date/time: 01/14/20 14:16

SAMPLE RESULTS - 08

L1179348

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Vinyl acetate	U		0.645	5.00	1	01/15/2020 23:03	WG1411916
Vinyl chloride	U		0.118	0.500	1	01/15/2020 23:03	WG1411916
Xylenes, Total	U		0.316	1.50	1	01/15/2020 23:03	WG1411916
(S) Toluene-d8	*103*			*80.0-120*		*01/15/2020 23:03*	WG1411916
(S) Toluene-d8	*94.8*			*80.0-120*		*01/16/2020 23:19*	WG1412367
(S) 4-Bromofluorobenzene	*94.7*			*77.0-126*		*01/15/2020 23:03*	WG1411916
(S) 4-Bromofluorobenzene	*99.2*			*77.0-126*		*01/16/2020 23:19*	WG1412367
(S) 1,2-Dichloroethane-d4	*107*			*70.0-130*		*01/15/2020 23:03*	WG1411916
(S) 1,2-Dichloroethane-d4	*108*			*70.0-130*		*01/16/2020 23:19*	WG1412367

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

JC 1/30/20

Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	385000		2710	20000	1	01/15/2020 19:48	WG1411429

Sample Narrative:

L1179348-09 WG1411429: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	43400		51.9	1000	1	01/15/2020 16:20	WG1411442
Nitrate	U		22.7	100	1	01/15/2020 16:20	WG1411442
Sulfate	14200		77.4	5000	1	01/15/2020 16:20	WG1411442

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	5990		102	1000	1	01/16/2020 03:29	WG1411668

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	306		15.0	100	1	01/16/2020 13:41	WG1411560
Manganese	793		0.250	5.00	1	01/16/2020 13:41	WG1411560

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	534		0.287	0.678	1	01/16/2020 14:05	WG1411726
Ethane	22.7		0.296	1.29	1	01/16/2020 14:05	WG1411726
Ethene	7.10		0.422	1.27	1	01/16/2020 14:05	WG1411726

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	2.13	J	1.05	25.0	1	01/15/2020 23:23	WG1411916
Acrylonitrile	U		0.873	5.00	1	01/15/2020 23:23	WG1411916
Benzene	U		0.0896	0.500	1	01/15/2020 23:23	WG1411916
Bromobenzene	U		0.133	0.500	1	01/15/2020 23:23	WG1411916
Bromodichloromethane	U		0.0800	0.500	1	01/15/2020 23:23	WG1411916
Bromochloromethane	U		0.145	0.500	1	01/15/2020 23:23	WG1411916
Bromoform	U		0.186	0.500	1	01/15/2020 23:23	WG1411916
Bromomethane	U		0.157	2.50	1	01/15/2020 23:23	WG1411916
n-Butylbenzene	U		0.143	0.500	1	01/15/2020 23:23	WG1411916
sec-Butylbenzene	U		0.134	0.500	1	01/15/2020 23:23	WG1411916
tert-Butylbenzene	U		0.183	0.500	1	01/15/2020 23:23	WG1411916
Carbon disulfide	2.05		0.101	0.500	1	01/15/2020 23:23	WG1411916
Carbon tetrachloride	U		0.159	0.500	1	01/15/2020 23:23	WG1411916
Chlorobenzene	U		0.140	0.500	1	01/15/2020 23:23	WG1411916
Chlorodibromomethane	U		0.128	0.500	1	01/15/2020 23:23	WG1411916
Chloroethane	U		0.141	2.50	1	01/15/2020 23:23	WG1411916
Chloroform	U		0.0860	0.500	1	01/15/2020 23:23	WG1411916
Chloromethane	U		0.153	1.25	1	01/15/2020 23:23	WG1411916
2-Chlorotoluene	U		0.111	0.500	1	01/15/2020 23:23	WG1411916
4-Chlorotoluene	U		0.0972	0.500	1	01/15/2020 23:23	WG1411916

JC 1/30/20

MW-311-011420

Collected date/time: 01/14/20 14:50

SAMPLE RESULTS - 09

L1179348

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

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,2-Dibromo-3-Chloropropane	U	UJ J0	0.325	2.50	1	01/15/2020 23:23	WG1411916
1,2-Dibromoethane	U		0.193	0.500	1	01/15/2020 23:23	WG1411916
Dibromomethane	U		0.117	0.500	1	01/15/2020 23:23	WG1411916
1,2-Dichlorobenzene	U		0.101	0.500	1	01/15/2020 23:23	WG1411916
1,3-Dichlorobenzene	U		0.130	0.500	1	01/15/2020 23:23	WG1411916
1,4-Dichlorobenzene	U		0.121	0.500	1	01/15/2020 23:23	WG1411916
Dichlorodifluoromethane	U		0.127	2.50	1	01/15/2020 23:23	WG1411916
1,1-Dichloroethane	U		0.114	0.500	1	01/15/2020 23:23	WG1411916
1,2-Dichloroethane	U		0.108	0.500	1	01/15/2020 23:23	WG1411916
1,1-Dichloroethene	0.281	J	0.188	0.500	1	01/15/2020 23:23	WG1411916
cis-1,2-Dichloroethene	75.0		0.0933	0.500	1	01/15/2020 23:23	WG1411916
trans-1,2-Dichloroethene	0.204	J	0.152	0.500	1	01/15/2020 23:23	WG1411916
1,2-Dichloropropane	U		0.190	0.500	1	01/15/2020 23:23	WG1411916
1,1-Dichloropropene	U		0.128	0.500	1	01/15/2020 23:23	WG1411916
1,3-Dichloropropane	U		0.147	1.00	1	01/15/2020 23:23	WG1411916
cis-1,3-Dichloropropene	U		0.0976	0.500	1	01/15/2020 23:23	WG1411916
trans-1,3-Dichloropropene	U		0.222	0.500	1	01/15/2020 23:23	WG1411916
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	01/15/2020 23:23	WG1411916
2,2-Dichloropropane	U		0.0929	0.500	1	01/15/2020 23:23	WG1411916
Di-isopropyl ether	U		0.0924	0.500	1	01/15/2020 23:23	WG1411916
Ethylbenzene	U		0.158	0.500	1	01/15/2020 23:23	WG1411916
Hexachloro-1,3-butadiene	U		0.157	1.00	1	01/15/2020 23:23	WG1411916
2-Hexanone	U		0.757	5.00	1	01/15/2020 23:23	WG1411916
n-Hexane	U		0.305	5.00	1	01/15/2020 23:23	WG1411916
Iodomethane	U		0.377	10.0	1	01/15/2020 23:23	WG1411916
Isopropylbenzene	U		0.126	0.500	1	01/15/2020 23:23	WG1411916
p-Isopropyltoluene	U		0.138	0.500	1	01/15/2020 23:23	WG1411916
2-Butanone (MEK)	U		1.28	5.00	1	01/15/2020 23:23	WG1411916
Methylene Chloride	U		1.07	2.50	1	01/15/2020 23:23	WG1411916
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	01/15/2020 23:23	WG1411916
Methyl tert-butyl ether	U		0.102	0.500	1	01/15/2020 23:23	WG1411916
Naphthalene	U	UJ J0	0.174	2.50	1	01/15/2020 23:23	WG1411916
n-Propylbenzene	U		0.162	0.500	1	01/15/2020 23:23	WG1411916
Styrene	U		0.117	0.500	1	01/15/2020 23:23	WG1411916
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	01/15/2020 23:23	WG1411916
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	01/15/2020 23:23	WG1411916
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	01/15/2020 23:23	WG1411916
Tetrachloroethene	1.99		0.199	0.500	1	01/15/2020 23:23	WG1411916
Toluene	U		0.412	0.500	1	01/15/2020 23:23	WG1411916
1,2,3-Trichlorobenzene	U	UJ J0	0.164	0.500	1	01/15/2020 23:23	WG1411916
1,2,4-Trichlorobenzene	U		0.355	0.500	1	01/15/2020 23:23	WG1411916
1,1,1-Trichloroethane	U		0.0940	0.500	1	01/15/2020 23:23	WG1411916
1,1,2-Trichloroethane	U		0.186	0.500	1	01/15/2020 23:23	WG1411916
Trichloroethene	11.4		0.153	0.500	1	01/15/2020 23:23	WG1411916
Trichlorofluoromethane	U		0.130	2.50	1	01/15/2020 23:23	WG1411916
1,2,3-Trichloropropane	U		0.247	2.50	1	01/15/2020 23:23	WG1411916
1,2,4-Trimethylbenzene	U		0.123	0.500	1	01/15/2020 23:23	WG1411916
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	01/15/2020 23:23	WG1411916
1,3,5-Trimethylbenzene	U		0.124	0.500	1	01/15/2020 23:23	WG1411916
Vinyl acetate	U		0.645	5.00	1	01/15/2020 23:23	WG1411916
Vinyl chloride	13.6		0.118	0.500	1	01/15/2020 23:23	WG1411916
Xylenes, Total	U		0.316	1.50	1	01/15/2020 23:23	WG1411916
(S) Toluene-d8	*103*			*80.0-120*		*01/15/2020 23:23*	WG1411916
(S) 4-Bromofluorobenzene	*94.9*			*77.0-126*		*01/15/2020 23:23*	WG1411916
(S) 1,2-Dichloroethane-d4	*106*			*70.0-130*		*01/15/2020 23:23*	WG1411916

JC 1/30/20

FMW-141-011420

Collected date/time: 01/14/20 15:35

SAMPLE RESULTS - 10

L1179348

Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	119000		2710	20000	1	01/15/2020 19:56	WG1411429

Sample Narrative:

L1179348-10 WG1411429: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	10000		51.9	1000	1	01/15/2020 16:33	WG1411442
Nitrate	38.5	J	22.7	100	1	01/15/2020 16:33	WG1411442
Sulfate	1180	J	77.4	5000	1	01/15/2020 16:33	WG1411442

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	3740		102	1000	1	01/16/2020 03:47	WG1411668

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	5520		15.0	100	1	01/16/2020 13:45	WG1411560
Manganese	340		0.250	5.00	1	01/16/2020 13:45	WG1411560

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	1890		0.287	0.678	1	01/16/2020 14:12	WG1411726
Ethane	23.6		0.296	1.29	1	01/16/2020 14:12	WG1411726
Ethene	299		0.422	1.27	1	01/16/2020 14:12	WG1411726

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U		5.25	125	5	01/16/2020 23:40	WG1412367
Acrylonitrile	U		4.37	25.0	5	01/16/2020 23:40	WG1412367
Benzene	U		0.448	2.50	5	01/16/2020 23:40	WG1412367
Bromobenzene	U		0.665	2.50	5	01/16/2020 23:40	WG1412367
Bromodichloromethane	U		0.400	2.50	5	01/16/2020 23:40	WG1412367
Bromochloromethane	U		0.725	2.50	5	01/16/2020 23:40	WG1412367
Bromoform	U		0.930	2.50	5	01/16/2020 23:40	WG1412367
Bromomethane	U		0.785	12.5	5	01/16/2020 23:40	WG1412367
n-Butylbenzene	U		0.715	2.50	5	01/16/2020 23:40	WG1412367
sec-Butylbenzene	U		0.670	2.50	5	01/16/2020 23:40	WG1412367
tert-Butylbenzene	U		0.915	2.50	5	01/16/2020 23:40	WG1412367
Carbon disulfide	U	UJ J0	0.505	2.50	5	01/16/2020 23:40	WG1412367
Carbon tetrachloride	U		0.795	2.50	5	01/16/2020 23:40	WG1412367
Chlorobenzene	U		0.700	2.50	5	01/16/2020 23:40	WG1412367
Chlorodibromomethane	U		0.640	2.50	5	01/16/2020 23:40	WG1412367
Chloroethane	U		0.705	12.5	5	01/16/2020 23:40	WG1412367
Chloroform	U		0.430	2.50	5	01/16/2020 23:40	WG1412367
Chloromethane	U		0.765	6.25	5	01/16/2020 23:40	WG1412367
2-Chlorotoluene	U		0.555	2.50	5	01/16/2020 23:40	WG1412367
4-Chlorotoluene	U		0.486	2.50	5	01/16/2020 23:40	WG1412367

JC 1/30/20

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

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch	
1,2-Dibromo-3-Chloropropane	U		1.63	12.5	5	01/16/2020 23:40	WG1412367	
1,2-Dibromoethane	U		0.965	2.50	5	01/16/2020 23:40	WG1412367	
Dibromomethane	U		0.585	2.50	5	01/16/2020 23:40	WG1412367	
1,2-Dichlorobenzene	U		0.505	2.50	5	01/16/2020 23:40	WG1412367	
1,3-Dichlorobenzene	U		0.650	2.50	5	01/16/2020 23:40	WG1412367	
1,4-Dichlorobenzene	U		0.605	2.50	5	01/16/2020 23:40	WG1412367	
Dichlorodifluoromethane	U		0.635	12.5	5	01/16/2020 23:40	WG1412367	
1,1-Dichloroethane	U		0.570	2.50	5	01/16/2020 23:40	WG1412367	
1,2-Dichloroethane	U		0.540	2.50	5	01/16/2020 23:40	WG1412367	
1,1-Dichloroethene	1.01	J	0.940	2.50	5	01/16/2020 23:40	WG1412367	
cis-1,2-Dichloroethene	414		0.467	2.50	5	01/16/2020 23:40	WG1412367	
trans-1,2-Dichloroethene	1.98	J	0.760	2.50	5	01/16/2020 23:40	WG1412367	
1,2-Dichloropropane	U		0.950	2.50	5	01/16/2020 23:40	WG1412367	
1,1-Dichloropropene	U		0.640	2.50	5	01/16/2020 23:40	WG1412367	
1,3-Dichloropropane	U		0.735	5.00	5	01/16/2020 23:40	WG1412367	
cis-1,3-Dichloropropene	U		0.488	2.50	5	01/16/2020 23:40	WG1412367	
trans-1,3-Dichloropropene	U		1.11	2.50	5	01/16/2020 23:40	WG1412367	
trans-1,4-Dichloro-2-butene	U UJ	J0	1.29	25.0	5	01/16/2020 23:40	WG1412367	
2,2-Dichloropropane	U		0.465	2.50	5	01/16/2020 23:40	WG1412367	
Di-isopropyl ether	U		0.462	2.50	5	01/16/2020 23:40	WG1412367	
Ethylbenzene	U		0.790	2.50	5	01/16/2020 23:40	WG1412367	
Hexachloro-1,3-butadiene	U		0.785	5.00	5	01/16/2020 23:40	WG1412367	
2-Hexanone	U		3.78	25.0	5	01/16/2020 23:40	WG1412367	
n-Hexane	U UJ	J0	1.53	25.0	5	01/16/2020 23:40	WG1412367	
Iodomethane	U		1.89	50.0	5	01/16/2020 23:40	WG1412367	
Isopropylbenzene	U		0.630	2.50	5	01/16/2020 23:40	WG1412367	
p-Isopropyltoluene	U		0.690	2.50	5	01/16/2020 23:40	WG1412367	
2-Butanone (MEK)	U		6.40	25.0	5	01/16/2020 23:40	WG1412367	
Methylene Chloride	U		5.35	12.5	5	01/16/2020 23:40	WG1412367	
4-Methyl-2-pentanone (MIBK)	U		4.12	25.0	5	01/16/2020 23:40	WG1412367	
Methyl tert-butyl ether	U		0.510	2.50	5	01/16/2020 23:40	WG1412367	
Naphthalene	0.903 U	~~B J J0~~	0.870	12.5	5	01/16/2020 23:40	WG1412367	
n-Propylbenzene	U		0.810	2.50	5	01/16/2020 23:40	WG1412367	
Styrene	U		0.585	2.50	5	01/16/2020 23:40	WG1412367	
1,1,1,2-Tetrachloroethane	U		0.600	2.50	5	01/16/2020 23:40	WG1412367	
1,1,2,2-Tetrachloroethane	U		0.650	2.50	5	01/16/2020 23:40	WG1412367	
1,1,2-Trichlorotrifluoroethane	U		0.820	2.50	5	01/16/2020 23:40	WG1412367	
Tetrachloroethene	U		0.995	2.50	5	01/16/2020 23:40	WG1412367	
Toluene	U		2.06	2.50	5	01/16/2020 23:40	WG1412367	
1,2,3-Trichlorobenzene	U UJ	J0	0.820	2.50	5	01/16/2020 23:40	WG1412367	
1,2,4-Trichlorobenzene	U		1.78	2.50	5	01/16/2020 23:40	WG1412367	
1,1,1-Trichloroethane	U		0.470	2.50	5	01/16/2020 23:40	WG1412367	
1,1,2-Trichloroethane	U		0.930	2.50	5	01/16/2020 23:40	WG1412367	
Trichloroethene	2.91		0.765	2.50	5	01/16/2020 23:40	WG1412367	
Trichlorofluoromethane	U		0.650	12.5	5	01/16/2020 23:40	WG1412367	
1,2,3-Trichloropropane	U		1.23	12.5	5	01/16/2020 23:40	WG1412367	
1,2,4-Trimethylbenzene	U		0.615	2.50	5	01/16/2020 23:40	WG1412367	
1,2,3-Trimethylbenzene	U		0.369	2.50	5	01/16/2020 23:40	WG1412367	
1,3,5-Trimethylbenzene	U		0.620	2.50	5	01/16/2020 23:40	WG1412367	
Vinyl acetate	U UJ	J0	3.22	25.0	5	01/16/2020 23:40	WG1412367	JC 1/30/20
Vinyl chloride	532		0.590	2.50	5	01/16/2020 23:40	WG1412367	
Xylenes, Total	U		1.58	7.50	5	01/16/2020 23:40	WG1412367	
(S) Toluene-d8	*99.0*			*80.0-120*		*01/16/2020 23:40*	WG1412367	
(S) 4-Bromofluorobenzene	*107*			*77.0-126*		*01/16/2020 23:40*	WG1412367	
(S) 1,2-Dichloroethane-d4	*111*			*70.0-130*		*01/16/2020 23:40*	WG1412367	

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

Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	233000		2710	20000	1	01/16/2020 15:58	WG1412383

Sample Narrative:

L1179855-01 WG1412383: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	19400		51.9	1000	1	01/16/2020 17:23	WG1412158
Nitrate	U		22.7	100	1	01/16/2020 17:23	WG1412158
Sulfate	304000		387	25000	5	01/16/2020 22:31	WG1412158

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	2440		102	1000	1	01/16/2020 22:43	WG1412539

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	12000		15.0	100	1	01/17/2020 08:15	WG1412084
Manganese	1300		0.250	5.00	1	01/17/2020 08:15	WG1412084

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	303		0.287	0.678	1	01/18/2020 13:52	WG1413356
Ethane	U	UJ	0.296	1.29	1	01/18/2020 13:52	WG1413356
Ethene	U		0.422	1.27	1	01/18/2020 13:52	WG1413356

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U		1.05	25.0	1	01/16/2020 22:40	WG1412735
Acrylonitrile	U		0.873	5.00	1	01/16/2020 22:40	WG1412735
Benzene	U		0.0896	0.500	1	01/16/2020 22:40	WG1412735
Bromobenzene	U		0.133	0.500	1	01/16/2020 22:40	WG1412735
Bromodichloromethane	U		0.0800	0.500	1	01/16/2020 22:40	WG1412735
Bromochloromethane	U		0.145	0.500	1	01/16/2020 22:40	WG1412735
Bromoform	U		0.186	0.500	1	01/16/2020 22:40	WG1412735
Bromomethane	U		0.157	2.50	1	01/16/2020 22:40	WG1412735
n-Butylbenzene	U		0.143	0.500	1	01/16/2020 22:40	WG1412735
sec-Butylbenzene	U		0.134	0.500	1	01/16/2020 22:40	WG1412735
tert-Butylbenzene	U		0.183	0.500	1	01/16/2020 22:40	WG1412735
Carbon disulfide	U		0.101	0.500	1	01/16/2020 22:40	WG1412735
Carbon tetrachloride	U		0.159	0.500	1	01/16/2020 22:40	WG1412735
Chlorobenzene	U		0.140	0.500	1	01/16/2020 22:40	WG1412735
Chlorodibromomethane	U		0.128	0.500	1	01/16/2020 22:40	WG1412735
Chloroethane	U		0.141	2.50	1	01/16/2020 22:40	WG1412735
Chloroform	U		0.0860	0.500	1	01/16/2020 22:40	WG1412735
Chloromethane	U		0.153	1.25	1	01/16/2020 22:40	WG1412735
2-Chlorotoluene	U		0.111	0.500	1	01/16/2020 22:40	WG1412735
4-Chlorotoluene	U		0.0972	0.500	1	01/16/2020 22:40	WG1412735

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	01/16/2020 22:40	WG1412735
1,2-Dibromoethane	U		0.193	0.500	1	01/16/2020 22:40	WG1412735
Dibromomethane	U		0.117	0.500	1	01/16/2020 22:40	WG1412735
1,2-Dichlorobenzene	U		0.101	0.500	1	01/16/2020 22:40	WG1412735
1,3-Dichlorobenzene	U		0.130	0.500	1	01/16/2020 22:40	WG1412735
1,4-Dichlorobenzene	U		0.121	0.500	1	01/16/2020 22:40	WG1412735
Dichlorodifluoromethane	U		0.127	2.50	1	01/16/2020 22:40	WG1412735
1,1-Dichloroethane	U		0.114	0.500	1	01/16/2020 22:40	WG1412735
1,2-Dichloroethane	U		0.108	0.500	1	01/16/2020 22:40	WG1412735
1,1-Dichloroethene	2.95		0.188	0.500	1	01/16/2020 22:40	WG1412735
cis-1,2-Dichloroethene	569		0.933	5.00	10	01/22/2020 08:53	WG1415075
trans-1,2-Dichloroethene	1.85		0.152	0.500	1	01/16/2020 22:40	WG1412735
1,2-Dichloropropane	U		0.190	0.500	1	01/16/2020 22:40	WG1412735
1,1-Dichloropropene	U		0.128	0.500	1	01/16/2020 22:40	WG1412735
1,3-Dichloropropane	U		0.147	1.00	1	01/16/2020 22:40	WG1412735
cis-1,3-Dichloropropene	U		0.0976	0.500	1	01/16/2020 22:40	WG1412735
trans-1,3-Dichloropropene	U		0.222	0.500	1	01/16/2020 22:40	WG1412735
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	01/16/2020 22:40	WG1412735
2,2-Dichloropropane	U		0.0929	0.500	1	01/16/2020 22:40	WG1412735
Di-isopropyl ether	U		0.0924	0.500	1	01/16/2020 22:40	WG1412735
Ethylbenzene	U		0.158	0.500	1	01/16/2020 22:40	WG1412735
Hexachloro-1,3-butadiene	U		0.157	1.00	1	01/16/2020 22:40	WG1412735
2-Hexanone	U		0.757	5.00	1	01/16/2020 22:40	WG1412735
n-Hexane	U	UJ J0	0.305	5.00	1	01/16/2020 22:40	WG1412735
Iodomethane	U	UJ J0	0.377	10.0	1	01/16/2020 22:40	WG1412735
Isopropylbenzene	U		0.126	0.500	1	01/16/2020 22:40	WG1412735
p-Isopropyltoluene	U		0.138	0.500	1	01/16/2020 22:40	WG1412735
2-Butanone (MEK)	U		1.28	5.00	1	01/16/2020 22:40	WG1412735
Methylene Chloride	U		1.07	2.50	1	01/16/2020 22:40	WG1412735
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	01/16/2020 22:40	WG1412735
Methyl tert-butyl ether	U		0.102	0.500	1	01/16/2020 22:40	WG1412735
Naphthalene	U	~~J4~~	0.174	2.50	1	01/16/2020 22:40	WG1412735
n-Propylbenzene	U		0.162	0.500	1	01/16/2020 22:40	WG1412735
Styrene	U		0.117	0.500	1	01/16/2020 22:40	WG1412735
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	01/16/2020 22:40	WG1412735
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	01/16/2020 22:40	WG1412735
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	01/16/2020 22:40	WG1412735
Tetrachloroethene	19.8		0.199	0.500	1	01/16/2020 22:40	WG1412735
Toluene	U		0.412	0.500	1	01/16/2020 22:40	WG1412735
1,2,3-Trichlorobenzene	U	~~J4~~	0.164	0.500	1	01/16/2020 22:40	WG1412735
1,2,4-Trichlorobenzene	U		0.355	0.500	1	01/16/2020 22:40	WG1412735
1,1,1-Trichloroethane	U		0.0940	0.500	1	01/16/2020 22:40	WG1412735
1,1,2-Trichloroethane	U		0.186	0.500	1	01/16/2020 22:40	WG1412735
Trichloroethene	88.5		0.153	0.500	1	01/16/2020 22:40	WG1412735
Trichlorofluoromethane	U		0.130	2.50	1	01/16/2020 22:40	WG1412735
1,2,3-Trichloropropane	U		0.247	2.50	1	01/16/2020 22:40	WG1412735
1,2,4-Trimethylbenzene	U		0.123	0.500	1	01/16/2020 22:40	WG1412735
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	01/16/2020 22:40	WG1412735
1,3,5-Trimethylbenzene	U		0.124	0.500	1	01/16/2020 22:40	WG1412735
Vinyl acetate	U	UJ J0	0.645	5.00	1	01/16/2020 22:40	WG1412735
Vinyl chloride	17.9		0.118	0.500	1	01/16/2020 22:40	WG1412735
Xylenes, Total	U		0.316	1.50	1	01/16/2020 22:40	WG1412735
(S) Toluene-d8	*103*			*80.0-120*		*01/16/2020 22:40*	WG1412735
(S) Toluene-d8	*104*			*80.0-120*		*01/22/2020 08:53*	WG1415075
(S) 4-Bromofluorobenzene	*97.8*			*77.0-126*		*01/16/2020 22:40*	WG1412735
(S) 4-Bromofluorobenzene	*94.6*			*77.0-126*		*01/22/2020 08:53*	WG1415075

JC 1/30/20

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
(S) 1,2-Dichloroethane-d4	*102*			*70.0-130*		*01/16/2020 22:40*	WG1412735
(S) 1,2-Dichloroethane-d4	*107*			*70.0-130*		*01/22/2020 08:53*	WG1415075

JC 1/30/20

Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Alkalinity	231000		2710	20000	1	01/16/2020 16:06	WG1412383

Sample Narrative:

L1179855-02 WG1412383: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chloride	18900		51.9	1000	1	01/16/2020 17:35	WG1412158
Nitrate	U		22.7	100	1	01/16/2020 17:35	WG1412158
Sulfate	309000		774	50000	10	01/16/2020 22:42	WG1412158

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
TOC (Total Organic Carbon)	2440		102	1000	1	01/17/2020 00:20	WG1412539

Metals (ICPMS) by Method 6020B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Iron	11700		15.0	100	1	01/17/2020 08:18	WG1412084
Manganese	1270		0.250	5.00	1	01/17/2020 08:18	WG1412084

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Methane	290		0.287	0.678	1	01/18/2020 14:14	WG1413356
Ethane	7.67	J	0.296	1.29	1	01/18/2020 14:14	WG1413356
Ethene	U		0.422	1.27	1	01/18/2020 14:14	WG1413356

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	U		1.05	25.0	1	01/16/2020 22:59	WG1412735
Acrylonitrile	U		0.873	5.00	1	01/16/2020 22:59	WG1412735
Benzene	U		0.0896	0.500	1	01/16/2020 22:59	WG1412735
Bromobenzene	U		0.133	0.500	1	01/16/2020 22:59	WG1412735
Bromodichloromethane	U		0.0800	0.500	1	01/16/2020 22:59	WG1412735
Bromochloromethane	U		0.145	0.500	1	01/16/2020 22:59	WG1412735
Bromoform	U		0.186	0.500	1	01/16/2020 22:59	WG1412735
Bromomethane	U		0.157	2.50	1	01/16/2020 22:59	WG1412735
n-Butylbenzene	U		0.143	0.500	1	01/16/2020 22:59	WG1412735
sec-Butylbenzene	U		0.134	0.500	1	01/16/2020 22:59	WG1412735
tert-Butylbenzene	U		0.183	0.500	1	01/16/2020 22:59	WG1412735
Carbon disulfide	U		0.101	0.500	1	01/16/2020 22:59	WG1412735
Carbon tetrachloride	U		0.159	0.500	1	01/16/2020 22:59	WG1412735
Chlorobenzene	U		0.140	0.500	1	01/16/2020 22:59	WG1412735
Chlorodibromomethane	U		0.128	0.500	1	01/16/2020 22:59	WG1412735
Chloroethane	U		0.141	2.50	1	01/16/2020 22:59	WG1412735
Chloroform	U		0.0860	0.500	1	01/16/2020 22:59	WG1412735
Chloromethane	U		0.153	1.25	1	01/16/2020 22:59	WG1412735
2-Chlorotoluene	U		0.111	0.500	1	01/16/2020 22:59	WG1412735
4-Chlorotoluene	U		0.0972	0.500	1	01/16/2020 22:59	WG1412735

JC 1/30/20

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	01/16/2020 22:59	WG1412735
1,2-Dibromoethane	U		0.193	0.500	1	01/16/2020 22:59	WG1412735
Dibromomethane	U		0.117	0.500	1	01/16/2020 22:59	WG1412735
1,2-Dichlorobenzene	U		0.101	0.500	1	01/16/2020 22:59	WG1412735
1,3-Dichlorobenzene	U		0.130	0.500	1	01/16/2020 22:59	WG1412735
1,4-Dichlorobenzene	U		0.121	0.500	1	01/16/2020 22:59	WG1412735
Dichlorodifluoromethane	U		0.127	2.50	1	01/16/2020 22:59	WG1412735
1,1-Dichloroethane	U		0.114	0.500	1	01/16/2020 22:59	WG1412735
1,2-Dichloroethane	U		0.108	0.500	1	01/16/2020 22:59	WG1412735
1,1-Dichloroethene	2.74		0.188	0.500	1	01/16/2020 22:59	WG1412735
cis-1,2-Dichloroethene	596		0.933	5.00	10	01/22/2020 09:13	WG1415075
trans-1,2-Dichloroethene	2.12		0.152	0.500	1	01/16/2020 22:59	WG1412735
1,2-Dichloropropane	U		0.190	0.500	1	01/16/2020 22:59	WG1412735
1,1-Dichloropropene	U		0.128	0.500	1	01/16/2020 22:59	WG1412735
1,3-Dichloropropane	U		0.147	1.00	1	01/16/2020 22:59	WG1412735
cis-1,3-Dichloropropene	U		0.0976	0.500	1	01/16/2020 22:59	WG1412735
trans-1,3-Dichloropropene	U		0.222	0.500	1	01/16/2020 22:59	WG1412735
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	01/16/2020 22:59	WG1412735
2,2-Dichloropropane	U		0.0929	0.500	1	01/16/2020 22:59	WG1412735
Di-isopropyl ether	U		0.0924	0.500	1	01/16/2020 22:59	WG1412735
Ethylbenzene	U		0.158	0.500	1	01/16/2020 22:59	WG1412735
Hexachloro-1,3-butadiene	U		0.157	1.00	1	01/16/2020 22:59	WG1412735
2-Hexanone	U		0.757	5.00	1	01/16/2020 22:59	WG1412735
n-Hexane	U	UJ J0	0.305	5.00	1	01/16/2020 22:59	WG1412735
Iodomethane	U	UJ J0	0.377	10.0	1	01/16/2020 22:59	WG1412735
Isopropylbenzene	U		0.126	0.500	1	01/16/2020 22:59	WG1412735
p-Isopropyltoluene	U		0.138	0.500	1	01/16/2020 22:59	WG1412735
2-Butanone (MEK)	U		1.28	5.00	1	01/16/2020 22:59	WG1412735
Methylene Chloride	U		1.07	2.50	1	01/16/2020 22:59	WG1412735
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	01/16/2020 22:59	WG1412735
Methyl tert-butyl ether	U		0.102	0.500	1	01/16/2020 22:59	WG1412735
Naphthalene	U	~~J4~~	0.174	2.50	1	01/16/2020 22:59	WG1412735
n-Propylbenzene	U		0.162	0.500	1	01/16/2020 22:59	WG1412735
Styrene	U		0.117	0.500	1	01/16/2020 22:59	WG1412735
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	01/16/2020 22:59	WG1412735
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	01/16/2020 22:59	WG1412735
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	01/16/2020 22:59	WG1412735
Tetrachloroethene	22.7		0.199	0.500	1	01/16/2020 22:59	WG1412735
Toluene	U		0.412	0.500	1	01/16/2020 22:59	WG1412735
1,2,3-Trichlorobenzene	U	~~J4~~	0.164	0.500	1	01/16/2020 22:59	WG1412735
1,2,4-Trichlorobenzene	U		0.355	0.500	1	01/16/2020 22:59	WG1412735
1,1,1-Trichloroethane	U		0.0940	0.500	1	01/16/2020 22:59	WG1412735
1,1,2-Trichloroethane	U		0.186	0.500	1	01/16/2020 22:59	WG1412735
Trichloroethene	98.3		0.153	0.500	1	01/16/2020 22:59	WG1412735
Trichlorofluoromethane	U		0.130	2.50	1	01/16/2020 22:59	WG1412735
1,2,3-Trichloropropane	U		0.247	2.50	1	01/16/2020 22:59	WG1412735
1,2,4-Trimethylbenzene	U		0.123	0.500	1	01/16/2020 22:59	WG1412735
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	01/16/2020 22:59	WG1412735
1,3,5-Trimethylbenzene	U		0.124	0.500	1	01/16/2020 22:59	WG1412735
Vinyl acetate	U	UJ J0	0.645	5.00	1	01/16/2020 22:59	WG1412735
Vinyl chloride	17.9		0.118	0.500	1	01/16/2020 22:59	WG1412735
Xylenes, Total	U		0.316	1.50	1	01/16/2020 22:59	WG1412735
(S) Toluene-d8	*103*			*80.0-120*		*01/16/2020 22:59*	WG1412735
(S) Toluene-d8	*106*			*80.0-120*		*01/22/2020 09:13*	WG1415075
(S) 4-Bromofluorobenzene	*97.4*			*77.0-126*		*01/16/2020 22:59*	WG1412735
(S) 4-Bromofluorobenzene	*93.3*			*77.0-126*		*01/22/2020 09:13*	WG1415075

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
(S) 1,2-Dichloroethane-d4	*101*			*70.0-130*		*01/16/2020 22:59*	WG1412735
(S) 1,2-Dichloroethane-d4	*108*			*70.0-130*		*01/22/2020 09:13*	WG1415075

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Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	266000		2710	20000	1	01/16/2020 16:14	WG1412383

Sample Narrative:

L1179855-03 WG1412383: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	15100		51.9	1000	1	01/16/2020 17:47	WG1412158
Nitrate	U		22.7	100	1	01/16/2020 17:47	WG1412158
Sulfate	64700		77.4	5000	1	01/16/2020 17:47	WG1412158

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	7870		102	1000	1	01/17/2020 00:38	WG1412539

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	1990		15.0	100	1	01/17/2020 08:22	WG1412084
Manganese	198		0.250	5.00	1	01/17/2020 08:22	WG1412084

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	U		31.6	100	1	01/17/2020 23:01	WG1413155
(S) a,a,a-Trifluorotoluene(FID)	*97.0*			*78.0-120*		*01/17/2020 23:01*	WG1413155

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	12.6		0.287	0.678	1	01/18/2020 14:17	WG1413356
Ethane	2.79		0.296	1.29	1	01/18/2020 14:17	WG1413356
Ethene	U		0.422	1.27	1	01/18/2020 14:17	WG1413356

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	1.22	J	1.05	25.0	1	01/16/2020 23:18	WG1412735
Acrylonitrile	U		0.873	5.00	1	01/16/2020 23:18	WG1412735
Benzene	U		0.0896	0.500	1	01/16/2020 23:18	WG1412735
Bromobenzene	U		0.133	0.500	1	01/16/2020 23:18	WG1412735
Bromodichloromethane	U		0.0800	0.500	1	01/16/2020 23:18	WG1412735
Bromochloromethane	U		0.145	0.500	1	01/16/2020 23:18	WG1412735
Bromoform	U		0.186	0.500	1	01/16/2020 23:18	WG1412735
Bromomethane	U		0.157	2.50	1	01/16/2020 23:18	WG1412735
n-Butylbenzene	U		0.143	0.500	1	01/16/2020 23:18	WG1412735
sec-Butylbenzene	U		0.134	0.500	1	01/16/2020 23:18	WG1412735
tert-Butylbenzene	U		0.183	0.500	1	01/16/2020 23:18	WG1412735
Carbon disulfide	6.72		0.101	0.500	1	01/16/2020 23:18	WG1412735
Carbon tetrachloride	U		0.159	0.500	1	01/16/2020 23:18	WG1412735

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chlorobenzene	U		0.140	0.500	1	01/16/2020 23:18	WG1412735
Chlorodibromomethane	U		0.128	0.500	1	01/16/2020 23:18	WG1412735
Chloroethane	U		0.141	2.50	1	01/16/2020 23:18	WG1412735
Chloroform	U		0.0860	0.500	1	01/16/2020 23:18	WG1412735
Chloromethane	U		0.153	1.25	1	01/16/2020 23:18	WG1412735
2-Chlorotoluene	U		0.111	0.500	1	01/16/2020 23:18	WG1412735
4-Chlorotoluene	U		0.0972	0.500	1	01/16/2020 23:18	WG1412735
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	01/16/2020 23:18	WG1412735
1,2-Dibromoethane	U		0.193	0.500	1	01/16/2020 23:18	WG1412735
Dibromomethane	U		0.117	0.500	1	01/16/2020 23:18	WG1412735
1,2-Dichlorobenzene	U		0.101	0.500	1	01/16/2020 23:18	WG1412735
1,3-Dichlorobenzene	U		0.130	0.500	1	01/16/2020 23:18	WG1412735
1,4-Dichlorobenzene	U		0.121	0.500	1	01/16/2020 23:18	WG1412735
Dichlorodifluoromethane	U		0.127	2.50	1	01/16/2020 23:18	WG1412735
1,1-Dichloroethane	U		0.114	0.500	1	01/16/2020 23:18	WG1412735
1,2-Dichloroethane	U		0.108	0.500	1	01/16/2020 23:18	WG1412735
1,1-Dichloroethene	U		0.188	0.500	1	01/16/2020 23:18	WG1412735
cis-1,2-Dichloroethene	0.172	J	0.0933	0.500	1	01/22/2020 09:33	WG1415075
trans-1,2-Dichloroethene	U		0.152	0.500	1	01/16/2020 23:18	WG1412735
1,2-Dichloropropane	U		0.190	0.500	1	01/16/2020 23:18	WG1412735
1,1-Dichloropropene	U		0.128	0.500	1	01/16/2020 23:18	WG1412735
1,3-Dichloropropane	U		0.147	1.00	1	01/16/2020 23:18	WG1412735
cis-1,3-Dichloropropene	U		0.0976	0.500	1	01/16/2020 23:18	WG1412735
trans-1,3-Dichloropropene	U		0.222	0.500	1	01/16/2020 23:18	WG1412735
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	01/16/2020 23:18	WG1412735
2,2-Dichloropropane	U		0.0929	0.500	1	01/16/2020 23:18	WG1412735
Di-isopropyl ether	U		0.0924	0.500	1	01/16/2020 23:18	WG1412735
Ethylbenzene	U		0.158	0.500	1	01/16/2020 23:18	WG1412735
Hexachloro-1,3-butadiene	U		0.157	1.00	1	01/16/2020 23:18	WG1412735
2-Hexanone	U		0.757	5.00	1	01/16/2020 23:18	WG1412735
n-Hexane	U UJ	J0	0.305	5.00	1	01/16/2020 23:18	WG1412735
Iodomethane	U UJ	J0	0.377	10.0	1	01/16/2020 23:18	WG1412735
Isopropylbenzene	U		0.126	0.500	1	01/16/2020 23:18	WG1412735
p-Isopropyltoluene	U		0.138	0.500	1	01/16/2020 23:18	WG1412735
2-Butanone (MEK)	U		1.28	5.00	1	01/16/2020 23:18	WG1412735
Methylene Chloride	U		1.07	2.50	1	01/16/2020 23:18	WG1412735
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	01/16/2020 23:18	WG1412735
Methyl tert-butyl ether	U		0.102	0.500	1	01/16/2020 23:18	WG1412735
Naphthalene	U	~~J4~~	0.174	2.50	1	01/16/2020 23:18	WG1412735
n-Propylbenzene	U		0.162	0.500	1	01/16/2020 23:18	WG1412735
Styrene	U		0.117	0.500	1	01/16/2020 23:18	WG1412735
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	01/16/2020 23:18	WG1412735
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	01/16/2020 23:18	WG1412735
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	01/16/2020 23:18	WG1412735
Tetrachloroethene	U		0.199	0.500	1	01/16/2020 23:18	WG1412735
Toluene	U		0.412	0.500	1	01/16/2020 23:18	WG1412735
1,2,3-Trichlorobenzene	U	~~J4~~	0.164	0.500	1	01/16/2020 23:18	WG1412735
1,2,4-Trichlorobenzene	U		0.355	0.500	1	01/16/2020 23:18	WG1412735
1,1,1-Trichloroethane	U		0.0940	0.500	1	01/16/2020 23:18	WG1412735
1,1,2-Trichloroethane	U		0.186	0.500	1	01/16/2020 23:18	WG1412735
Trichloroethene	U		0.153	0.500	1	01/16/2020 23:18	WG1412735
Trichlorofluoromethane	U		0.130	2.50	1	01/16/2020 23:18	WG1412735
1,2,3-Trichloropropane	U		0.247	2.50	1	01/16/2020 23:18	WG1412735
1,2,4-Trimethylbenzene	U		0.123	0.500	1	01/16/2020 23:18	WG1412735
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	01/16/2020 23:18	WG1412735
1,3,5-Trimethylbenzene	U		0.124	0.500	1	01/16/2020 23:18	WG1412735

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Vinyl acetate	U		0.645	5.00	1	01/16/2020 23:18	WG1412735
Vinyl chloride	U		0.118	0.500	1	01/16/2020 23:18	WG1412735
Xylenes, Total	U		0.316	1.50	1	01/16/2020 23:18	WG1412735
(S) Toluene-d8	*102*			*80.0-120*		*01/16/2020 23:18*	WG1412735
(S) Toluene-d8	*106*			*80.0-120*		*01/22/2020 09:33*	WG1415075
(S) 4-Bromofluorobenzene	*95.9*			*77.0-126*		*01/16/2020 23:18*	WG1412735
(S) 4-Bromofluorobenzene	*92.9*			*77.0-126*		*01/22/2020 09:33*	WG1415075
(S) 1,2-Dichloroethane-d4	*101*			*70.0-130*		*01/16/2020 23:18*	WG1412735
(S) 1,2-Dichloroethane-d4	*106*			*70.0-130*		*01/22/2020 09:33*	WG1415075

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

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Wet Chemistry by Method 2320 B-2011

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Alkalinity	107000		2710	20000	1	01/16/2020 16:33	WG1412383

Sample Narrative:

L1179855-04 WG1412383: Endpoint pH 4.5

Wet Chemistry by Method 9056A

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Chloride	11700		51.9	1000	1	01/16/2020 18:22	WG1412158
Nitrate	1020		22.7	100	1	01/16/2020 18:22	WG1412158
Sulfate	28600		77.4	5000	1	01/16/2020 18:22	WG1412158

Wet Chemistry by Method 9060A

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
TOC (Total Organic Carbon)	10800		102	1000	1	01/17/2020 01:01	WG1412539

Metals (ICPMS) by Method 6020B

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Iron	6460		15.0	100	1	01/17/2020 08:25	WG1412084
Manganese	98.0		0.250	5.00	1	01/17/2020 08:25	WG1412084

Volatile Organic Compounds (GC) by Method NWTPHGX

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Gasoline Range Organics-NWTPH	U		31.6	100	1	01/17/2020 23:22	WG1413155
(S) a,a,a-Trifluorotoluene(FID)	*97.0*			*78.0-120*		*01/17/2020 23:22*	WG1413155

Volatile Organic Compounds (GC) by Method RSK175

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Methane	U		0.287	0.678	1	01/18/2020 14:25	WG1413356
Ethane	U		0.296	1.29	1	01/18/2020 14:25	WG1413356
Ethene	U		0.422	1.27	1	01/18/2020 14:25	WG1413356

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

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Acetone	U		1.05	25.0	1	01/16/2020 23:37	WG1412735
Acrylonitrile	U		0.873	5.00	1	01/16/2020 23:37	WG1412735
Benzene	U		0.0896	0.500	1	01/16/2020 23:37	WG1412735
Bromobenzene	U		0.133	0.500	1	01/16/2020 23:37	WG1412735
Bromodichloromethane	U		0.0800	0.500	1	01/16/2020 23:37	WG1412735
Bromochloromethane	U		0.145	0.500	1	01/16/2020 23:37	WG1412735
Bromoform	U		0.186	0.500	1	01/16/2020 23:37	WG1412735
Bromomethane	U		0.157	2.50	1	01/16/2020 23:37	WG1412735
n-Butylbenzene	U		0.143	0.500	1	01/16/2020 23:37	WG1412735
sec-Butylbenzene	U		0.134	0.500	1	01/16/2020 23:37	WG1412735
tert-Butylbenzene	U		0.183	0.500	1	01/16/2020 23:37	WG1412735
Carbon disulfide	U		0.101	0.500	1	01/16/2020 23:37	WG1412735
Carbon tetrachloride	U		0.159	0.500	1	01/16/2020 23:37	WG1412735

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chlorobenzene	U		0.140	0.500	1	01/16/2020 23:37	WG1412735
Chlorodibromomethane	U		0.128	0.500	1	01/16/2020 23:37	WG1412735
Chloroethane	U		0.141	2.50	1	01/16/2020 23:37	WG1412735
Chloroform	U		0.0860	0.500	1	01/16/2020 23:37	WG1412735
Chloromethane	U		0.153	1.25	1	01/16/2020 23:37	WG1412735
2-Chlorotoluene	U		0.111	0.500	1	01/16/2020 23:37	WG1412735
4-Chlorotoluene	U		0.0972	0.500	1	01/16/2020 23:37	WG1412735
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	01/16/2020 23:37	WG1412735
1,2-Dibromoethane	U		0.193	0.500	1	01/16/2020 23:37	WG1412735
Dibromomethane	U		0.117	0.500	1	01/16/2020 23:37	WG1412735
1,2-Dichlorobenzene	U		0.101	0.500	1	01/16/2020 23:37	WG1412735
1,3-Dichlorobenzene	U		0.130	0.500	1	01/16/2020 23:37	WG1412735
1,4-Dichlorobenzene	U		0.121	0.500	1	01/16/2020 23:37	WG1412735
Dichlorodifluoromethane	U		0.127	2.50	1	01/16/2020 23:37	WG1412735
1,1-Dichloroethane	U		0.114	0.500	1	01/16/2020 23:37	WG1412735
1,2-Dichloroethane	U		0.108	0.500	1	01/16/2020 23:37	WG1412735
1,1-Dichloroethene	U		0.188	0.500	1	01/16/2020 23:37	WG1412735
cis-1,2-Dichloroethene	U		0.0933	0.500	1	01/22/2020 09:53	WG1415075
trans-1,2-Dichloroethene	U		0.152	0.500	1	01/16/2020 23:37	WG1412735
1,2-Dichloropropane	U		0.190	0.500	1	01/16/2020 23:37	WG1412735
1,1-Dichloropropene	U		0.128	0.500	1	01/16/2020 23:37	WG1412735
1,3-Dichloropropane	U		0.147	1.00	1	01/16/2020 23:37	WG1412735
cis-1,3-Dichloropropene	U		0.0976	0.500	1	01/16/2020 23:37	WG1412735
trans-1,3-Dichloropropene	U		0.222	0.500	1	01/16/2020 23:37	WG1412735
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	01/16/2020 23:37	WG1412735
2,2-Dichloropropane	U		0.0929	0.500	1	01/16/2020 23:37	WG1412735
Di-isopropyl ether	U		0.0924	0.500	1	01/16/2020 23:37	WG1412735
Ethylbenzene	U		0.158	0.500	1	01/16/2020 23:37	WG1412735
Hexachloro-1,3-butadiene	U		0.157	1.00	1	01/16/2020 23:37	WG1412735
2-Hexanone	U		0.757	5.00	1	01/16/2020 23:37	WG1412735
n-Hexane	U	UJ J0	0.305	5.00	1	01/16/2020 23:37	WG1412735
Iodomethane	U	UJ J0	0.377	10.0	1	01/16/2020 23:37	WG1412735
Isopropylbenzene	U		0.126	0.500	1	01/16/2020 23:37	WG1412735
p-Isopropyltoluene	U		0.138	0.500	1	01/16/2020 23:37	WG1412735
2-Butanone (MEK)	U		1.28	5.00	1	01/16/2020 23:37	WG1412735
Methylene Chloride	U		1.07	2.50	1	01/16/2020 23:37	WG1412735
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	01/16/2020 23:37	WG1412735
Methyl tert-butyl ether	U		0.102	0.500	1	01/16/2020 23:37	WG1412735
Naphthalene	U	~~J4~~	0.174	2.50	1	01/16/2020 23:37	WG1412735
n-Propylbenzene	U		0.162	0.500	1	01/16/2020 23:37	WG1412735
Styrene	U		0.117	0.500	1	01/16/2020 23:37	WG1412735
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	01/16/2020 23:37	WG1412735
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	01/16/2020 23:37	WG1412735
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	01/16/2020 23:37	WG1412735
Tetrachloroethene	U		0.199	0.500	1	01/16/2020 23:37	WG1412735
Toluene	U		0.412	0.500	1	01/16/2020 23:37	WG1412735
1,2,3-Trichlorobenzene	U	~~J4~~	0.164	0.500	1	01/16/2020 23:37	WG1412735
1,2,4-Trichlorobenzene	U		0.355	0.500	1	01/16/2020 23:37	WG1412735
1,1,1-Trichloroethane	U		0.0940	0.500	1	01/16/2020 23:37	WG1412735
1,1,2-Trichloroethane	U		0.186	0.500	1	01/16/2020 23:37	WG1412735
Trichloroethene	U		0.153	0.500	1	01/16/2020 23:37	WG1412735
Trichlorofluoromethane	U		0.130	2.50	1	01/16/2020 23:37	WG1412735
1,2,3-Trichloropropane	U		0.247	2.50	1	01/16/2020 23:37	WG1412735
1,2,4-Trimethylbenzene	U		0.123	0.500	1	01/16/2020 23:37	WG1412735
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	01/16/2020 23:37	WG1412735
1,3,5-Trimethylbenzene	U		0.124	0.500	1	01/16/2020 23:37	WG1412735

JC 1/30/20

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

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Vinyl acetate	U UJ	J0	0.645	5.00	1	01/16/2020 23:37	WG1412735
Vinyl chloride	U		0.118	0.500	1	01/16/2020 23:37	WG1412735
Xylenes, Total	U		0.316	1.50	1	01/16/2020 23:37	WG1412735
(S) Toluene-d8	*103*			*80.0-120*		*01/16/2020 23:37*	WG1412735
(S) Toluene-d8	*104*			*80.0-120*		*01/22/2020 09:53*	WG1415075
(S) 4-Bromofluorobenzene	*96.9*			*77.0-126*		*01/16/2020 23:37*	WG1412735
(S) 4-Bromofluorobenzene	*92.5*			*77.0-126*		*01/22/2020 09:53*	WG1415075
(S) 1,2-Dichloroethane-d4	*99.8*			*70.0-130*		*01/16/2020 23:37*	WG1412735
(S) 1,2-Dichloroethane-d4	*109*			*70.0-130*		*01/22/2020 09:53*	WG1415075

JC 1/30/20

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

Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	264000		2710	20000	1	01/17/2020 22:11	WG1413034

Sample Narrative:

L1180338-01 WG1413034: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	17700		51.9	1000	1	01/17/2020 15:04	WG1412916
Nitrate	U		22.7	100	1	01/17/2020 15:04	WG1412916
Sulfate	69900		77.4	5000	1	01/17/2020 15:04	WG1412916

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	1660	~~B~~	102	1000	1	01/21/2020 07:22	WG1413982

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	451		15.0	100	1	01/21/2020 16:39	WG1413721
Manganese	621		0.250	5.00	1	01/21/2020 16:39	WG1413721

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	158		0.287	0.678	1	01/18/2020 16:31	WG1413359
Ethane	2.06		0.296	1.29	1	01/18/2020 16:31	WG1413359
Ethene	U		0.422	1.27	1	01/18/2020 16:31	WG1413359

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	1.14	J	1.05	25.0	1	01/18/2020 12:55	WG1413456
Acrylonitrile	U		0.873	5.00	1	01/18/2020 12:55	WG1413456
Benzene	0.585		0.0896	0.500	1	01/18/2020 12:55	WG1413456
Bromobenzene	U		0.133	0.500	1	01/18/2020 12:55	WG1413456
Bromodichloromethane	U		0.0800	0.500	1	01/18/2020 12:55	WG1413456
Bromochloromethane	U		0.145	0.500	1	01/18/2020 12:55	WG1413456
Bromoform	U		0.186	0.500	1	01/18/2020 12:55	WG1413456
Bromomethane	U		0.157	2.50	1	01/18/2020 12:55	WG1413456
n-Butylbenzene	U		0.143	0.500	1	01/18/2020 12:55	WG1413456
sec-Butylbenzene	U		0.134	0.500	1	01/18/2020 12:55	WG1413456
tert-Butylbenzene	U		0.183	0.500	1	01/18/2020 12:55	WG1413456
Carbon disulfide	0.950		0.101	0.500	1	01/18/2020 12:55	WG1413456
Carbon tetrachloride	U		0.159	0.500	1	01/18/2020 12:55	WG1413456
Chlorobenzene	U		0.140	0.500	1	01/18/2020 12:55	WG1413456
Chlorodibromomethane	U		0.128	0.500	1	01/18/2020 12:55	WG1413456
Chloroethane	U		0.141	2.50	1	01/18/2020 12:55	WG1413456
Chloroform	U		0.0860	0.500	1	01/18/2020 12:55	WG1413456
Chloromethane	U		0.153	1.25	1	01/18/2020 12:55	WG1413456
2-Chlorotoluene	U		0.111	0.500	1	01/18/2020 12:55	WG1413456
4-Chlorotoluene	U		0.0972	0.500	1	01/18/2020 12:55	WG1413456

JC 1/30/20

MW-309-011620

Collected date/time: 01/16/20 09:00

SAMPLE RESULTS - 01

L1180338

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	01/18/2020 12:55	WG1413456
1,2-Dibromoethane	U		0.193	0.500	1	01/18/2020 12:55	WG1413456
Dibromomethane	U		0.117	0.500	1	01/18/2020 12:55	WG1413456
1,2-Dichlorobenzene	U		0.101	0.500	1	01/18/2020 12:55	WG1413456
1,3-Dichlorobenzene	U		0.130	0.500	1	01/18/2020 12:55	WG1413456
1,4-Dichlorobenzene	U		0.121	0.500	1	01/18/2020 12:55	WG1413456
Dichlorodifluoromethane	U		0.127	2.50	1	01/18/2020 12:55	WG1413456
1,1-Dichloroethane	U		0.114	0.500	1	01/18/2020 12:55	WG1413456
1,2-Dichloroethane	U		0.108	0.500	1	01/18/2020 12:55	WG1413456
1,1-Dichloroethene	U		0.188	0.500	1	01/18/2020 12:55	WG1413456
cis-1,2-Dichloroethene	0.487	J	0.0933	0.500	1	01/18/2020 12:55	WG1413456
trans-1,2-Dichloroethene	U		0.152	0.500	1	01/18/2020 12:55	WG1413456
1,2-Dichloropropane	U		0.190	0.500	1	01/18/2020 12:55	WG1413456
1,1-Dichloropropene	U		0.128	0.500	1	01/18/2020 12:55	WG1413456
1,3-Dichloropropane	U		0.147	1.00	1	01/18/2020 12:55	WG1413456
cis-1,3-Dichloropropene	U		0.0976	0.500	1	01/18/2020 12:55	WG1413456
trans-1,3-Dichloropropene	U		0.222	0.500	1	01/18/2020 12:55	WG1413456
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	01/18/2020 12:55	WG1413456
2,2-Dichloropropane	U		0.0929	0.500	1	01/18/2020 12:55	WG1413456
Di-isopropyl ether	U		0.0924	0.500	1	01/18/2020 12:55	WG1413456
Ethylbenzene	U		0.158	0.500	1	01/18/2020 12:55	WG1413456
Hexachloro-1,3-butadiene	U		0.157	1.00	1	01/18/2020 12:55	WG1413456
2-Hexanone	U		0.757	5.00	1	01/18/2020 12:55	WG1413456
n-Hexane	U	~~J4~~	0.305	5.00	1	01/18/2020 12:55	WG1413456
Iodomethane	U		0.377	10.0	1	01/18/2020 12:55	WG1413456
Isopropylbenzene	U		0.126	0.500	1	01/18/2020 12:55	WG1413456
p-Isopropyltoluene	U		0.138	0.500	1	01/18/2020 12:55	WG1413456
2-Butanone (MEK)	U		1.28	5.00	1	01/18/2020 12:55	WG1413456
Methylene Chloride	U		1.07	2.50	1	01/18/2020 12:55	WG1413456
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	01/18/2020 12:55	WG1413456
Methyl tert-butyl ether	U		0.102	0.500	1	01/18/2020 12:55	WG1413456
Naphthalene	U		0.174	2.50	1	01/18/2020 12:55	WG1413456
n-Propylbenzene	U		0.162	0.500	1	01/18/2020 12:55	WG1413456
Styrene	U		0.117	0.500	1	01/18/2020 12:55	WG1413456
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	01/18/2020 12:55	WG1413456
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	01/18/2020 12:55	WG1413456
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	01/18/2020 12:55	WG1413456
Tetrachloroethene	U		0.199	0.500	1	01/18/2020 12:55	WG1413456
Toluene	U		0.412	0.500	1	01/18/2020 12:55	WG1413456
1,2,3-Trichlorobenzene	U		0.164	0.500	1	01/18/2020 12:55	WG1413456
1,2,4-Trichlorobenzene	U		0.355	0.500	1	01/18/2020 12:55	WG1413456
1,1,1-Trichloroethane	U		0.0940	0.500	1	01/18/2020 12:55	WG1413456
1,1,2-Trichloroethane	U		0.186	0.500	1	01/18/2020 12:55	WG1413456
Trichloroethene	U		0.153	0.500	1	01/18/2020 12:55	WG1413456
Trichlorofluoromethane	U		0.130	2.50	1	01/18/2020 12:55	WG1413456
1,2,3-Trichloropropane	U		0.247	2.50	1	01/18/2020 12:55	WG1413456
1,2,4-Trimethylbenzene	U		0.123	0.500	1	01/18/2020 12:55	WG1413456
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	01/18/2020 12:55	WG1413456
1,3,5-Trimethylbenzene	U		0.124	0.500	1	01/18/2020 12:55	WG1413456
Vinyl acetate	U		0.645	5.00	1	01/18/2020 12:55	WG1413456
Vinyl chloride	12.6		0.118	0.500	1	01/18/2020 12:55	WG1413456
Xylenes, Total	U		0.316	1.50	1	01/18/2020 12:55	WG1413456
(S) Toluene-d8	*102*			*80.0-120*		*01/18/2020 12:55*	WG1413456
(S) 4-Bromofluorobenzene	*95.0*			*77.0-126*		*01/18/2020 12:55*	WG1413456
(S) 1,2-Dichloroethane-d4	*107*			*70.0-130*		*01/18/2020 12:55*	WG1413456

JC 1/30/20

Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	185000		2710	20000	1	01/17/2020 22:29	WG1413034

Sample Narrative:

L1180338-02 WG1413034: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	9480		51.9	1000	1	01/17/2020 15:16	WG1412916
Nitrate	U		22.7	100	1	01/17/2020 15:16	WG1412916
Sulfate	77500		77.4	5000	1	01/17/2020 15:16	WG1412916

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	2970	~~B~~	102	1000	1	01/21/2020 07:35	WG1413982

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	4090		15.0	100	1	01/21/2020 16:42	WG1413721
Manganese	550		0.250	5.00	1	01/21/2020 16:42	WG1413721

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	34.3 U	~~B J~~	31.6	100	1	01/18/2020 16:27	WG1413246
(S) a,a,a-Trifluorotoluene(FID)	*97.3*			*78.0-120*		*01/18/2020 16:27*	WG1413246

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	U		0.287	0.678	1	01/18/2020 16:34	WG1413359
Ethane	U		0.296	1.29	1	01/18/2020 16:34	WG1413359
Ethene	U		0.422	1.27	1	01/18/2020 16:34	WG1413359

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U		1.05	25.0	1	01/18/2020 13:16	WG1413456
Acrylonitrile	U		0.873	5.00	1	01/18/2020 13:16	WG1413456
Benzene	U		0.0896	0.500	1	01/18/2020 13:16	WG1413456
Bromobenzene	U		0.133	0.500	1	01/18/2020 13:16	WG1413456
Bromodichloromethane	U		0.0800	0.500	1	01/18/2020 13:16	WG1413456
Bromochloromethane	U		0.145	0.500	1	01/18/2020 13:16	WG1413456
Bromoform	U		0.186	0.500	1	01/18/2020 13:16	WG1413456
Bromomethane	U		0.157	2.50	1	01/18/2020 13:16	WG1413456
n-Butylbenzene	U		0.143	0.500	1	01/18/2020 13:16	WG1413456
sec-Butylbenzene	U		0.134	0.500	1	01/18/2020 13:16	WG1413456
tert-Butylbenzene	U		0.183	0.500	1	01/18/2020 13:16	WG1413456
Carbon disulfide	U		0.101	0.500	1	01/18/2020 13:16	WG1413456
Carbon tetrachloride	U		0.159	0.500	1	01/18/2020 13:16	WG1413456

JC 1/30/20

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chlorobenzene	U		0.140	0.500	1	01/18/2020 13:16	WG1413456
Chlorodibromomethane	U		0.128	0.500	1	01/18/2020 13:16	WG1413456
Chloroethane	U		0.141	2.50	1	01/18/2020 13:16	WG1413456
Chloroform	U		0.0860	0.500	1	01/18/2020 13:16	WG1413456
Chloromethane	U		0.153	1.25	1	01/18/2020 13:16	WG1413456
2-Chlorotoluene	U		0.111	0.500	1	01/18/2020 13:16	WG1413456
4-Chlorotoluene	U		0.0972	0.500	1	01/18/2020 13:16	WG1413456
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	01/18/2020 13:16	WG1413456
1,2-Dibromoethane	U		0.193	0.500	1	01/18/2020 13:16	WG1413456
Dibromomethane	U		0.117	0.500	1	01/18/2020 13:16	WG1413456
1,2-Dichlorobenzene	U		0.101	0.500	1	01/18/2020 13:16	WG1413456
1,3-Dichlorobenzene	U		0.130	0.500	1	01/18/2020 13:16	WG1413456
1,4-Dichlorobenzene	U		0.121	0.500	1	01/18/2020 13:16	WG1413456
Dichlorodifluoromethane	U		0.127	2.50	1	01/18/2020 13:16	WG1413456
1,1-Dichloroethane	U		0.114	0.500	1	01/18/2020 13:16	WG1413456
1,2-Dichloroethane	U		0.108	0.500	1	01/18/2020 13:16	WG1413456
1,1-Dichloroethene	U		0.188	0.500	1	01/18/2020 13:16	WG1413456
cis-1,2-Dichloroethene	U		0.0933	0.500	1	01/18/2020 13:16	WG1413456
trans-1,2-Dichloroethene	U		0.152	0.500	1	01/18/2020 13:16	WG1413456
1,2-Dichloropropane	U		0.190	0.500	1	01/18/2020 13:16	WG1413456
1,1-Dichloropropene	U		0.128	0.500	1	01/18/2020 13:16	WG1413456
1,3-Dichloropropane	U		0.147	1.00	1	01/18/2020 13:16	WG1413456
cis-1,3-Dichloropropene	U		0.0976	0.500	1	01/18/2020 13:16	WG1413456
trans-1,3-Dichloropropene	U		0.222	0.500	1	01/18/2020 13:16	WG1413456
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	01/18/2020 13:16	WG1413456
2,2-Dichloropropane	U		0.0929	0.500	1	01/18/2020 13:16	WG1413456
Di-isopropyl ether	U		0.0924	0.500	1	01/18/2020 13:16	WG1413456
Ethylbenzene	U		0.158	0.500	1	01/18/2020 13:16	WG1413456
Hexachloro-1,3-butadiene	U		0.157	1.00	1	01/18/2020 13:16	WG1413456
2-Hexanone	U		0.757	5.00	1	01/18/2020 13:16	WG1413456
n-Hexane	U	~~J4~~	0.305	5.00	1	01/18/2020 13:16	WG1413456
Iodomethane	U		0.377	10.0	1	01/18/2020 13:16	WG1413456
Isopropylbenzene	U		0.126	0.500	1	01/18/2020 13:16	WG1413456
p-Isopropyltoluene	U		0.138	0.500	1	01/18/2020 13:16	WG1413456
2-Butanone (MEK)	U		1.28	5.00	1	01/18/2020 13:16	WG1413456
Methylene Chloride	U		1.07	2.50	1	01/18/2020 13:16	WG1413456
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	01/18/2020 13:16	WG1413456
Methyl tert-butyl ether	U		0.102	0.500	1	01/18/2020 13:16	WG1413456
Naphthalene	U		0.174	2.50	1	01/18/2020 13:16	WG1413456
n-Propylbenzene	U		0.162	0.500	1	01/18/2020 13:16	WG1413456
Styrene	U		0.117	0.500	1	01/18/2020 13:16	WG1413456
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	01/18/2020 13:16	WG1413456
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	01/18/2020 13:16	WG1413456
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	01/18/2020 13:16	WG1413456
Tetrachloroethene	U		0.199	0.500	1	01/18/2020 13:16	WG1413456
Toluene	U		0.412	0.500	1	01/18/2020 13:16	WG1413456
1,2,3-Trichlorobenzene	U		0.164	0.500	1	01/18/2020 13:16	WG1413456
1,2,4-Trichlorobenzene	U		0.355	0.500	1	01/18/2020 13:16	WG1413456
1,1,1-Trichloroethane	U		0.0940	0.500	1	01/18/2020 13:16	WG1413456
1,1,2-Trichloroethane	U		0.186	0.500	1	01/18/2020 13:16	WG1413456
Trichloroethene	U		0.153	0.500	1	01/18/2020 13:16	WG1413456
Trichlorofluoromethane	U		0.130	2.50	1	01/18/2020 13:16	WG1413456
1,2,3-Trichloropropane	U		0.247	2.50	1	01/18/2020 13:16	WG1413456
1,2,4-Trimethylbenzene	U		0.123	0.500	1	01/18/2020 13:16	WG1413456
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	01/18/2020 13:16	WG1413456
1,3,5-Trimethylbenzene	U		0.124	0.500	1	01/18/2020 13:16	WG1413456

JC 1/30/20

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Vinyl acetate	U		0.645	5.00	1	01/18/2020 13:16	WG1413456
Vinyl chloride	U		0.118	0.500	1	01/18/2020 13:16	WG1413456
Xylenes, Total	U		0.316	1.50	1	01/18/2020 13:16	WG1413456
(S) Toluene-d8	*106*			*80.0-120*		*01/18/2020 13:16*	WG1413456
(S) 4-Bromofluorobenzene	*93.4*			*77.0-126*		*01/18/2020 13:16*	WG1413456
(S) 1,2-Dichloroethane-d4	*105*			*70.0-130*		*01/18/2020 13:16*	WG1413456

JC 1/30/20

Wet Chemistry by Method 2320 B-2011

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Alkalinity	373000		2710	20000	1	01/17/2020 22:37	WG1413034

Sample Narrative:

L1180338-03 WG1413034: Endpoint pH 4.5

Wet Chemistry by Method 9056A

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Chloride	14000		51.9	1000	1	01/17/2020 15:51	WG1412916
Nitrate	U		22.7	100	1	01/17/2020 15:51	WG1412916
Sulfate	36200		77.4	5000	1	01/17/2020 15:51	WG1412916

Wet Chemistry by Method 9060A

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
TOC (Total Organic Carbon)	3010	~~B~~	102	1000	1	01/21/2020 07:49	WG1413982

Metals (ICPMS) by Method 6020B

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Iron	320		15.0	100	1	01/21/2020 16:03	WG1413721
Manganese	2890	~~V~~	0.250	5.00	1	01/21/2020 16:03	WG1413721

Volatile Organic Compounds (GC) by Method RSK175

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Methane	2590		0.287	0.678	1	01/18/2020 16:38	WG1413359
Ethane	2.58		0.296	1.29	1	01/18/2020 16:38	WG1413359
Ethene	U		0.422	1.27	1	01/18/2020 16:38	WG1413359

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

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Acetone	U		5.25	125	5	01/25/2020 18:38	WG1416851
Acrylonitrile	U		4.37	25.0	5	01/25/2020 18:38	WG1416851
Benzene	U		0.448	2.50	5	01/25/2020 18:38	WG1416851
Bromobenzene	U		0.665	2.50	5	01/25/2020 18:38	WG1416851
Bromodichloromethane	U		0.400	2.50	5	01/25/2020 18:38	WG1416851
Bromochloromethane	U		0.725	2.50	5	01/25/2020 18:38	WG1416851
Bromoform	U		0.930	2.50	5	01/25/2020 18:38	WG1416851
Bromomethane	U		0.785	12.5	5	01/25/2020 18:38	WG1416851
n-Butylbenzene	U		0.715	2.50	5	01/25/2020 18:38	WG1416851
sec-Butylbenzene	U		0.670	2.50	5	01/25/2020 18:38	WG1416851
tert-Butylbenzene	U		0.915	2.50	5	01/25/2020 18:38	WG1416851
Carbon disulfide	U		0.505	2.50	5	01/25/2020 18:38	WG1416851
Carbon tetrachloride	U		0.795	2.50	5	01/25/2020 18:38	WG1416851
Chlorobenzene	U		0.700	2.50	5	01/25/2020 18:38	WG1416851
Chlorodibromomethane	U		0.640	2.50	5	01/25/2020 18:38	WG1416851
Chloroethane	U		0.705	12.5	5	01/25/2020 18:38	WG1416851
Chloroform	U		0.430	2.50	5	01/25/2020 18:38	WG1416851
Chloromethane	U		0.765	6.25	5	01/25/2020 18:38	WG1416851
2-Chlorotoluene	U		0.555	2.50	5	01/25/2020 18:38	WG1416851
4-Chlorotoluene	U		0.486	2.50	5	01/25/2020 18:38	WG1416851

JC 1/30/20

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,2-Dibromo-3-Chloropropane	U		1.63	12.5	5	01/25/2020 18:38	WG1416851
1,2-Dibromoethane	U		0.965	2.50	5	01/25/2020 18:38	WG1416851
Dibromomethane	U		0.585	2.50	5	01/25/2020 18:38	WG1416851
1,2-Dichlorobenzene	U		0.505	2.50	5	01/25/2020 18:38	WG1416851
1,3-Dichlorobenzene	U		0.650	2.50	5	01/25/2020 18:38	WG1416851
1,4-Dichlorobenzene	U		0.605	2.50	5	01/25/2020 18:38	WG1416851
Dichlorodifluoromethane	U		0.635	12.5	5	01/25/2020 18:38	WG1416851
1,1-Dichloroethane	U		0.570	2.50	5	01/25/2020 18:38	WG1416851
1,2-Dichloroethane	U		0.540	2.50	5	01/25/2020 18:38	WG1416851
1,1-Dichloroethene	1.21	J	0.940	2.50	5	01/25/2020 18:38	WG1416851
cis-1,2-Dichloroethene	187		0.467	2.50	5	01/25/2020 18:38	WG1416851
trans-1,2-Dichloroethene	1.95	J	0.760	2.50	5	01/25/2020 18:38	WG1416851
1,2-Dichloropropane	U		0.950	2.50	5	01/25/2020 18:38	WG1416851
1,1-Dichloropropene	U		0.640	2.50	5	01/25/2020 18:38	WG1416851
1,3-Dichloropropane	U		0.735	5.00	5	01/25/2020 18:38	WG1416851
cis-1,3-Dichloropropene	U		0.488	2.50	5	01/25/2020 18:38	WG1416851
trans-1,3-Dichloropropene	U		1.11	2.50	5	01/25/2020 18:38	WG1416851
trans-1,4-Dichloro-2-butene	U		1.29	25.0	5	01/25/2020 18:38	WG1416851
2,2-Dichloropropane	U		0.465	2.50	5	01/25/2020 18:38	WG1416851
Di-isopropyl ether	U		0.462	2.50	5	01/25/2020 18:38	WG1416851
Ethylbenzene	U		0.790	2.50	5	01/25/2020 18:38	WG1416851
Hexachloro-1,3-butadiene	U		0.785	5.00	5	01/25/2020 18:38	WG1416851
2-Hexanone	U		3.78	25.0	5	01/25/2020 18:38	WG1416851
n-Hexane	U		1.53	25.0	5	01/25/2020 18:38	WG1416851
Iodomethane	U		1.89	50.0	5	01/25/2020 18:38	WG1416851
Isopropylbenzene	U		0.630	2.50	5	01/25/2020 18:38	WG1416851
p-Isopropyltoluene	U		0.690	2.50	5	01/25/2020 18:38	WG1416851
2-Butanone (MEK)	U		6.40	25.0	5	01/25/2020 18:38	WG1416851
Methylene Chloride	U		5.35	12.5	5	01/25/2020 18:38	WG1416851
4-Methyl-2-pentanone (MIBK)	U		4.12	25.0	5	01/25/2020 18:38	WG1416851
Methyl tert-butyl ether	U		0.510	2.50	5	01/25/2020 18:38	WG1416851
Naphthalene	U		0.870	12.5	5	01/25/2020 18:38	WG1416851
n-Propylbenzene	U		0.810	2.50	5	01/25/2020 18:38	WG1416851
Styrene	U		0.585	2.50	5	01/25/2020 18:38	WG1416851
1,1,1,2-Tetrachloroethane	U		0.600	2.50	5	01/25/2020 18:38	WG1416851
1,1,2,2-Tetrachloroethane	U		0.650	2.50	5	01/25/2020 18:38	WG1416851
1,1,2-Trichlorotrifluoroethane	U		0.820	2.50	5	01/25/2020 18:38	WG1416851
Tetrachloroethene	459		0.995	2.50	5	01/25/2020 18:38	WG1416851
Toluene	U		2.06	2.50	5	01/25/2020 18:38	WG1416851
1,2,3-Trichlorobenzene	U		0.820	2.50	5	01/25/2020 18:38	WG1416851
1,2,4-Trichlorobenzene	U		1.78	2.50	5	01/25/2020 18:38	WG1416851
1,1,1-Trichloroethane	U		0.470	2.50	5	01/25/2020 18:38	WG1416851
1,1,2-Trichloroethane	U		0.930	2.50	5	01/25/2020 18:38	WG1416851
Trichloroethene	176		0.765	2.50	5	01/25/2020 18:38	WG1416851
Trichlorofluoromethane	U		0.650	12.5	5	01/25/2020 18:38	WG1416851
1,2,3-Trichloropropane	U		1.23	12.5	5	01/25/2020 18:38	WG1416851
1,2,4-Trimethylbenzene	U		0.615	2.50	5	01/25/2020 18:38	WG1416851
1,2,3-Trimethylbenzene	U		0.369	2.50	5	01/25/2020 18:38	WG1416851
1,3,5-Trimethylbenzene	U		0.620	2.50	5	01/25/2020 18:38	WG1416851
Vinyl acetate	U		3.22	25.0	5	01/25/2020 18:38	WG1416851
Vinyl chloride	0.706	J	0.590	2.50	5	01/25/2020 18:38	WG1416851
Xylenes, Total	U		1.58	7.50	5	01/25/2020 18:38	WG1416851
(S) Toluene-d8	*101*			*80.0-120*		*01/25/2020 18:38*	WG1416851
(S) 4-Bromofluorobenzene	*102*			*77.0-126*		*01/25/2020 18:38*	WG1416851
(S) 1,2-Dichloroethane-d4	*104*			*70.0-130*		*01/25/2020 18:38*	WG1416851

JC 1/30/20

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U		1.05	25.0	1	01/18/2020 13:35	WG1413456
Acrylonitrile	U		0.873	5.00	1	01/18/2020 13:35	WG1413456
Benzene	0.156	J	0.0896	0.500	1	01/18/2020 13:35	WG1413456
Bromobenzene	U		0.133	0.500	1	01/18/2020 13:35	WG1413456
Bromodichloromethane	U		0.0800	0.500	1	01/18/2020 13:35	WG1413456
Bromochloromethane	U		0.145	0.500	1	01/18/2020 13:35	WG1413456
Bromoform	U		0.186	0.500	1	01/18/2020 13:35	WG1413456
Bromomethane	U		0.157	2.50	1	01/18/2020 13:35	WG1413456
n-Butylbenzene	U		0.143	0.500	1	01/18/2020 13:35	WG1413456
sec-Butylbenzene	U		0.134	0.500	1	01/18/2020 13:35	WG1413456
tert-Butylbenzene	U		0.183	0.500	1	01/18/2020 13:35	WG1413456
Carbon disulfide	U		0.101	0.500	1	01/18/2020 13:35	WG1413456
Carbon tetrachloride	U		0.159	0.500	1	01/18/2020 13:35	WG1413456
Chlorobenzene	U		0.140	0.500	1	01/18/2020 13:35	WG1413456
Chlorodibromomethane	U		0.128	0.500	1	01/18/2020 13:35	WG1413456
Chloroethane	U		0.141	2.50	1	01/18/2020 13:35	WG1413456
Chloroform	U		0.0860	0.500	1	01/18/2020 13:35	WG1413456
Chloromethane	U		0.153	1.25	1	01/18/2020 13:35	WG1413456
2-Chlorotoluene	U		0.111	0.500	1	01/18/2020 13:35	WG1413456
4-Chlorotoluene	U		0.0972	0.500	1	01/18/2020 13:35	WG1413456
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	01/18/2020 13:35	WG1413456
1,2-Dibromoethane	U		0.193	0.500	1	01/18/2020 13:35	WG1413456
Dibromomethane	U		0.117	0.500	1	01/18/2020 13:35	WG1413456
1,2-Dichlorobenzene	U		0.101	0.500	1	01/18/2020 13:35	WG1413456
1,3-Dichlorobenzene	U		0.130	0.500	1	01/18/2020 13:35	WG1413456
1,4-Dichlorobenzene	U		0.121	0.500	1	01/18/2020 13:35	WG1413456
Dichlorodifluoromethane	U		0.127	2.50	1	01/18/2020 13:35	WG1413456
1,1-Dichloroethane	U		0.114	0.500	1	01/18/2020 13:35	WG1413456
1,2-Dichloroethane	U		0.108	0.500	1	01/18/2020 13:35	WG1413456
1,1-Dichloroethene	U		0.188	0.500	1	01/18/2020 13:35	WG1413456
cis-1,2-Dichloroethene	U		0.0933	0.500	1	01/18/2020 13:35	WG1413456
trans-1,2-Dichloroethene	U		0.152	0.500	1	01/18/2020 13:35	WG1413456
1,2-Dichloropropane	U		0.190	0.500	1	01/18/2020 13:35	WG1413456
1,1-Dichloropropene	U		0.128	0.500	1	01/18/2020 13:35	WG1413456
1,3-Dichloropropane	U		0.147	1.00	1	01/18/2020 13:35	WG1413456
cis-1,3-Dichloropropene	U		0.0976	0.500	1	01/18/2020 13:35	WG1413456
trans-1,3-Dichloropropene	U		0.222	0.500	1	01/18/2020 13:35	WG1413456
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	01/18/2020 13:35	WG1413456
2,2-Dichloropropane	U		0.0929	0.500	1	01/18/2020 13:35	WG1413456
Di-isopropyl ether	U		0.0924	0.500	1	01/18/2020 13:35	WG1413456
Ethylbenzene	U		0.158	0.500	1	01/18/2020 13:35	WG1413456
Hexachloro-1,3-butadiene	U		0.157	1.00	1	01/18/2020 13:35	WG1413456
2-Hexanone	U		0.757	5.00	1	01/18/2020 13:35	WG1413456
n-Hexane	U	~~J4~~	0.305	5.00	1	01/18/2020 13:35	WG1413456
Iodomethane	U		0.377	10.0	1	01/18/2020 13:35	WG1413456
Isopropylbenzene	U		0.126	0.500	1	01/18/2020 13:35	WG1413456
p-Isopropyltoluene	U		0.138	0.500	1	01/18/2020 13:35	WG1413456
2-Butanone (MEK)	U		1.28	5.00	1	01/18/2020 13:35	WG1413456
Methylene Chloride	U		1.07	2.50	1	01/18/2020 13:35	WG1413456
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	01/18/2020 13:35	WG1413456
Methyl tert-butyl ether	U		0.102	0.500	1	01/18/2020 13:35	WG1413456
Naphthalene	U		0.174	2.50	1	01/18/2020 13:35	WG1413456
n-Propylbenzene	U		0.162	0.500	1	01/18/2020 13:35	WG1413456
Styrene	U		0.117	0.500	1	01/18/2020 13:35	WG1413456
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	01/18/2020 13:35	WG1413456
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	01/18/2020 13:35	WG1413456

JC 1/30/20

MW-8-011620

Collected date/time: 01/16/20 10:05

SAMPLE RESULTS - 04

L1180338

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	01/18/2020 13:35	WG1413456
Tetrachloroethene	U		0.199	0.500	1	01/18/2020 13:35	WG1413456
Toluene	1.96		0.412	0.500	1	01/18/2020 13:35	WG1413456
1,2,3-Trichlorobenzene	U		0.164	0.500	1	01/18/2020 13:35	WG1413456
1,2,4-Trichlorobenzene	U		0.355	0.500	1	01/18/2020 13:35	WG1413456
1,1,1-Trichloroethane	U		0.0940	0.500	1	01/18/2020 13:35	WG1413456
1,1,2-Trichloroethane	U		0.186	0.500	1	01/18/2020 13:35	WG1413456
Trichloroethene	U		0.153	0.500	1	01/18/2020 13:35	WG1413456
Trichlorofluoromethane	U		0.130	2.50	1	01/18/2020 13:35	WG1413456
1,2,3-Trichloropropane	U		0.247	2.50	1	01/18/2020 13:35	WG1413456
1,2,4-Trimethylbenzene	U		0.123	0.500	1	01/18/2020 13:35	WG1413456
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	01/18/2020 13:35	WG1413456
1,3,5-Trimethylbenzene	U		0.124	0.500	1	01/18/2020 13:35	WG1413456
Vinyl acetate	U		0.645	5.00	1	01/18/2020 13:35	WG1413456
Vinyl chloride	U		0.118	0.500	1	01/18/2020 13:35	WG1413456
Xylenes, Total	0.569	J	0.316	1.50	1	01/18/2020 13:35	WG1413456
(S) Toluene-d8	*103*			*80.0-120*		*01/18/2020 13:35*	WG1413456
(S) 4-Bromofluorobenzene	*91.7*			*77.0-126*		*01/18/2020 13:35*	WG1413456
(S) 1,2-Dichloroethane-d4	*107*			*70.0-130*		*01/18/2020 13:35*	WG1413456

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

JC 1/30/20

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U		10.5	250	10	01/18/2020 18:39	WG1413456
Acrylonitrile	U		8.73	50.0	10	01/18/2020 18:39	WG1413456
Benzene	16.9		0.896	5.00	10	01/18/2020 18:39	WG1413456
Bromobenzene	U		1.33	5.00	10	01/18/2020 18:39	WG1413456
Bromodichloromethane	U		0.800	5.00	10	01/18/2020 18:39	WG1413456
Bromochloromethane	U		1.45	5.00	10	01/18/2020 18:39	WG1413456
Bromoform	U		1.86	5.00	10	01/18/2020 18:39	WG1413456
Bromomethane	U		1.57	25.0	10	01/18/2020 18:39	WG1413456
n-Butylbenzene	U		1.43	5.00	10	01/18/2020 18:39	WG1413456
sec-Butylbenzene	U		1.34	5.00	10	01/18/2020 18:39	WG1413456
tert-Butylbenzene	U		1.83	5.00	10	01/18/2020 18:39	WG1413456
Carbon disulfide	U		1.01	5.00	10	01/18/2020 18:39	WG1413456
Carbon tetrachloride	U		1.59	5.00	10	01/18/2020 18:39	WG1413456
Chlorobenzene	U		1.40	5.00	10	01/18/2020 18:39	WG1413456
Chlorodibromomethane	U		1.28	5.00	10	01/18/2020 18:39	WG1413456
Chloroethane	U		1.41	25.0	10	01/18/2020 18:39	WG1413456
Chloroform	U		0.860	5.00	10	01/18/2020 18:39	WG1413456
Chloromethane	U		1.53	12.5	10	01/18/2020 18:39	WG1413456
2-Chlorotoluene	U		1.11	5.00	10	01/18/2020 18:39	WG1413456
4-Chlorotoluene	U		0.972	5.00	10	01/18/2020 18:39	WG1413456
1,2-Dibromo-3-Chloropropane	U		3.25	25.0	10	01/18/2020 18:39	WG1413456
1,2-Dibromoethane	U		1.93	5.00	10	01/18/2020 18:39	WG1413456
Dibromomethane	U		1.17	5.00	10	01/18/2020 18:39	WG1413456
1,2-Dichlorobenzene	U		1.01	5.00	10	01/18/2020 18:39	WG1413456
1,3-Dichlorobenzene	U		1.30	5.00	10	01/18/2020 18:39	WG1413456
1,4-Dichlorobenzene	U		1.21	5.00	10	01/18/2020 18:39	WG1413456
Dichlorodifluoromethane	U		1.27	25.0	10	01/18/2020 18:39	WG1413456
1,1-Dichloroethane	U		1.14	5.00	10	01/18/2020 18:39	WG1413456
1,2-Dichloroethane	U		1.08	5.00	10	01/18/2020 18:39	WG1413456
1,1-Dichloroethene	U		1.88	5.00	10	01/18/2020 18:39	WG1413456
cis-1,2-Dichloroethene	U		0.933	5.00	10	01/18/2020 18:39	WG1413456
trans-1,2-Dichloroethene	U		1.52	5.00	10	01/18/2020 18:39	WG1413456
1,2-Dichloropropane	U		1.90	5.00	10	01/18/2020 18:39	WG1413456
1,1-Dichloropropene	U		1.28	5.00	10	01/18/2020 18:39	WG1413456
1,3-Dichloropropane	U		1.47	10.0	10	01/18/2020 18:39	WG1413456
cis-1,3-Dichloropropene	U		0.976	5.00	10	01/18/2020 18:39	WG1413456
trans-1,3-Dichloropropene	U		2.22	5.00	10	01/18/2020 18:39	WG1413456
trans-1,4-Dichloro-2-butene	U		2.57	50.0	10	01/18/2020 18:39	WG1413456
2,2-Dichloropropane	U		0.929	5.00	10	01/18/2020 18:39	WG1413456
Di-isopropyl ether	U		0.924	5.00	10	01/18/2020 18:39	WG1413456
Ethylbenzene	135		1.58	5.00	10	01/18/2020 18:39	WG1413456
Hexachloro-1,3-butadiene	U		1.57	10.0	10	01/18/2020 18:39	WG1413456
2-Hexanone	U		7.57	50.0	10	01/18/2020 18:39	WG1413456
n-Hexane	U	~~J4~~	3.05	50.0	10	01/18/2020 18:39	WG1413456
Iodomethane	U		3.77	100	10	01/18/2020 18:39	WG1413456
Isopropylbenzene	10.9		1.26	5.00	10	01/18/2020 18:39	WG1413456
p-Isopropyltoluene	U		1.38	5.00	10	01/18/2020 18:39	WG1413456
2-Butanone (MEK)	U		12.8	50.0	10	01/18/2020 18:39	WG1413456
Methylene Chloride	U		10.7	25.0	10	01/18/2020 18:39	WG1413456
4-Methyl-2-pentanone (MIBK)	U		8.23	50.0	10	01/18/2020 18:39	WG1413456
Methyl tert-butyl ether	U		1.02	5.00	10	01/18/2020 18:39	WG1413456
Naphthalene	94.2		1.74	25.0	10	01/18/2020 18:39	WG1413456
n-Propylbenzene	30.2		1.62	5.00	10	01/18/2020 18:39	WG1413456
Styrene	U		1.17	5.00	10	01/18/2020 18:39	WG1413456
1,1,1,2-Tetrachloroethane	U		1.20	5.00	10	01/18/2020 18:39	WG1413456
1,1,2,2-Tetrachloroethane	U		1.30	5.00	10	01/18/2020 18:39	WG1413456

JC 1/30/20

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,1,2-Trichlorotrifluoroethane	U		1.64	5.00	10	01/18/2020 18:39	WG1413456
Tetrachloroethene	U		1.99	5.00	10	01/18/2020 18:39	WG1413456
Toluene	5.00	J	4.12	5.00	10	01/18/2020 18:39	WG1413456
1,2,3-Trichlorobenzene	U		1.64	5.00	10	01/18/2020 18:39	WG1413456
1,2,4-Trichlorobenzene	U		3.55	5.00	10	01/18/2020 18:39	WG1413456
1,1,1-Trichloroethane	U		0.940	5.00	10	01/18/2020 18:39	WG1413456
1,1,2-Trichloroethane	U		1.86	5.00	10	01/18/2020 18:39	WG1413456
Trichloroethene	U		1.53	5.00	10	01/18/2020 18:39	WG1413456
Trichlorofluoromethane	U		1.30	25.0	10	01/18/2020 18:39	WG1413456
1,2,3-Trichloropropane	U		2.47	25.0	10	01/18/2020 18:39	WG1413456
1,2,4-Trimethylbenzene	11.5		1.23	5.00	10	01/18/2020 18:39	WG1413456
1,2,3-Trimethylbenzene	68.4		0.739	5.00	10	01/18/2020 18:39	WG1413456
1,3,5-Trimethylbenzene	U		1.24	5.00	10	01/18/2020 18:39	WG1413456
Vinyl acetate	U		6.45	50.0	10	01/18/2020 18:39	WG1413456
Vinyl chloride	U		1.18	5.00	10	01/18/2020 18:39	WG1413456
Xylenes, Total	32.2		3.16	15.0	10	01/18/2020 18:39	WG1413456
(S) Toluene-d8	*101*			*80.0-120*		*01/18/2020 18:39*	WG1413456
(S) 4-Bromofluorobenzene	*94.4*			*77.0-126*		*01/18/2020 18:39*	WG1413456
(S) 1,2-Dichloroethane-d4	*110*			*70.0-130*		*01/18/2020 18:39*	WG1413456

JC 1/30/20

Wet Chemistry by Method 2320 B-2011

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Alkalinity	331000		2710	20000	1	01/17/2020 22:44	WG1413034

Sample Narrative:

L1180338-06 WG1413034: Endpoint pH 4.5

Wet Chemistry by Method 9056A

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Chloride	16900		51.9	1000	1	01/17/2020 16:14	WG1412916
Nitrate	U		22.7	100	1	01/17/2020 16:14	WG1412916
Sulfate	41600		77.4	5000	1	01/17/2020 16:14	WG1412916

Wet Chemistry by Method 9060A

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
TOC (Total Organic Carbon)	5630		102	1000	1	01/21/2020 08:05	WG1413982

Metals (ICPMS) by Method 6020B

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Iron	6150		15.0	100	1	01/21/2020 16:46	WG1413721
Manganese	359		0.250	5.00	1	01/21/2020 16:46	WG1413721

Volatile Organic Compounds (GC) by Method RSK175

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Methane	145		0.287	0.678	1	01/18/2020 16:41	WG1413359
Ethane	U		0.296	1.29	1	01/18/2020 16:41	WG1413359
Ethene	U		0.422	1.27	1	01/18/2020 16:41	WG1413359

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

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Acetone	U		1.05	25.0	1	01/18/2020 13:56	WG1413456
Acrylonitrile	U		0.873	5.00	1	01/18/2020 13:56	WG1413456
Benzene	U		0.0896	0.500	1	01/18/2020 13:56	WG1413456
Bromobenzene	U		0.133	0.500	1	01/18/2020 13:56	WG1413456
Bromodichloromethane	U		0.0800	0.500	1	01/18/2020 13:56	WG1413456
Bromochloromethane	U		0.145	0.500	1	01/18/2020 13:56	WG1413456
Bromoform	U		0.186	0.500	1	01/18/2020 13:56	WG1413456
Bromomethane	U		0.157	2.50	1	01/18/2020 13:56	WG1413456
n-Butylbenzene	U		0.143	0.500	1	01/18/2020 13:56	WG1413456
sec-Butylbenzene	U		0.134	0.500	1	01/18/2020 13:56	WG1413456
tert-Butylbenzene	U		0.183	0.500	1	01/18/2020 13:56	WG1413456
Carbon disulfide	0.814		0.101	0.500	1	01/18/2020 13:56	WG1413456
Carbon tetrachloride	U		0.159	0.500	1	01/18/2020 13:56	WG1413456
Chlorobenzene	U		0.140	0.500	1	01/18/2020 13:56	WG1413456
Chlorodibromomethane	U		0.128	0.500	1	01/18/2020 13:56	WG1413456
Chloroethane	U		0.141	2.50	1	01/18/2020 13:56	WG1413456
Chloroform	U		0.0860	0.500	1	01/18/2020 13:56	WG1413456
Chloromethane	U		0.153	1.25	1	01/18/2020 13:56	WG1413456
2-Chlorotoluene	U		0.111	0.500	1	01/18/2020 13:56	WG1413456
4-Chlorotoluene	U		0.0972	0.500	1	01/18/2020 13:56	WG1413456

JC 1/30/20

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch	
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	01/18/2020 13:56	WG1413456	
1,2-Dibromoethane	U		0.193	0.500	1	01/18/2020 13:56	WG1413456	
Dibromomethane	U		0.117	0.500	1	01/18/2020 13:56	WG1413456	
1,2-Dichlorobenzene	U		0.101	0.500	1	01/18/2020 13:56	WG1413456	
1,3-Dichlorobenzene	U		0.130	0.500	1	01/18/2020 13:56	WG1413456	
1,4-Dichlorobenzene	U		0.121	0.500	1	01/18/2020 13:56	WG1413456	
Dichlorodifluoromethane	U		0.127	2.50	1	01/18/2020 13:56	WG1413456	
1,1-Dichloroethane	U		0.114	0.500	1	01/18/2020 13:56	WG1413456	
1,2-Dichloroethane	U		0.108	0.500	1	01/18/2020 13:56	WG1413456	
1,1-Dichloroethene	U		0.188	0.500	1	01/18/2020 13:56	WG1413456	
cis-1,2-Dichloroethene	U		0.0933	0.500	1	01/18/2020 13:56	WG1413456	
trans-1,2-Dichloroethene	U		0.152	0.500	1	01/18/2020 13:56	WG1413456	
1,2-Dichloropropane	U		0.190	0.500	1	01/18/2020 13:56	WG1413456	
1,1-Dichloropropene	U		0.128	0.500	1	01/18/2020 13:56	WG1413456	
1,3-Dichloropropane	U		0.147	1.00	1	01/18/2020 13:56	WG1413456	
cis-1,3-Dichloropropene	U		0.0976	0.500	1	01/18/2020 13:56	WG1413456	
trans-1,3-Dichloropropene	U		0.222	0.500	1	01/18/2020 13:56	WG1413456	
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	01/18/2020 13:56	WG1413456	
2,2-Dichloropropane	U		0.0929	0.500	1	01/18/2020 13:56	WG1413456	
Di-isopropyl ether	U		0.0924	0.500	1	01/18/2020 13:56	WG1413456	
Ethylbenzene	U		0.158	0.500	1	01/18/2020 13:56	WG1413456	
Hexachloro-1,3-butadiene	U		0.157	1.00	1	01/18/2020 13:56	WG1413456	
2-Hexanone	U		0.757	5.00	1	01/18/2020 13:56	WG1413456	
n-Hexane	U	J4 ✓	0.305	5.00	1	01/18/2020 13:56	WG1413456	
Iodomethane	U		0.377	10.0	1	01/18/2020 13:56	WG1413456	
Isopropylbenzene	U		0.126	0.500	1	01/18/2020 13:56	WG1413456	
p-Isopropyltoluene	U		0.138	0.500	1	01/18/2020 13:56	WG1413456	
2-Butanone (MEK)	U		1.28	5.00	1	01/18/2020 13:56	WG1413456	
Methylene Chloride	U		1.07	2.50	1	01/18/2020 13:56	WG1413456	
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	01/18/2020 13:56	WG1413456	
Methyl tert-butyl ether	U		0.102	0.500	1	01/18/2020 13:56	WG1413456	
Naphthalene	U		0.174	2.50	1	01/18/2020 13:56	WG1413456	
n-Propylbenzene	U		0.162	0.500	1	01/18/2020 13:56	WG1413456	
Styrene	U		0.117	0.500	1	01/18/2020 13:56	WG1413456	
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	01/18/2020 13:56	WG1413456	
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	01/18/2020 13:56	WG1413456	
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	01/18/2020 13:56	WG1413456	
Tetrachloroethene	U		0.199	0.500	1	01/18/2020 13:56	WG1413456	
Toluene	U		0.412	0.500	1	01/18/2020 13:56	WG1413456	
1,2,3-Trichlorobenzene	U		0.164	0.500	1	01/18/2020 13:56	WG1413456	
1,2,4-Trichlorobenzene	U		0.355	0.500	1	01/18/2020 13:56	WG1413456	
1,1,1-Trichloroethane	U		0.0940	0.500	1	01/18/2020 13:56	WG1413456	
1,1,2-Trichloroethane	U		0.186	0.500	1	01/18/2020 13:56	WG1413456	
Trichloroethene	U		0.153	0.500	1	01/18/2020 13:56	WG1413456	
Trichlorofluoromethane	U		0.130	2.50	1	01/18/2020 13:56	WG1413456	
1,2,3-Trichloropropane	U		0.247	2.50	1	01/18/2020 13:56	WG1413456	
1,2,4-Trimethylbenzene	U		0.123	0.500	1	01/18/2020 13:56	WG1413456	
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	01/18/2020 13:56	WG1413456	
1,3,5-Trimethylbenzene	U		0.124	0.500	1	01/18/2020 13:56	WG1413456	
Vinyl acetate	U		0.645	5.00	1	01/18/2020 13:56	WG1413456	
Vinyl chloride	U		0.118	0.500	1	01/18/2020 13:56	WG1413456	
Xylenes, Total	U		0.316	1.50	1	01/18/2020 13:56	WG1413456	JC 1/30/20
(S) Toluene-d8	*102*			*80.0-120*		*01/18/2020 13:56*	WG1413456	
(S) 4-Bromofluorobenzene	*94.1*			*77.0-126*		*01/18/2020 13:56*	WG1413456	
(S) 1,2-Dichloroethane-d4	*108*			*70.0-130*		*01/18/2020 13:56*	WG1413456	

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

Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	227000		2710	20000	1	01/17/2020 22:52	WG1413034

Sample Narrative:

L1180338-07 WG1413034: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	32300		51.9	1000	1	01/17/2020 16:37	WG1412916
Nitrate	U		22.7	100	1	01/17/2020 16:37	WG1412916
Sulfate	15700		77.4	5000	1	01/17/2020 16:37	WG1412916

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	1560	~~B~~	102	1000	1	01/21/2020 08:36	WG1413982

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	9040		15.0	100	1	01/21/2020 16:49	WG1413721
Manganese	415		0.250	5.00	1	01/21/2020 16:49	WG1413721

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	386		0.287	0.678	1	01/18/2020 16:43	WG1413359
Ethane	30.2		0.296	1.29	1	01/18/2020 16:43	WG1413359
Ethene	20.4		0.422	1.27	1	01/18/2020 16:43	WG1413359

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U		1.05	25.0	1	01/18/2020 14:16	WG1413456
Acrylonitrile	U		0.873	5.00	1	01/18/2020 14:16	WG1413456
Benzene	U		0.0896	0.500	1	01/18/2020 14:16	WG1413456
Bromobenzene	U		0.133	0.500	1	01/18/2020 14:16	WG1413456
Bromodichloromethane	U		0.0800	0.500	1	01/18/2020 14:16	WG1413456
Bromochloromethane	U		0.145	0.500	1	01/18/2020 14:16	WG1413456
Bromoform	U		0.186	0.500	1	01/18/2020 14:16	WG1413456
Bromomethane	U		0.157	2.50	1	01/18/2020 14:16	WG1413456
n-Butylbenzene	U		0.143	0.500	1	01/18/2020 14:16	WG1413456
sec-Butylbenzene	U		0.134	0.500	1	01/18/2020 14:16	WG1413456
tert-Butylbenzene	U		0.183	0.500	1	01/18/2020 14:16	WG1413456
Carbon disulfide	U		0.101	0.500	1	01/18/2020 14:16	WG1413456
Carbon tetrachloride	U		0.159	0.500	1	01/18/2020 14:16	WG1413456
Chlorobenzene	U		0.140	0.500	1	01/18/2020 14:16	WG1413456
Chlorodibromomethane	U		0.128	0.500	1	01/18/2020 14:16	WG1413456
Chloroethane	U		0.141	2.50	1	01/18/2020 14:16	WG1413456
Chloroform	U		0.0860	0.500	1	01/18/2020 14:16	WG1413456
Chloromethane	U		0.153	1.25	1	01/18/2020 14:16	WG1413456
2-Chlorotoluene	U		0.111	0.500	1	01/18/2020 14:16	WG1413456
4-Chlorotoluene	U		0.0972	0.500	1	01/18/2020 14:16	WG1413456

JC 1/30/20

MW111-011620
Collected date/time: 01/16/20 11:35

SAMPLE RESULTS - 07

L1180338

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	01/18/2020 14:16	WG1413456
1,2-Dibromoethane	U		0.193	0.500	1	01/18/2020 14:16	WG1413456
Dibromomethane	U		0.117	0.500	1	01/18/2020 14:16	WG1413456
1,2-Dichlorobenzene	U		0.101	0.500	1	01/18/2020 14:16	WG1413456
1,3-Dichlorobenzene	U		0.130	0.500	1	01/18/2020 14:16	WG1413456
1,4-Dichlorobenzene	U		0.121	0.500	1	01/18/2020 14:16	WG1413456
Dichlorodifluoromethane	U		0.127	2.50	1	01/18/2020 14:16	WG1413456
1,1-Dichloroethane	U		0.114	0.500	1	01/18/2020 14:16	WG1413456
1,2-Dichloroethane	U		0.108	0.500	1	01/18/2020 14:16	WG1413456
1,1-Dichloroethene	U		0.188	0.500	1	01/18/2020 14:16	WG1413456
cis-1,2-Dichloroethene	5.08		0.0933	0.500	1	01/18/2020 14:16	WG1413456
trans-1,2-Dichloroethene	U		0.152	0.500	1	01/18/2020 14:16	WG1413456
1,2-Dichloropropane	U		0.190	0.500	1	01/18/2020 14:16	WG1413456
1,1-Dichloropropene	U		0.128	0.500	1	01/18/2020 14:16	WG1413456
1,3-Dichloropropane	U		0.147	1.00	1	01/18/2020 14:16	WG1413456
cis-1,3-Dichloropropene	U		0.0976	0.500	1	01/18/2020 14:16	WG1413456
trans-1,3-Dichloropropene	U		0.222	0.500	1	01/18/2020 14:16	WG1413456
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	01/18/2020 14:16	WG1413456
2,2-Dichloropropane	U		0.0929	0.500	1	01/18/2020 14:16	WG1413456
Di-isopropyl ether	U		0.0924	0.500	1	01/18/2020 14:16	WG1413456
Ethylbenzene	U		0.158	0.500	1	01/18/2020 14:16	WG1413456
Hexachloro-1,3-butadiene	U		0.157	1.00	1	01/18/2020 14:16	WG1413456
2-Hexanone	U		0.757	5.00	1	01/18/2020 14:16	WG1413456
n-Hexane	U	~~J4~~	0.305	5.00	1	01/18/2020 14:16	WG1413456
Iodomethane	U		0.377	10.0	1	01/18/2020 14:16	WG1413456
Isopropylbenzene	U		0.126	0.500	1	01/18/2020 14:16	WG1413456
p-Isopropyltoluene	U		0.138	0.500	1	01/18/2020 14:16	WG1413456
2-Butanone (MEK)	U		1.28	5.00	1	01/18/2020 14:16	WG1413456
Methylene Chloride	U		1.07	2.50	1	01/18/2020 14:16	WG1413456
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	01/18/2020 14:16	WG1413456
Methyl tert-butyl ether	U		0.102	0.500	1	01/18/2020 14:16	WG1413456
Naphthalene	U		0.174	2.50	1	01/18/2020 14:16	WG1413456
n-Propylbenzene	U		0.162	0.500	1	01/18/2020 14:16	WG1413456
Styrene	U		0.117	0.500	1	01/18/2020 14:16	WG1413456
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	01/18/2020 14:16	WG1413456
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	01/18/2020 14:16	WG1413456
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	01/18/2020 14:16	WG1413456
Tetrachloroethene	U		0.199	0.500	1	01/18/2020 14:16	WG1413456
Toluene	U		0.412	0.500	1	01/18/2020 14:16	WG1413456
1,2,3-Trichlorobenzene	U		0.164	0.500	1	01/18/2020 14:16	WG1413456
1,2,4-Trichlorobenzene	U		0.355	0.500	1	01/18/2020 14:16	WG1413456
1,1,1-Trichloroethane	U		0.0940	0.500	1	01/18/2020 14:16	WG1413456
1,1,2-Trichloroethane	U		0.186	0.500	1	01/18/2020 14:16	WG1413456
Trichloroethene	U		0.153	0.500	1	01/18/2020 14:16	WG1413456
Trichlorofluoromethane	U		0.130	2.50	1	01/18/2020 14:16	WG1413456
1,2,3-Trichloropropane	U		0.247	2.50	1	01/18/2020 14:16	WG1413456
1,2,4-Trimethylbenzene	U		0.123	0.500	1	01/18/2020 14:16	WG1413456
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	01/18/2020 14:16	WG1413456
1,3,5-Trimethylbenzene	U		0.124	0.500	1	01/18/2020 14:16	WG1413456
Vinyl acetate	U		0.645	5.00	1	01/18/2020 14:16	WG1413456
Vinyl chloride	34.0		0.118	0.500	1	01/18/2020 14:16	WG1413456
Xylenes, Total	U		0.316	1.50	1	01/18/2020 14:16	WG1413456
(S) Toluene-d8	*103*			*80.0-120*		*01/18/2020 14:16*	WG1413456
(S) 4-Bromofluorobenzene	*93.3*			*77.0-126*		*01/18/2020 14:16*	WG1413456
(S) 1,2-Dichloroethane-d4	*108*			*70.0-130*		*01/18/2020 14:16*	WG1413456

JC 1/30/20

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

Wet Chemistry by Method 2320 B-2011

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Alkalinity	394000		2710	20000	1	01/17/2020 23:01	WG1413034

Sample Narrative:

L1180338-08 WG1413034: Endpoint pH 4.5

Wet Chemistry by Method 9056A

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Chloride	U		51.9	1000	1	01/17/2020 16:49	WG1412916
Nitrate	U		22.7	100	1	01/17/2020 16:49	WG1412916
Sulfate	U		77.4	5000	1	01/17/2020 16:49	WG1412916

Wet Chemistry by Method 9060A

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
TOC (Total Organic Carbon)	12900		102	1000	1	01/21/2020 08:58	WG1413982

Metals (ICPMS) by Method 6020B

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Iron	14400		15.0	100	1	01/21/2020 16:52	WG1413721
Manganese	3710		0.250	5.00	1	01/21/2020 16:52	WG1413721

Volatile Organic Compounds (GC) by Method RSK175

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Methane	12800		2.87	6.78	10	01/21/2020 16:05	WG1413355
Ethane	U		0.296	1.29	1	01/18/2020 16:51	WG1413359
Ethene	U		0.422	1.27	1	01/18/2020 16:51	WG1413359

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

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Acetone	1.55	J	1.05	25.0	1	01/18/2020 14:36	WG1413456
Acrylonitrile	U		0.873	5.00	1	01/18/2020 14:36	WG1413456
Benzene	U		0.0896	0.500	1	01/18/2020 14:36	WG1413456
Bromobenzene	U		0.133	0.500	1	01/18/2020 14:36	WG1413456
Bromodichloromethane	U		0.0800	0.500	1	01/18/2020 14:36	WG1413456
Bromochloromethane	U		0.145	0.500	1	01/18/2020 14:36	WG1413456
Bromoform	U		0.186	0.500	1	01/18/2020 14:36	WG1413456
Bromomethane	U		0.157	2.50	1	01/18/2020 14:36	WG1413456
n-Butylbenzene	U		0.143	0.500	1	01/18/2020 14:36	WG1413456
sec-Butylbenzene	U		0.134	0.500	1	01/18/2020 14:36	WG1413456
tert-Butylbenzene	U		0.183	0.500	1	01/18/2020 14:36	WG1413456
Carbon disulfide	U		0.101	0.500	1	01/18/2020 14:36	WG1413456
Carbon tetrachloride	U		0.159	0.500	1	01/18/2020 14:36	WG1413456
Chlorobenzene	U		0.140	0.500	1	01/18/2020 14:36	WG1413456
Chlorodibromomethane	U		0.128	0.500	1	01/18/2020 14:36	WG1413456
Chloroethane	U		0.141	2.50	1	01/18/2020 14:36	WG1413456
Chloroform	U		0.0860	0.500	1	01/18/2020 14:36	WG1413456
Chloromethane	U		0.153	1.25	1	01/18/2020 14:36	WG1413456
2-Chlorotoluene	U		0.111	0.500	1	01/18/2020 14:36	WG1413456
4-Chlorotoluene	U		0.0972	0.500	1	01/18/2020 14:36	WG1413456

JC 1/30/20

MW-317-011620
Collected date/time: 01/16/20 12:15

SAMPLE RESULTS - 08

L1180338

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	01/18/2020 14:36	WG1413456
1,2-Dibromoethane	U		0.193	0.500	1	01/18/2020 14:36	WG1413456
Dibromomethane	U		0.117	0.500	1	01/18/2020 14:36	WG1413456
1,2-Dichlorobenzene	U		0.101	0.500	1	01/18/2020 14:36	WG1413456
1,3-Dichlorobenzene	U		0.130	0.500	1	01/18/2020 14:36	WG1413456
1,4-Dichlorobenzene	U		0.121	0.500	1	01/18/2020 14:36	WG1413456
Dichlorodifluoromethane	U		0.127	2.50	1	01/18/2020 14:36	WG1413456
1,1-Dichloroethane	U		0.114	0.500	1	01/18/2020 14:36	WG1413456
1,2-Dichloroethane	U		0.108	0.500	1	01/18/2020 14:36	WG1413456
1,1-Dichloroethene	U		0.188	0.500	1	01/18/2020 14:36	WG1413456
cis-1,2-Dichloroethene	U		0.0933	0.500	1	01/18/2020 14:36	WG1413456
trans-1,2-Dichloroethene	U		0.152	0.500	1	01/18/2020 14:36	WG1413456
1,2-Dichloropropane	U		0.190	0.500	1	01/18/2020 14:36	WG1413456
1,1-Dichloropropene	U		0.128	0.500	1	01/18/2020 14:36	WG1413456
1,3-Dichloropropane	U		0.147	1.00	1	01/18/2020 14:36	WG1413456
cis-1,3-Dichloropropene	U		0.0976	0.500	1	01/18/2020 14:36	WG1413456
trans-1,3-Dichloropropene	U		0.222	0.500	1	01/18/2020 14:36	WG1413456
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	01/18/2020 14:36	WG1413456
2,2-Dichloropropane	U		0.0929	0.500	1	01/18/2020 14:36	WG1413456
Di-isopropyl ether	0.136 J	J J0	0.0924	0.500	1	01/18/2020 14:36	WG1413456
Ethylbenzene	U		0.158	0.500	1	01/18/2020 14:36	WG1413456
Hexachloro-1,3-butadiene	U		0.157	1.00	1	01/18/2020 14:36	WG1413456
2-Hexanone	U		0.757	5.00	1	01/18/2020 14:36	WG1413456
n-Hexane	U	~~J4~~	0.305	5.00	1	01/18/2020 14:36	WG1413456
Iodomethane	U		0.377	10.0	1	01/18/2020 14:36	WG1413456
Isopropylbenzene	U		0.126	0.500	1	01/18/2020 14:36	WG1413456
p-Isopropyltoluene	U		0.138	0.500	1	01/18/2020 14:36	WG1413456
2-Butanone (MEK)	U		1.28	5.00	1	01/18/2020 14:36	WG1413456
Methylene Chloride	U		1.07	2.50	1	01/18/2020 14:36	WG1413456
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	01/18/2020 14:36	WG1413456
Methyl tert-butyl ether	U		0.102	0.500	1	01/18/2020 14:36	WG1413456
Naphthalene	U		0.174	2.50	1	01/18/2020 14:36	WG1413456
n-Propylbenzene	U		0.162	0.500	1	01/18/2020 14:36	WG1413456
Styrene	U		0.117	0.500	1	01/18/2020 14:36	WG1413456
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	01/18/2020 14:36	WG1413456
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	01/18/2020 14:36	WG1413456
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	01/18/2020 14:36	WG1413456
Tetrachloroethene	U		0.199	0.500	1	01/18/2020 14:36	WG1413456
Toluene	U		0.412	0.500	1	01/18/2020 14:36	WG1413456
1,2,3-Trichlorobenzene	U		0.164	0.500	1	01/18/2020 14:36	WG1413456
1,2,4-Trichlorobenzene	U		0.355	0.500	1	01/18/2020 14:36	WG1413456
1,1,1-Trichloroethane	U		0.0940	0.500	1	01/18/2020 14:36	WG1413456
1,1,2-Trichloroethane	U		0.186	0.500	1	01/18/2020 14:36	WG1413456
Trichloroethene	U		0.153	0.500	1	01/18/2020 14:36	WG1413456
Trichlorofluoromethane	U		0.130	2.50	1	01/18/2020 14:36	WG1413456
1,2,3-Trichloropropane	U		0.247	2.50	1	01/18/2020 14:36	WG1413456
1,2,4-Trimethylbenzene	U		0.123	0.500	1	01/18/2020 14:36	WG1413456
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	01/18/2020 14:36	WG1413456
1,3,5-Trimethylbenzene	U		0.124	0.500	1	01/18/2020 14:36	WG1413456
Vinyl acetate	U		0.645	5.00	1	01/18/2020 14:36	WG1413456
Vinyl chloride	U		0.118	0.500	1	01/18/2020 14:36	WG1413456
Xylenes, Total	U		0.316	1.50	1	01/18/2020 14:36	WG1413456
(S) Toluene-d8	*103*			*80.0-120*		*01/18/2020 14:36*	WG1413456
(S) 4-Bromofluorobenzene	*91.0*			*77.0-126*		*01/18/2020 14:36*	WG1413456
(S) 1,2-Dichloroethane-d4	*109*			*70.0-130*		*01/18/2020 14:36*	WG1413456

JC 1/30/20

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

Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	387000		2710	20000	1	01/17/2020 23:08	WG1413034

Sample Narrative:

L1180338-09 WG1413034: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	22600		51.9	1000	1	01/17/2020 17:00	WG1412916
Nitrate	U		22.7	100	1	01/17/2020 17:00	WG1412916
Sulfate	118000		774	50000	10	01/17/2020 17:12	WG1412916

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	4090	~~B~~	102	1000	1	01/21/2020 09:16	WG1413982

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	16000		15.0	100	1	01/21/2020 16:55	WG1413721
Manganese	2940		0.250	5.00	1	01/21/2020 16:55	WG1413721

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	2230		0.287	0.678	1	01/18/2020 17:18	WG1413359
Ethane	18.2		0.296	1.29	1	01/18/2020 17:18	WG1413359
Ethene	U		0.422	1.27	1	01/18/2020 17:18	WG1413359

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U		1.05	25.0	1	01/18/2020 14:57	WG1413456
Acrylonitrile	U		0.873	5.00	1	01/18/2020 14:57	WG1413456
Benzene	25.4		0.0896	0.500	1	01/18/2020 14:57	WG1413456
Bromobenzene	U		0.133	0.500	1	01/18/2020 14:57	WG1413456
Bromodichloromethane	U		0.0800	0.500	1	01/18/2020 14:57	WG1413456
Bromochloromethane	U		0.145	0.500	1	01/18/2020 14:57	WG1413456
Bromoform	U		0.186	0.500	1	01/18/2020 14:57	WG1413456
Bromomethane	U		0.157	2.50	1	01/18/2020 14:57	WG1413456
n-Butylbenzene	U		0.143	0.500	1	01/18/2020 14:57	WG1413456
sec-Butylbenzene	U		0.134	0.500	1	01/18/2020 14:57	WG1413456
tert-Butylbenzene	U		0.183	0.500	1	01/18/2020 14:57	WG1413456
Carbon disulfide	U		0.101	0.500	1	01/18/2020 14:57	WG1413456
Carbon tetrachloride	U		0.159	0.500	1	01/18/2020 14:57	WG1413456
Chlorobenzene	U		0.140	0.500	1	01/18/2020 14:57	WG1413456
Chlorodibromomethane	U		0.128	0.500	1	01/18/2020 14:57	WG1413456
Chloroethane	U		0.141	2.50	1	01/18/2020 14:57	WG1413456
Chloroform	U		0.0860	0.500	1	01/18/2020 14:57	WG1413456
Chloromethane	U		0.153	1.25	1	01/18/2020 14:57	WG1413456
2-Chlorotoluene	U		0.111	0.500	1	01/18/2020 14:57	WG1413456
4-Chlorotoluene	U		0.0972	0.500	1	01/18/2020 14:57	WG1413456

JC 1/30/20

MW-318-011620
Collected date/time: 01/16/20 13:05

SAMPLE RESULTS - 09

L1180338

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

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	01/18/2020 14:57	WG1413456
1,2-Dibromoethane	U		0.193	0.500	1	01/18/2020 14:57	WG1413456
Dibromomethane	U		0.117	0.500	1	01/18/2020 14:57	WG1413456
1,2-Dichlorobenzene	U		0.101	0.500	1	01/18/2020 14:57	WG1413456
1,3-Dichlorobenzene	U		0.130	0.500	1	01/18/2020 14:57	WG1413456
1,4-Dichlorobenzene	U		0.121	0.500	1	01/18/2020 14:57	WG1413456
Dichlorodifluoromethane	U		0.127	2.50	1	01/18/2020 14:57	WG1413456
1,1-Dichloroethane	0.521		0.114	0.500	1	01/18/2020 14:57	WG1413456
1,2-Dichloroethane	1.40		0.108	0.500	1	01/18/2020 14:57	WG1413456
1,1-Dichloroethene	U		0.188	0.500	1	01/18/2020 14:57	WG1413456
cis-1,2-Dichloroethene	9.86		0.0933	0.500	1	01/18/2020 14:57	WG1413456
trans-1,2-Dichloroethene	U		0.152	0.500	1	01/18/2020 14:57	WG1413456
1,2-Dichloropropane	0.298	J	0.190	0.500	1	01/18/2020 14:57	WG1413456
1,1-Dichloropropene	U		0.128	0.500	1	01/18/2020 14:57	WG1413456
1,3-Dichloropropane	U		0.147	1.00	1	01/18/2020 14:57	WG1413456
cis-1,3-Dichloropropene	U		0.0976	0.500	1	01/18/2020 14:57	WG1413456
trans-1,3-Dichloropropene	U		0.222	0.500	1	01/18/2020 14:57	WG1413456
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	01/18/2020 14:57	WG1413456
2,2-Dichloropropane	U		0.0929	0.500	1	01/18/2020 14:57	WG1413456
Di-isopropyl ether	U		0.0924	0.500	1	01/18/2020 14:57	WG1413456
Ethylbenzene	U		0.158	0.500	1	01/18/2020 14:57	WG1413456
Hexachloro-1,3-butadiene	U		0.157	1.00	1	01/18/2020 14:57	WG1413456
2-Hexanone	U		0.757	5.00	1	01/18/2020 14:57	WG1413456
n-Hexane	U	~~J4~~	0.305	5.00	1	01/18/2020 14:57	WG1413456
Iodomethane	U		0.377	10.0	1	01/18/2020 14:57	WG1413456
Isopropylbenzene	U		0.126	0.500	1	01/18/2020 14:57	WG1413456
p-Isopropyltoluene	U		0.138	0.500	1	01/18/2020 14:57	WG1413456
2-Butanone (MEK)	U		1.28	5.00	1	01/18/2020 14:57	WG1413456
Methylene Chloride	U		1.07	2.50	1	01/18/2020 14:57	WG1413456
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	01/18/2020 14:57	WG1413456
Methyl tert-butyl ether	U		0.102	0.500	1	01/18/2020 14:57	WG1413456
Naphthalene	U		0.174	2.50	1	01/18/2020 14:57	WG1413456
n-Propylbenzene	U		0.162	0.500	1	01/18/2020 14:57	WG1413456
Styrene	U		0.117	0.500	1	01/18/2020 14:57	WG1413456
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	01/18/2020 14:57	WG1413456
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	01/18/2020 14:57	WG1413456
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	01/18/2020 14:57	WG1413456
Tetrachloroethene	U		0.199	0.500	1	01/18/2020 14:57	WG1413456
Toluene	0.519		0.412	0.500	1	01/18/2020 14:57	WG1413456
1,2,3-Trichlorobenzene	U		0.164	0.500	1	01/18/2020 14:57	WG1413456
1,2,4-Trichlorobenzene	U		0.355	0.500	1	01/18/2020 14:57	WG1413456
1,1,1-Trichloroethane	U		0.0940	0.500	1	01/18/2020 14:57	WG1413456
1,1,2-Trichloroethane	U		0.186	0.500	1	01/18/2020 14:57	WG1413456
Trichloroethene	U		0.153	0.500	1	01/18/2020 14:57	WG1413456
Trichlorofluoromethane	U		0.130	2.50	1	01/18/2020 14:57	WG1413456
1,2,3-Trichloropropane	U		0.247	2.50	1	01/18/2020 14:57	WG1413456
1,2,4-Trimethylbenzene	U		0.123	0.500	1	01/18/2020 14:57	WG1413456
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	01/18/2020 14:57	WG1413456
1,3,5-Trimethylbenzene	U		0.124	0.500	1	01/18/2020 14:57	WG1413456
Vinyl acetate	U		0.645	5.00	1	01/18/2020 14:57	WG1413456
Vinyl chloride	31.0		0.118	0.500	1	01/18/2020 14:57	WG1413456
Xylenes, Total	U		0.316	1.50	1	01/18/2020 14:57	WG1413456
(S) Toluene-d8	*103*			*80.0-120*		*01/18/2020 14:57*	WG1413456
(S) 4-Bromofluorobenzene	*93.8*			*77.0-126*		*01/18/2020 14:57*	WG1413456
(S) 1,2-Dichloroethane-d4	*107*			*70.0-130*		*01/18/2020 14:57*	WG1413456

JC 1/30/20

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

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

Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	296000		2710	20000	1	01/17/2020 23:16	WG1413034

Sample Narrative:

L1180338-10 WG1413034: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	28600		51.9	1000	1	01/17/2020 17:24	WG1412916
Nitrate	U		22.7	100	1	01/17/2020 17:24	WG1412916
Sulfate	25000		77.4	5000	1	01/17/2020 17:24	WG1412916

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	1750	~~B~~	102	1000	1	01/21/2020 09:29	WG1413982

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	7450		15.0	100	1	01/21/2020 16:59	WG1413721
Manganese	1020		0.250	5.00	1	01/21/2020 16:59	WG1413721

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	284		0.287	0.678	1	01/18/2020 17:21	WG1413359
Ethane	29.1		0.296	1.29	1	01/18/2020 17:21	WG1413359
Ethene	34.3		0.422	1.27	1	01/18/2020 17:21	WG1413359

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U		1.05	25.0	1	01/18/2020 15:17	WG1413456
Acrylonitrile	U		0.873	5.00	1	01/18/2020 15:17	WG1413456
Benzene	U		0.0896	0.500	1	01/18/2020 15:17	WG1413456
Bromobenzene	U		0.133	0.500	1	01/18/2020 15:17	WG1413456
Bromodichloromethane	U		0.0800	0.500	1	01/18/2020 15:17	WG1413456
Bromochloromethane	U		0.145	0.500	1	01/18/2020 15:17	WG1413456
Bromoform	U		0.186	0.500	1	01/18/2020 15:17	WG1413456
Bromomethane	U		0.157	2.50	1	01/18/2020 15:17	WG1413456
n-Butylbenzene	U		0.143	0.500	1	01/18/2020 15:17	WG1413456
sec-Butylbenzene	U		0.134	0.500	1	01/18/2020 15:17	WG1413456
tert-Butylbenzene	U		0.183	0.500	1	01/18/2020 15:17	WG1413456
Carbon disulfide	U		0.101	0.500	1	01/18/2020 15:17	WG1413456
Carbon tetrachloride	U		0.159	0.500	1	01/18/2020 15:17	WG1413456
Chlorobenzene	U		0.140	0.500	1	01/18/2020 15:17	WG1413456
Chlorodibromomethane	U		0.128	0.500	1	01/18/2020 15:17	WG1413456
Chloroethane	U		0.141	2.50	1	01/18/2020 15:17	WG1413456
Chloroform	U		0.0860	0.500	1	01/18/2020 15:17	WG1413456
Chloromethane	U		0.153	1.25	1	01/18/2020 15:17	WG1413456
2-Chlorotoluene	U		0.111	0.500	1	01/18/2020 15:17	WG1413456
4-Chlorotoluene	U		0.0972	0.500	1	01/18/2020 15:17	WG1413456

JC 1/30/20

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch	
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	01/18/2020 15:17	WG1413456	
1,2-Dibromoethane	U		0.193	0.500	1	01/18/2020 15:17	WG1413456	
Dibromomethane	U		0.117	0.500	1	01/18/2020 15:17	WG1413456	
1,2-Dichlorobenzene	U		0.101	0.500	1	01/18/2020 15:17	WG1413456	
1,3-Dichlorobenzene	U		0.130	0.500	1	01/18/2020 15:17	WG1413456	
1,4-Dichlorobenzene	U		0.121	0.500	1	01/18/2020 15:17	WG1413456	
Dichlorodifluoromethane	U		0.127	2.50	1	01/18/2020 15:17	WG1413456	
1,1-Dichloroethane	U		0.114	0.500	1	01/18/2020 15:17	WG1413456	
1,2-Dichloroethane	U		0.108	0.500	1	01/18/2020 15:17	WG1413456	
1,1-Dichloroethene	0.479	J	0.188	0.500	1	01/18/2020 15:17	WG1413456	
cis-1,2-Dichloroethene	40.6		0.0933	0.500	1	01/18/2020 15:17	WG1413456	
trans-1,2-Dichloroethene	U		0.152	0.500	1	01/18/2020 15:17	WG1413456	
1,2-Dichloropropane	U		0.190	0.500	1	01/18/2020 15:17	WG1413456	
1,1-Dichloropropene	U		0.128	0.500	1	01/18/2020 15:17	WG1413456	
1,3-Dichloropropane	U		0.147	1.00	1	01/18/2020 15:17	WG1413456	
cis-1,3-Dichloropropene	U		0.0976	0.500	1	01/18/2020 15:17	WG1413456	
trans-1,3-Dichloropropene	U		0.222	0.500	1	01/18/2020 15:17	WG1413456	
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	01/18/2020 15:17	WG1413456	
2,2-Dichloropropane	U		0.0929	0.500	1	01/18/2020 15:17	WG1413456	
Di-isopropyl ether	U		0.0924	0.500	1	01/18/2020 15:17	WG1413456	
Ethylbenzene	U		0.158	0.500	1	01/18/2020 15:17	WG1413456	
Hexachloro-1,3-butadiene	U		0.157	1.00	1	01/18/2020 15:17	WG1413456	
2-Hexanone	U		0.757	5.00	1	01/18/2020 15:17	WG1413456	
n-Hexane	U	~~J4~~	0.305	5.00	1	01/18/2020 15:17	WG1413456	
Iodomethane	U		0.377	10.0	1	01/18/2020 15:17	WG1413456	
Isopropylbenzene	U		0.126	0.500	1	01/18/2020 15:17	WG1413456	
p-Isopropyltoluene	U		0.138	0.500	1	01/18/2020 15:17	WG1413456	
2-Butanone (MEK)	U		1.28	5.00	1	01/18/2020 15:17	WG1413456	
Methylene Chloride	U		1.07	2.50	1	01/18/2020 15:17	WG1413456	
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	01/18/2020 15:17	WG1413456	
Methyl tert-butyl ether	U		0.102	0.500	1	01/18/2020 15:17	WG1413456	
Naphthalene	U		0.174	2.50	1	01/18/2020 15:17	WG1413456	
n-Propylbenzene	U		0.162	0.500	1	01/18/2020 15:17	WG1413456	
Styrene	U		0.117	0.500	1	01/18/2020 15:17	WG1413456	
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	01/18/2020 15:17	WG1413456	
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	01/18/2020 15:17	WG1413456	
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	01/18/2020 15:17	WG1413456	
Tetrachloroethene	U		0.199	0.500	1	01/18/2020 15:17	WG1413456	
Toluene	U		0.412	0.500	1	01/18/2020 15:17	WG1413456	
1,2,3-Trichlorobenzene	U		0.164	0.500	1	01/18/2020 15:17	WG1413456	
1,2,4-Trichlorobenzene	U		0.355	0.500	1	01/18/2020 15:17	WG1413456	
1,1,1-Trichloroethane	U		0.0940	0.500	1	01/18/2020 15:17	WG1413456	
1,1,2-Trichloroethane	U		0.186	0.500	1	01/18/2020 15:17	WG1413456	
Trichloroethene	U		0.153	0.500	1	01/18/2020 15:17	WG1413456	
Trichlorofluoromethane	U		0.130	2.50	1	01/18/2020 15:17	WG1413456	
1,2,3-Trichloropropane	U		0.247	2.50	1	01/18/2020 15:17	WG1413456	
1,2,4-Trimethylbenzene	U		0.123	0.500	1	01/18/2020 15:17	WG1413456	
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	01/18/2020 15:17	WG1413456	
1,3,5-Trimethylbenzene	U		0.124	0.500	1	01/18/2020 15:17	WG1413456	
Vinyl acetate	U		0.645	5.00	1	01/18/2020 15:17	WG1413456	
Vinyl chloride	77.9		0.118	0.500	1	01/18/2020 15:17	WG1413456	JC 1/30/20
Xylenes, Total	U		0.316	1.50	1	01/18/2020 15:17	WG1413456	
(S) Toluene-d8	*102*			*80.0-120*		*01/18/2020 15:17*	WG1413456	
(S) 4-Bromofluorobenzene	*93.3*			*77.0-126*		*01/18/2020 15:17*	WG1413456	
(S) 1,2-Dichloroethane-d4	*107*			*70.0-130*		*01/18/2020 15:17*	WG1413456	

Wet Chemistry by Method 2320 B-2011

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Alkalinity	262000		2710	20000	1	01/17/2020 23:39	WG1413034

Sample Narrative:

L1180338-11 WG1413034: Endpoint pH 4.5

Wet Chemistry by Method 9056A

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Chloride	10500		51.9	1000	1	01/17/2020 17:35	WG1412916
Nitrate	U		22.7	100	1	01/17/2020 17:35	WG1412916
Sulfate	37600		77.4	5000	1	01/17/2020 17:35	WG1412916

Wet Chemistry by Method 9060A

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
TOC (Total Organic Carbon)	4680	~~B~~	102	1000	1	01/21/2020 11:45	WG1413982

Metals (ICPMS) by Method 6020B

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Iron	1030		15.0	100	1	01/21/2020 17:02	WG1413721
Manganese	354		0.250	5.00	1	01/21/2020 17:02	WG1413721

Volatile Organic Compounds (GC) by Method RSK175

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Methane	77.2		0.287	0.678	1	01/18/2020 17:25	WG1413359
Ethane	U		0.296	1.29	1	01/18/2020 17:25	WG1413359
Ethene	U		0.422	1.27	1	01/18/2020 17:25	WG1413359

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

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Acetone	1.06	J	1.05	25.0	1	01/18/2020 15:37	WG1413456
Acrylonitrile	U		0.873	5.00	1	01/18/2020 15:37	WG1413456
Benzene	U		0.0896	0.500	1	01/18/2020 15:37	WG1413456
Bromobenzene	U		0.133	0.500	1	01/18/2020 15:37	WG1413456
Bromodichloromethane	U		0.0800	0.500	1	01/18/2020 15:37	WG1413456
Bromochloromethane	U		0.145	0.500	1	01/18/2020 15:37	WG1413456
Bromoform	U		0.186	0.500	1	01/18/2020 15:37	WG1413456
Bromomethane	U		0.157	2.50	1	01/18/2020 15:37	WG1413456
n-Butylbenzene	U		0.143	0.500	1	01/18/2020 15:37	WG1413456
sec-Butylbenzene	U		0.134	0.500	1	01/18/2020 15:37	WG1413456
tert-Butylbenzene	U		0.183	0.500	1	01/18/2020 15:37	WG1413456
Carbon disulfide	U		0.101	0.500	1	01/18/2020 15:37	WG1413456
Carbon tetrachloride	U		0.159	0.500	1	01/18/2020 15:37	WG1413456
Chlorobenzene	U		0.140	0.500	1	01/18/2020 15:37	WG1413456
Chlorodibromomethane	U		0.128	0.500	1	01/18/2020 15:37	WG1413456
Chloroethane	U		0.141	2.50	1	01/18/2020 15:37	WG1413456
Chloroform	U		0.0860	0.500	1	01/18/2020 15:37	WG1413456
Chloromethane	U		0.153	1.25	1	01/18/2020 15:37	WG1413456
2-Chlorotoluene	U		0.111	0.500	1	01/18/2020 15:37	WG1413456
4-Chlorotoluene	U		0.0972	0.500	1	01/18/2020 15:37	WG1413456

JC 1/30/20

MW-315-011620
Collected date/time: 01/16/20 13:31

SAMPLE RESULTS - 11

L1180338

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	01/18/2020 15:37	WG1413456
1,2-Dibromoethane	U		0.193	0.500	1	01/18/2020 15:37	WG1413456
Dibromomethane	U		0.117	0.500	1	01/18/2020 15:37	WG1413456
1,2-Dichlorobenzene	U		0.101	0.500	1	01/18/2020 15:37	WG1413456
1,3-Dichlorobenzene	U		0.130	0.500	1	01/18/2020 15:37	WG1413456
1,4-Dichlorobenzene	U		0.121	0.500	1	01/18/2020 15:37	WG1413456
Dichlorodifluoromethane	U		0.127	2.50	1	01/18/2020 15:37	WG1413456
1,1-Dichloroethane	U		0.114	0.500	1	01/18/2020 15:37	WG1413456
1,2-Dichloroethane	U		0.108	0.500	1	01/18/2020 15:37	WG1413456
1,1-Dichloroethene	U		0.188	0.500	1	01/18/2020 15:37	WG1413456
cis-1,2-Dichloroethene	U		0.0933	0.500	1	01/18/2020 15:37	WG1413456
trans-1,2-Dichloroethene	U		0.152	0.500	1	01/18/2020 15:37	WG1413456
1,2-Dichloropropane	U		0.190	0.500	1	01/18/2020 15:37	WG1413456
1,1-Dichloropropene	U		0.128	0.500	1	01/18/2020 15:37	WG1413456
1,3-Dichloropropane	U		0.147	1.00	1	01/18/2020 15:37	WG1413456
cis-1,3-Dichloropropene	U		0.0976	0.500	1	01/18/2020 15:37	WG1413456
trans-1,3-Dichloropropene	U		0.222	0.500	1	01/18/2020 15:37	WG1413456
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	01/18/2020 15:37	WG1413456
2,2-Dichloropropane	U		0.0929	0.500	1	01/18/2020 15:37	WG1413456
Di-isopropyl ether	U		0.0924	0.500	1	01/18/2020 15:37	WG1413456
Ethylbenzene	U		0.158	0.500	1	01/18/2020 15:37	WG1413456
Hexachloro-1,3-butadiene	U		0.157	1.00	1	01/18/2020 15:37	WG1413456
2-Hexanone	U		0.757	5.00	1	01/18/2020 15:37	WG1413456
n-Hexane	U	~~J4~~	0.305	5.00	1	01/18/2020 15:37	WG1413456
Iodomethane	U		0.377	10.0	1	01/18/2020 15:37	WG1413456
Isopropylbenzene	U		0.126	0.500	1	01/18/2020 15:37	WG1413456
p-Isopropyltoluene	U		0.138	0.500	1	01/18/2020 15:37	WG1413456
2-Butanone (MEK)	U		1.28	5.00	1	01/18/2020 15:37	WG1413456
Methylene Chloride	U		1.07	2.50	1	01/18/2020 15:37	WG1413456
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	01/18/2020 15:37	WG1413456
Methyl tert-butyl ether	U		0.102	0.500	1	01/18/2020 15:37	WG1413456
Naphthalene	U		0.174	2.50	1	01/18/2020 15:37	WG1413456
n-Propylbenzene	U		0.162	0.500	1	01/18/2020 15:37	WG1413456
Styrene	U		0.117	0.500	1	01/18/2020 15:37	WG1413456
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	01/18/2020 15:37	WG1413456
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	01/18/2020 15:37	WG1413456
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	01/18/2020 15:37	WG1413456
Tetrachloroethene	U		0.199	0.500	1	01/18/2020 15:37	WG1413456
Toluene	U		0.412	0.500	1	01/18/2020 15:37	WG1413456
1,2,3-Trichlorobenzene	U		0.164	0.500	1	01/18/2020 15:37	WG1413456
1,2,4-Trichlorobenzene	U		0.355	0.500	1	01/18/2020 15:37	WG1413456
1,1,1-Trichloroethane	U		0.0940	0.500	1	01/18/2020 15:37	WG1413456
1,1,2-Trichloroethane	U		0.186	0.500	1	01/18/2020 15:37	WG1413456
Trichloroethene	U		0.153	0.500	1	01/18/2020 15:37	WG1413456
Trichlorofluoromethane	U		0.130	2.50	1	01/18/2020 15:37	WG1413456
1,2,3-Trichloropropane	U		0.247	2.50	1	01/18/2020 15:37	WG1413456
1,2,4-Trimethylbenzene	U		0.123	0.500	1	01/18/2020 15:37	WG1413456
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	01/18/2020 15:37	WG1413456
1,3,5-Trimethylbenzene	U		0.124	0.500	1	01/18/2020 15:37	WG1413456
Vinyl acetate	U		0.645	5.00	1	01/18/2020 15:37	WG1413456
Vinyl chloride	U		0.118	0.500	1	01/18/2020 15:37	WG1413456
Xylenes, Total	U		0.316	1.50	1	01/18/2020 15:37	WG1413456
(S) Toluene-d8	*105*			*80.0-120*		*01/18/2020 15:37*	WG1413456
(S) 4-Bromofluorobenzene	*89.5*			*77.0-126*		*01/18/2020 15:37*	WG1413456
(S) 1,2-Dichloroethane-d4	*104*			*70.0-130*		*01/18/2020 15:37*	WG1413456

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Wet Chemistry by Method 2320 B-2011

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Alkalinity	241000		2710	20000	1	01/17/2020 23:48	WG1413034

Sample Narrative:

L1180338-12 WG1413034: Endpoint pH 4.5

Wet Chemistry by Method 9056A

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Chloride	18200		51.9	1000	1	01/17/2020 18:10	WG1412916
Nitrate	U		22.7	100	1	01/17/2020 18:10	WG1412916
Sulfate	82000		77.4	5000	1	01/17/2020 18:10	WG1412916

Wet Chemistry by Method 9060A

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
TOC (Total Organic Carbon)	1630	~~B~~	102	1000	1	01/21/2020 11:58	WG1413982

Metals (ICPMS) by Method 6020B

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Iron	4110		15.0	100	1	01/21/2020 17:24	WG1413721
Manganese	962		0.250	5.00	1	01/21/2020 17:24	WG1413721

Volatile Organic Compounds (GC) by Method RSK175

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Methane	166		0.287	0.678	1	01/18/2020 17:27	WG1413359
Ethane	U		0.296	1.29	1	01/18/2020 17:27	WG1413359
Ethene	U		0.422	1.27	1	01/18/2020 17:27	WG1413359

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

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Acetone	U		1.05	25.0	1	01/18/2020 15:57	WG1413456
Acrylonitrile	U		0.873	5.00	1	01/18/2020 15:57	WG1413456
Benzene	U		0.0896	0.500	1	01/18/2020 15:57	WG1413456
Bromobenzene	U		0.133	0.500	1	01/18/2020 15:57	WG1413456
Bromodichloromethane	U		0.0800	0.500	1	01/18/2020 15:57	WG1413456
Bromochloromethane	U		0.145	0.500	1	01/18/2020 15:57	WG1413456
Bromoform	U		0.186	0.500	1	01/18/2020 15:57	WG1413456
Bromomethane	U		0.157	2.50	1	01/18/2020 15:57	WG1413456
n-Butylbenzene	U		0.143	0.500	1	01/18/2020 15:57	WG1413456
sec-Butylbenzene	U		0.134	0.500	1	01/18/2020 15:57	WG1413456
tert-Butylbenzene	U		0.183	0.500	1	01/18/2020 15:57	WG1413456
Carbon disulfide	1.01		0.101	0.500	1	01/18/2020 15:57	WG1413456
Carbon tetrachloride	U		0.159	0.500	1	01/18/2020 15:57	WG1413456
Chlorobenzene	U		0.140	0.500	1	01/18/2020 15:57	WG1413456
Chlorodibromomethane	U		0.128	0.500	1	01/18/2020 15:57	WG1413456
Chloroethane	U		0.141	2.50	1	01/18/2020 15:57	WG1413456
Chloroform	U		0.0860	0.500	1	01/18/2020 15:57	WG1413456
Chloromethane	U		0.153	1.25	1	01/18/2020 15:57	WG1413456
2-Chlorotoluene	U		0.111	0.500	1	01/18/2020 15:57	WG1413456
4-Chlorotoluene	U		0.0972	0.500	1	01/18/2020 15:57	WG1413456

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

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	01/18/2020 15:57	WG1413456
1,2-Dibromoethane	U		0.193	0.500	1	01/18/2020 15:57	WG1413456
Dibromomethane	U		0.117	0.500	1	01/18/2020 15:57	WG1413456
1,2-Dichlorobenzene	U		0.101	0.500	1	01/18/2020 15:57	WG1413456
1,3-Dichlorobenzene	U		0.130	0.500	1	01/18/2020 15:57	WG1413456
1,4-Dichlorobenzene	U		0.121	0.500	1	01/18/2020 15:57	WG1413456
Dichlorodifluoromethane	U		0.127	2.50	1	01/18/2020 15:57	WG1413456
1,1-Dichloroethane	0.667		0.114	0.500	1	01/18/2020 15:57	WG1413456
1,2-Dichloroethane	U		0.108	0.500	1	01/18/2020 15:57	WG1413456
1,1-Dichloroethene	0.281	J	0.188	0.500	1	01/18/2020 15:57	WG1413456
cis-1,2-Dichloroethene	63.7		0.0933	0.500	1	01/18/2020 15:57	WG1413456
trans-1,2-Dichloroethene	U		0.152	0.500	1	01/18/2020 15:57	WG1413456
1,2-Dichloropropane	U		0.190	0.500	1	01/18/2020 15:57	WG1413456
1,1-Dichloropropene	U		0.128	0.500	1	01/18/2020 15:57	WG1413456
1,3-Dichloropropane	U		0.147	1.00	1	01/18/2020 15:57	WG1413456
cis-1,3-Dichloropropene	U		0.0976	0.500	1	01/18/2020 15:57	WG1413456
trans-1,3-Dichloropropene	U		0.222	0.500	1	01/18/2020 15:57	WG1413456
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	01/18/2020 15:57	WG1413456
2,2-Dichloropropane	U		0.0929	0.500	1	01/18/2020 15:57	WG1413456
Di-isopropyl ether	U		0.0924	0.500	1	01/18/2020 15:57	WG1413456
Ethylbenzene	U		0.158	0.500	1	01/18/2020 15:57	WG1413456
Hexachloro-1,3-butadiene	U		0.157	1.00	1	01/18/2020 15:57	WG1413456
2-Hexanone	U		0.757	5.00	1	01/18/2020 15:57	WG1413456
n-Hexane	U	~~J4~~	0.305	5.00	1	01/18/2020 15:57	WG1413456
Iodomethane	U		0.377	10.0	1	01/18/2020 15:57	WG1413456
Isopropylbenzene	U		0.126	0.500	1	01/18/2020 15:57	WG1413456
p-Isopropyltoluene	U		0.138	0.500	1	01/18/2020 15:57	WG1413456
2-Butanone (MEK)	U		1.28	5.00	1	01/18/2020 15:57	WG1413456
Methylene Chloride	U		1.07	2.50	1	01/18/2020 15:57	WG1413456
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	01/18/2020 15:57	WG1413456
Methyl tert-butyl ether	U		0.102	0.500	1	01/18/2020 15:57	WG1413456
Naphthalene	U		0.174	2.50	1	01/18/2020 15:57	WG1413456
n-Propylbenzene	U		0.162	0.500	1	01/18/2020 15:57	WG1413456
Styrene	U		0.117	0.500	1	01/18/2020 15:57	WG1413456
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	01/18/2020 15:57	WG1413456
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	01/18/2020 15:57	WG1413456
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	01/18/2020 15:57	WG1413456
Tetrachloroethene	0.414	J	0.199	0.500	1	01/18/2020 15:57	WG1413456
Toluene	U		0.412	0.500	1	01/18/2020 15:57	WG1413456
1,2,3-Trichlorobenzene	U		0.164	0.500	1	01/18/2020 15:57	WG1413456
1,2,4-Trichlorobenzene	U		0.355	0.500	1	01/18/2020 15:57	WG1413456
1,1,1-Trichloroethane	U		0.0940	0.500	1	01/18/2020 15:57	WG1413456
1,1,2-Trichloroethane	U		0.186	0.500	1	01/18/2020 15:57	WG1413456
Trichloroethene	11.4		0.153	0.500	1	01/18/2020 15:57	WG1413456
Trichlorofluoromethane	U		0.130	2.50	1	01/18/2020 15:57	WG1413456
1,2,3-Trichloropropane	U		0.247	2.50	1	01/18/2020 15:57	WG1413456
1,2,4-Trimethylbenzene	U		0.123	0.500	1	01/18/2020 15:57	WG1413456
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	01/18/2020 15:57	WG1413456
1,3,5-Trimethylbenzene	U		0.124	0.500	1	01/18/2020 15:57	WG1413456
Vinyl acetate	U		0.645	5.00	1	01/18/2020 15:57	WG1413456
Vinyl chloride	6.78		0.118	0.500	1	01/18/2020 15:57	WG1413456
Xylenes, Total	U		0.316	1.50	1	01/18/2020 15:57	WG1413456
(S) Toluene-d8	*104*			*80.0-120*		*01/18/2020 15:57*	WG1413456
(S) 4-Bromofluorobenzene	*92.7*			*77.0-126*		*01/18/2020 15:57*	WG1413456
(S) 1,2-Dichloroethane-d4	*108*			*70.0-130*		*01/18/2020 15:57*	WG1413456

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Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	565000		2710	20000	1	01/18/2020 00:01	WG1413034

Sample Narrative:

L1180338-15 WG1413034: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	14400		51.9	1000	1	01/17/2020 16:18	WG1412938
Nitrate	U		22.7	100	1	01/17/2020 16:18	WG1412938
Sulfate	86000		77.4	5000	1	01/17/2020 16:18	WG1412938

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	7850		102	1000	1	01/21/2020 12:32	WG1413982

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	16000		15.0	100	1	01/21/2020 17:30	WG1413721
Manganese	2650		0.250	5.00	1	01/21/2020 17:30	WG1413721

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	2780		0.287	0.678	1	01/18/2020 17:32	WG1413359
Ethane	31.5		0.296	1.29	1	01/18/2020 17:32	WG1413359
Ethene	8.93		0.422	1.27	1	01/18/2020 17:32	WG1413359

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	2.33	J	1.05	25.0	1	01/18/2020 16:17	WG1413456
Acrylonitrile	U		0.873	5.00	1	01/18/2020 16:17	WG1413456
Benzene	29.3		0.0896	0.500	1	01/18/2020 16:17	WG1413456
Bromobenzene	U		0.133	0.500	1	01/18/2020 16:17	WG1413456
Bromodichloromethane	U		0.0800	0.500	1	01/18/2020 16:17	WG1413456
Bromochloromethane	U		0.145	0.500	1	01/18/2020 16:17	WG1413456
Bromoform	U		0.186	0.500	1	01/18/2020 16:17	WG1413456
Bromomethane	U		0.157	2.50	1	01/18/2020 16:17	WG1413456
n-Butylbenzene	U		0.143	0.500	1	01/18/2020 16:17	WG1413456
sec-Butylbenzene	U		0.134	0.500	1	01/18/2020 16:17	WG1413456
tert-Butylbenzene	U		0.183	0.500	1	01/18/2020 16:17	WG1413456
Carbon disulfide	0.713		0.101	0.500	1	01/18/2020 16:17	WG1413456
Carbon tetrachloride	U		0.159	0.500	1	01/18/2020 16:17	WG1413456
Chlorobenzene	U		0.140	0.500	1	01/18/2020 16:17	WG1413456
Chlorodibromomethane	U		0.128	0.500	1	01/18/2020 16:17	WG1413456
Chloroethane	U		0.141	2.50	1	01/18/2020 16:17	WG1413456
Chloroform	U		0.0860	0.500	1	01/18/2020 16:17	WG1413456
Chloromethane	U		0.153	1.25	1	01/18/2020 16:17	WG1413456
2-Chlorotoluene	U		0.111	0.500	1	01/18/2020 16:17	WG1413456
4-Chlorotoluene	U		0.0972	0.500	1	01/18/2020 16:17	WG1413456

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	01/18/2020 16:17	WG1413456
1,2-Dibromoethane	U		0.193	0.500	1	01/18/2020 16:17	WG1413456
Dibromomethane	U		0.117	0.500	1	01/18/2020 16:17	WG1413456
1,2-Dichlorobenzene	U		0.101	0.500	1	01/18/2020 16:17	WG1413456
1,3-Dichlorobenzene	U		0.130	0.500	1	01/18/2020 16:17	WG1413456
1,4-Dichlorobenzene	U		0.121	0.500	1	01/18/2020 16:17	WG1413456
Dichlorodifluoromethane	U		0.127	2.50	1	01/18/2020 16:17	WG1413456
1,1-Dichloroethane	U		0.114	0.500	1	01/18/2020 16:17	WG1413456
1,2-Dichloroethane	U		0.108	0.500	1	01/18/2020 16:17	WG1413456
1,1-Dichloroethene	U		0.188	0.500	1	01/18/2020 16:17	WG1413456
cis-1,2-Dichloroethene	11.9		0.0933	0.500	1	01/18/2020 16:17	WG1413456
trans-1,2-Dichloroethene	0.411	J	0.152	0.500	1	01/18/2020 16:17	WG1413456
1,2-Dichloropropane	U		0.190	0.500	1	01/18/2020 16:17	WG1413456
1,1-Dichloropropene	U		0.128	0.500	1	01/18/2020 16:17	WG1413456
1,3-Dichloropropane	U		0.147	1.00	1	01/18/2020 16:17	WG1413456
cis-1,3-Dichloropropene	U		0.0976	0.500	1	01/18/2020 16:17	WG1413456
trans-1,3-Dichloropropene	U		0.222	0.500	1	01/18/2020 16:17	WG1413456
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	01/18/2020 16:17	WG1413456
2,2-Dichloropropane	U		0.0929	0.500	1	01/18/2020 16:17	WG1413456
Di-isopropyl ether	U		0.0924	0.500	1	01/18/2020 16:17	WG1413456
Ethylbenzene	U		0.158	0.500	1	01/18/2020 16:17	WG1413456
Hexachloro-1,3-butadiene	U		0.157	1.00	1	01/18/2020 16:17	WG1413456
2-Hexanone	U		0.757	5.00	1	01/18/2020 16:17	WG1413456
n-Hexane	U	~~J4~~	0.305	5.00	1	01/18/2020 16:17	WG1413456
Iodomethane	U		0.377	10.0	1	01/18/2020 16:17	WG1413456
Isopropylbenzene	0.675		0.126	0.500	1	01/18/2020 16:17	WG1413456
p-Isopropyltoluene	U		0.138	0.500	1	01/18/2020 16:17	WG1413456
2-Butanone (MEK)	U		1.28	5.00	1	01/18/2020 16:17	WG1413456
Methylene Chloride	U		1.07	2.50	1	01/18/2020 16:17	WG1413456
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	01/18/2020 16:17	WG1413456
Methyl tert-butyl ether	U		0.102	0.500	1	01/18/2020 16:17	WG1413456
Naphthalene	U		0.174	2.50	1	01/18/2020 16:17	WG1413456
n-Propylbenzene	U		0.162	0.500	1	01/18/2020 16:17	WG1413456
Styrene	U		0.117	0.500	1	01/18/2020 16:17	WG1413456
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	01/18/2020 16:17	WG1413456
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	01/18/2020 16:17	WG1413456
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	01/18/2020 16:17	WG1413456
Tetrachloroethene	U		0.199	0.500	1	01/18/2020 16:17	WG1413456
Toluene	U		0.412	0.500	1	01/18/2020 16:17	WG1413456
1,2,3-Trichlorobenzene	U		0.164	0.500	1	01/18/2020 16:17	WG1413456
1,2,4-Trichlorobenzene	U		0.355	0.500	1	01/18/2020 16:17	WG1413456
1,1,1-Trichloroethane	U		0.0940	0.500	1	01/18/2020 16:17	WG1413456
1,1,2-Trichloroethane	U		0.186	0.500	1	01/18/2020 16:17	WG1413456
Trichloroethene	U		0.153	0.500	1	01/18/2020 16:17	WG1413456
Trichlorofluoromethane	U		0.130	2.50	1	01/18/2020 16:17	WG1413456
1,2,3-Trichloropropane	U		0.247	2.50	1	01/18/2020 16:17	WG1413456
1,2,4-Trimethylbenzene	U		0.123	0.500	1	01/18/2020 16:17	WG1413456
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	01/18/2020 16:17	WG1413456
1,3,5-Trimethylbenzene	U		0.124	0.500	1	01/18/2020 16:17	WG1413456
Vinyl acetate	U		0.645	5.00	1	01/18/2020 16:17	WG1413456
Vinyl chloride	16.3		0.118	0.500	1	01/18/2020 16:17	WG1413456
Xylenes, Total	U		0.316	1.50	1	01/18/2020 16:17	WG1413456
(S) Toluene-d8	*102*			*80.0-120*		*01/18/2020 16:17*	WG1413456
(S) 4-Bromofluorobenzene	*94.3*			*77.0-126*		*01/18/2020 16:17*	WG1413456
(S) 1,2-Dichloroethane-d4	*109*			*70.0-130*		*01/18/2020 16:17*	WG1413456

JC 1/30/20

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch	
Acetone	7.48	J	1.05	25.0	1	01/22/2020 00:58	WG1414927	
Acrylonitrile	U		0.873	5.00	1	01/22/2020 00:58	WG1414927	
Benzene	U		0.0896	0.500	1	01/22/2020 00:58	WG1414927	
Bromobenzene	U		0.133	0.500	1	01/22/2020 00:58	WG1414927	
Bromodichloromethane	U		0.0800	0.500	1	01/22/2020 00:58	WG1414927	
Bromochloromethane	U		0.145	0.500	1	01/22/2020 00:58	WG1414927	
Bromoform	U		0.186	0.500	1	01/22/2020 00:58	WG1414927	
Bromomethane	U		0.157	2.50	1	01/22/2020 00:58	WG1414927	
n-Butylbenzene	U		0.143	0.500	1	01/22/2020 00:58	WG1414927	
sec-Butylbenzene	U		0.134	0.500	1	01/22/2020 00:58	WG1414927	
tert-Butylbenzene	U		0.183	0.500	1	01/22/2020 00:58	WG1414927	
Carbon disulfide	U		0.101	0.500	1	01/22/2020 00:58	WG1414927	
Carbon tetrachloride	U		0.159	0.500	1	01/22/2020 00:58	WG1414927	
Chlorobenzene	U		0.140	0.500	1	01/22/2020 00:58	WG1414927	
Chlorodibromomethane	U		0.128	0.500	1	01/22/2020 00:58	WG1414927	
Chloroethane	U		0.141	2.50	1	01/22/2020 00:58	WG1414927	
Chloroform	U		0.0860	0.500	1	01/22/2020 00:58	WG1414927	
Chloromethane	U		0.153	1.25	1	01/22/2020 00:58	WG1414927	
2-Chlorotoluene	U		0.111	0.500	1	01/22/2020 00:58	WG1414927	
4-Chlorotoluene	U		0.0972	0.500	1	01/22/2020 00:58	WG1414927	
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	01/22/2020 00:58	WG1414927	
1,2-Dibromoethane	U		0.193	0.500	1	01/22/2020 00:58	WG1414927	
Dibromomethane	U		0.117	0.500	1	01/22/2020 00:58	WG1414927	
1,2-Dichlorobenzene	U		0.101	0.500	1	01/22/2020 00:58	WG1414927	
1,3-Dichlorobenzene	U		0.130	0.500	1	01/22/2020 00:58	WG1414927	
1,4-Dichlorobenzene	U		0.121	0.500	1	01/22/2020 00:58	WG1414927	
Dichlorodifluoromethane	U		0.127	2.50	1	01/22/2020 00:58	WG1414927	
1,1-Dichloroethane	U		0.114	0.500	1	01/22/2020 00:58	WG1414927	
1,2-Dichloroethane	U		0.108	0.500	1	01/22/2020 00:58	WG1414927	
1,1-Dichloroethene	U		0.188	0.500	1	01/22/2020 00:58	WG1414927	
cis-1,2-Dichloroethene	U		0.0933	0.500	1	01/22/2020 00:58	WG1414927	
trans-1,2-Dichloroethene	U		0.152	0.500	1	01/22/2020 00:58	WG1414927	
1,2-Dichloropropane	U		0.190	0.500	1	01/22/2020 00:58	WG1414927	
1,1-Dichloropropene	U		0.128	0.500	1	01/22/2020 00:58	WG1414927	
1,3-Dichloropropane	U		0.147	1.00	1	01/22/2020 00:58	WG1414927	
cis-1,3-Dichloropropene	U		0.0976	0.500	1	01/22/2020 00:58	WG1414927	
trans-1,3-Dichloropropene	U		0.222	0.500	1	01/22/2020 00:58	WG1414927	
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	01/22/2020 00:58	WG1414927	
2,2-Dichloropropane	U		0.0929	0.500	1	01/22/2020 00:58	WG1414927	
Di-isopropyl ether	U		0.0924	0.500	1	01/22/2020 00:58	WG1414927	
Ethylbenzene	U		0.158	0.500	1	01/22/2020 00:58	WG1414927	
Hexachloro-1,3-butadiene	U		0.157	1.00	1	01/22/2020 00:58	WG1414927	
2-Hexanone	U		0.757	5.00	1	01/22/2020 00:58	WG1414927	
n-Hexane	U		0.305	5.00	1	01/22/2020 00:58	WG1414927	
Iodomethane	U		0.377	10.0	1	01/22/2020 00:58	WG1414927	
Isopropylbenzene	U		0.126	0.500	1	01/22/2020 00:58	WG1414927	
p-Isopropyltoluene	U		0.138	0.500	1	01/22/2020 00:58	WG1414927	
2-Butanone (MEK)	1.30	J	1.28	5.00	1	01/22/2020 00:58	WG1414927	
Methylene Chloride	U		1.07	2.50	1	01/22/2020 00:58	WG1414927	
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	01/22/2020 00:58	WG1414927	
Methyl tert-butyl ether	U		0.102	0.500	1	01/22/2020 00:58	WG1414927	
Naphthalene	0.250 U	~~B J~~	0.174	2.50	1	01/22/2020 00:58	WG1414927	JC 1/30/20
n-Propylbenzene	U		0.162	0.500	1	01/22/2020 00:58	WG1414927	
Styrene	U		0.117	0.500	1	01/22/2020 00:58	WG1414927	
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	01/22/2020 00:58	WG1414927	
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	01/22/2020 00:58	WG1414927	

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	01/22/2020 00:58	WG1414927
Tetrachloroethene	U		0.199	0.500	1	01/22/2020 00:58	WG1414927
Toluene	U		0.412	0.500	1	01/22/2020 00:58	WG1414927
1,2,3-Trichlorobenzene	U		0.164	0.500	1	01/22/2020 00:58	WG1414927
1,2,4-Trichlorobenzene	U		0.355	0.500	1	01/22/2020 00:58	WG1414927
1,1,1-Trichloroethane	U		0.0940	0.500	1	01/22/2020 00:58	WG1414927
1,1,2-Trichloroethane	U		0.186	0.500	1	01/22/2020 00:58	WG1414927
Trichloroethene	U		0.153	0.500	1	01/22/2020 00:58	WG1414927
Trichlorofluoromethane	U		0.130	2.50	1	01/22/2020 00:58	WG1414927
1,2,3-Trichloropropane	U		0.247	2.50	1	01/22/2020 00:58	WG1414927
1,2,4-Trimethylbenzene	U		0.123	0.500	1	01/22/2020 00:58	WG1414927
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	01/22/2020 00:58	WG1414927
1,3,5-Trimethylbenzene	U		0.124	0.500	1	01/22/2020 00:58	WG1414927
Vinyl acetate	U		0.645	5.00	1	01/22/2020 00:58	WG1414927
Vinyl chloride	U		0.118	0.500	1	01/22/2020 00:58	WG1414927
Xylenes, Total	U		0.316	1.50	1	01/22/2020 00:58	WG1414927
(S) Toluene-d8	*105*			*80.0-120*		*01/22/2020 00:58*	WG1414927
(S) 4-Bromofluorobenzene	*92.1*			*77.0-126*		*01/22/2020 00:58*	WG1414927
(S) 1,2-Dichloroethane-d4	*103*			*70.0-130*		*01/22/2020 00:58*	WG1414927

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

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Wet Chemistry by Method 2320 B-2011

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Alkalinity	606000		2710	20000	1	01/21/2020 21:57	WG1414762

Sample Narrative:

L1181247-02 WG1414762: Endpoint pH 4.5

Wet Chemistry by Method 9056A

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Chloride	28300		51.9	1000	1	01/21/2020 17:07	WG1414453
Nitrate	U		22.7	100	1	01/21/2020 17:07	WG1414453
Sulfate	47600		77.4	5000	1	01/21/2020 17:07	WG1414453

Wet Chemistry by Method 9060A

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
TOC (Total Organic Carbon)	10900		102	1000	1	01/24/2020 11:22	WG1415857

Metals (ICPMS) by Method 6020B

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Iron	3920		15.0	100	1	01/22/2020 13:48	WG1414629
Manganese	1200		0.250	5.00	1	01/22/2020 13:48	WG1414629

Volatile Organic Compounds (GC) by Method RSK175

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Methane	4830		0.287	0.678	1	01/22/2020 13:23	WG1415092
Ethane	6.70		0.296	1.29	1	01/22/2020 13:23	WG1415092
Ethene	28.7		0.422	1.27	1	01/22/2020 13:23	WG1415092

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

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Acetone	114	J	52.5	1250	50	01/22/2020 01:18	WG1414927
Acrylonitrile	U		43.7	250	50	01/22/2020 01:18	WG1414927
Benzene	U		4.48	25.0	50	01/22/2020 01:18	WG1414927
Bromobenzene	U		6.65	25.0	50	01/22/2020 01:18	WG1414927
Bromodichloromethane	U		4.00	25.0	50	01/22/2020 01:18	WG1414927
Bromochloromethane	U		7.25	25.0	50	01/22/2020 01:18	WG1414927
Bromoform	U		9.30	25.0	50	01/22/2020 01:18	WG1414927
Bromomethane	U		7.85	125	50	01/22/2020 01:18	WG1414927
n-Butylbenzene	U		7.15	25.0	50	01/22/2020 01:18	WG1414927
sec-Butylbenzene	U		6.70	25.0	50	01/22/2020 01:18	WG1414927
tert-Butylbenzene	U		9.15	25.0	50	01/22/2020 01:18	WG1414927
Carbon disulfide	U		5.05	25.0	50	01/22/2020 01:18	WG1414927
Carbon tetrachloride	U		7.95	25.0	50	01/22/2020 01:18	WG1414927
Chlorobenzene	U		7.00	25.0	50	01/22/2020 01:18	WG1414927
Chlorodibromomethane	U		6.40	25.0	50	01/22/2020 01:18	WG1414927
Chloroethane	U		7.05	125	50	01/22/2020 01:18	WG1414927
Chloroform	U		4.30	25.0	50	01/22/2020 01:18	WG1414927
Chloromethane	U		7.65	62.5	50	01/22/2020 01:18	WG1414927
2-Chlorotoluene	U		5.55	25.0	50	01/22/2020 01:18	WG1414927
4-Chlorotoluene	U		4.86	25.0	50	01/22/2020 01:18	WG1414927

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,2-Dibromo-3-Chloropropane	U		16.3	125	50	01/22/2020 01:18	WG1414927
1,2-Dibromoethane	U		9.65	25.0	50	01/22/2020 01:18	WG1414927
Dibromomethane	U		5.85	25.0	50	01/22/2020 01:18	WG1414927
1,2-Dichlorobenzene	U		5.05	25.0	50	01/22/2020 01:18	WG1414927
1,3-Dichlorobenzene	U		6.50	25.0	50	01/22/2020 01:18	WG1414927
1,4-Dichlorobenzene	U		6.05	25.0	50	01/22/2020 01:18	WG1414927
Dichlorodifluoromethane	U		6.35	125	50	01/22/2020 01:18	WG1414927
1,1-Dichloroethane	U		5.70	25.0	50	01/22/2020 01:18	WG1414927
1,2-Dichloroethane	U		5.40	25.0	50	01/22/2020 01:18	WG1414927
1,1-Dichloroethene	U		9.40	25.0	50	01/22/2020 01:18	WG1414927
cis-1,2-Dichloroethene	3170		4.67	25.0	50	01/22/2020 01:18	WG1414927
trans-1,2-Dichloroethene	U		7.60	25.0	50	01/22/2020 01:18	WG1414927
1,2-Dichloropropane	U		9.50	25.0	50	01/22/2020 01:18	WG1414927
1,1-Dichloropropene	U		6.40	25.0	50	01/22/2020 01:18	WG1414927
1,3-Dichloropropane	U		7.35	50.0	50	01/22/2020 01:18	WG1414927
cis-1,3-Dichloropropene	U		4.88	25.0	50	01/22/2020 01:18	WG1414927
trans-1,3-Dichloropropene	U		11.1	25.0	50	01/22/2020 01:18	WG1414927
trans-1,4-Dichloro-2-butene	U		12.9	250	50	01/22/2020 01:18	WG1414927
2,2-Dichloropropane	U		4.65	25.0	50	01/22/2020 01:18	WG1414927
Di-isopropyl ether	U		4.62	25.0	50	01/22/2020 01:18	WG1414927
Ethylbenzene	U		7.90	25.0	50	01/22/2020 01:18	WG1414927
Hexachloro-1,3-butadiene	U		7.85	50.0	50	01/22/2020 01:18	WG1414927
2-Hexanone	U		37.9	250	50	01/22/2020 01:18	WG1414927
n-Hexane	U		15.3	250	50	01/22/2020 01:18	WG1414927
Iodomethane	U		18.9	500	50	01/22/2020 01:18	WG1414927
Isopropylbenzene	U		6.30	25.0	50	01/22/2020 01:18	WG1414927
p-Isopropyltoluene	U		6.90	25.0	50	01/22/2020 01:18	WG1414927
2-Butanone (MEK)	U		64.0	250	50	01/22/2020 01:18	WG1414927
Methylene Chloride	U		53.5	125	50	01/22/2020 01:18	WG1414927
4-Methyl-2-pentanone (MIBK)	U		41.2	250	50	01/22/2020 01:18	WG1414927
Methyl tert-butyl ether	U		5.10	25.0	50	01/22/2020 01:18	WG1414927
Naphthalene	U		8.70	125	50	01/22/2020 01:18	WG1414927
n-Propylbenzene	U		8.10	25.0	50	01/22/2020 01:18	WG1414927
Styrene	U		5.85	25.0	50	01/22/2020 01:18	WG1414927
1,1,1,2-Tetrachloroethane	U		6.00	25.0	50	01/22/2020 01:18	WG1414927
1,1,2,2-Tetrachloroethane	U		6.50	25.0	50	01/22/2020 01:18	WG1414927
1,1,2-Trichlorotrifluoroethane	U		8.20	25.0	50	01/22/2020 01:18	WG1414927
Tetrachloroethene	U		9.95	25.0	50	01/22/2020 01:18	WG1414927
Toluene	U		20.6	25.0	50	01/22/2020 01:18	WG1414927
1,2,3-Trichlorobenzene	U		8.20	25.0	50	01/22/2020 01:18	WG1414927
1,2,4-Trichlorobenzene	U		17.8	25.0	50	01/22/2020 01:18	WG1414927
1,1,1-Trichloroethane	U		4.70	25.0	50	01/22/2020 01:18	WG1414927
1,1,2-Trichloroethane	U		9.30	25.0	50	01/22/2020 01:18	WG1414927
Trichloroethene	U		7.65	25.0	50	01/22/2020 01:18	WG1414927
Trichlorofluoromethane	U		6.50	125	50	01/22/2020 01:18	WG1414927
1,2,3-Trichloropropane	U		12.3	125	50	01/22/2020 01:18	WG1414927
1,2,4-Trimethylbenzene	U		6.15	25.0	50	01/22/2020 01:18	WG1414927
1,2,3-Trimethylbenzene	U		3.69	25.0	50	01/22/2020 01:18	WG1414927
1,3,5-Trimethylbenzene	U		6.20	25.0	50	01/22/2020 01:18	WG1414927
Vinyl acetate	U		32.3	250	50	01/22/2020 01:18	WG1414927
Vinyl chloride	113		5.90	25.0	50	01/22/2020 01:18	WG1414927
Xylenes, Total	U		15.8	75.0	50	01/22/2020 01:18	WG1414927
(S) Toluene-d8	*106*			*80.0-120*		*01/22/2020 01:18*	WG1414927
(S) 4-Bromofluorobenzene	*93.3*			*77.0-126*		*01/22/2020 01:18*	WG1414927
(S) 1,2-Dichloroethane-d4	*103*			*70.0-130*		*01/22/2020 01:18*	WG1414927

JC 1/30/20

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

Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	541000		2710	20000	1	01/21/2020 22:05	WG1414762

Sample Narrative:

L1181247-03 WG1414762: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	23100		51.9	1000	1	01/21/2020 17:18	WG1414453
Nitrate	U		22.7	100	1	01/21/2020 17:18	WG1414453
Sulfate	1110 U	~~BJ~~	77.4	5000	1	01/21/2020 17:18	WG1414453

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	6920		102	1000	1	01/24/2020 11:46	WG1415857

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	12100		15.0	100	1	01/22/2020 13:51	WG1414629
Manganese	450		0.250	5.00	1	01/22/2020 13:51	WG1414629

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	10800		2.87	6.78	10	01/22/2020 16:46	WG1415348
Ethane	8.84		0.296	1.29	1	01/22/2020 13:26	WG1415092
Ethene	40.8		0.422	1.27	1	01/22/2020 13:26	WG1415092

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U		1.05	25.0	1	01/22/2020 01:39	WG1414927
Acrylonitrile	U		0.873	5.00	1	01/22/2020 01:39	WG1414927
Benzene	17.8		0.0896	0.500	1	01/22/2020 01:39	WG1414927
Bromobenzene	U		0.133	0.500	1	01/22/2020 01:39	WG1414927
Bromodichloromethane	U		0.0800	0.500	1	01/22/2020 01:39	WG1414927
Bromochloromethane	U		0.145	0.500	1	01/22/2020 01:39	WG1414927
Bromoform	U		0.186	0.500	1	01/22/2020 01:39	WG1414927
Bromomethane	U		0.157	2.50	1	01/22/2020 01:39	WG1414927
n-Butylbenzene	U		0.143	0.500	1	01/22/2020 01:39	WG1414927
sec-Butylbenzene	U		0.134	0.500	1	01/22/2020 01:39	WG1414927
tert-Butylbenzene	U		0.183	0.500	1	01/22/2020 01:39	WG1414927
Carbon disulfide	U		0.101	0.500	1	01/22/2020 01:39	WG1414927
Carbon tetrachloride	U		0.159	0.500	1	01/22/2020 01:39	WG1414927
Chlorobenzene	U		0.140	0.500	1	01/22/2020 01:39	WG1414927
Chlorodibromomethane	U		0.128	0.500	1	01/22/2020 01:39	WG1414927
Chloroethane	U		0.141	2.50	1	01/22/2020 01:39	WG1414927
Chloroform	U		0.0860	0.500	1	01/22/2020 01:39	WG1414927
Chloromethane	U		0.153	1.25	1	01/22/2020 01:39	WG1414927
2-Chlorotoluene	U		0.111	0.500	1	01/22/2020 01:39	WG1414927
4-Chlorotoluene	U		0.0972	0.500	1	01/22/2020 01:39	WG1414927

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	01/22/2020 01:39	WG1414927
1,2-Dibromoethane	U		0.193	0.500	1	01/22/2020 01:39	WG1414927
Dibromomethane	U		0.117	0.500	1	01/22/2020 01:39	WG1414927
1,2-Dichlorobenzene	U		0.101	0.500	1	01/22/2020 01:39	WG1414927
1,3-Dichlorobenzene	U		0.130	0.500	1	01/22/2020 01:39	WG1414927
1,4-Dichlorobenzene	U		0.121	0.500	1	01/22/2020 01:39	WG1414927
Dichlorodifluoromethane	U		0.127	2.50	1	01/22/2020 01:39	WG1414927
1,1-Dichloroethane	U		0.114	0.500	1	01/22/2020 01:39	WG1414927
1,2-Dichloroethane	U		0.108	0.500	1	01/22/2020 01:39	WG1414927
1,1-Dichloroethene	U		0.188	0.500	1	01/22/2020 01:39	WG1414927
cis-1,2-Dichloroethene	1.67		0.0933	0.500	1	01/22/2020 01:39	WG1414927
trans-1,2-Dichloroethene	U		0.152	0.500	1	01/22/2020 01:39	WG1414927
1,2-Dichloropropane	U		0.190	0.500	1	01/22/2020 01:39	WG1414927
1,1-Dichloropropene	U		0.128	0.500	1	01/22/2020 01:39	WG1414927
1,3-Dichloropropane	U		0.147	1.00	1	01/22/2020 01:39	WG1414927
cis-1,3-Dichloropropene	U		0.0976	0.500	1	01/22/2020 01:39	WG1414927
trans-1,3-Dichloropropene	U		0.222	0.500	1	01/22/2020 01:39	WG1414927
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	01/22/2020 01:39	WG1414927
2,2-Dichloropropane	U		0.0929	0.500	1	01/22/2020 01:39	WG1414927
Di-isopropyl ether	0.182	J	0.0924	0.500	1	01/22/2020 01:39	WG1414927
Ethylbenzene	U		0.158	0.500	1	01/22/2020 01:39	WG1414927
Hexachloro-1,3-butadiene	U		0.157	1.00	1	01/22/2020 01:39	WG1414927
2-Hexanone	U		0.757	5.00	1	01/22/2020 01:39	WG1414927
n-Hexane	U		0.305	5.00	1	01/22/2020 01:39	WG1414927
Iodomethane	U		0.377	10.0	1	01/22/2020 01:39	WG1414927
Isopropylbenzene	U		0.126	0.500	1	01/22/2020 01:39	WG1414927
p-Isopropyltoluene	U		0.138	0.500	1	01/22/2020 01:39	WG1414927
2-Butanone (MEK)	U		1.28	5.00	1	01/22/2020 01:39	WG1414927
Methylene Chloride	U		1.07	2.50	1	01/22/2020 01:39	WG1414927
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	01/22/2020 01:39	WG1414927
Methyl tert-butyl ether	U		0.102	0.500	1	01/22/2020 01:39	WG1414927
Naphthalene	U		0.174	2.50	1	01/22/2020 01:39	WG1414927
n-Propylbenzene	U		0.162	0.500	1	01/22/2020 01:39	WG1414927
Styrene	U		0.117	0.500	1	01/22/2020 01:39	WG1414927
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	01/22/2020 01:39	WG1414927
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	01/22/2020 01:39	WG1414927
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	01/22/2020 01:39	WG1414927
Tetrachloroethene	U		0.199	0.500	1	01/22/2020 01:39	WG1414927
Toluene	U		0.412	0.500	1	01/22/2020 01:39	WG1414927
1,2,3-Trichlorobenzene	U		0.164	0.500	1	01/22/2020 01:39	WG1414927
1,2,4-Trichlorobenzene	U		0.355	0.500	1	01/22/2020 01:39	WG1414927
1,1,1-Trichloroethane	U		0.0940	0.500	1	01/22/2020 01:39	WG1414927
1,1,2-Trichloroethane	U		0.186	0.500	1	01/22/2020 01:39	WG1414927
Trichloroethene	U		0.153	0.500	1	01/22/2020 01:39	WG1414927
Trichlorofluoromethane	U		0.130	2.50	1	01/22/2020 01:39	WG1414927
1,2,3-Trichloropropane	U		0.247	2.50	1	01/22/2020 01:39	WG1414927
1,2,4-Trimethylbenzene	U		0.123	0.500	1	01/22/2020 01:39	WG1414927
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	01/22/2020 01:39	WG1414927
1,3,5-Trimethylbenzene	U		0.124	0.500	1	01/22/2020 01:39	WG1414927
Vinyl acetate	U		0.645	5.00	1	01/22/2020 01:39	WG1414927
Vinyl chloride	47.4		0.118	0.500	1	01/22/2020 01:39	WG1414927
Xylenes, Total	U		0.316	1.50	1	01/22/2020 01:39	WG1414927
(S) Toluene-d8	*107*			*80.0-120*		*01/22/2020 01:39*	WG1414927
(S) 4-Bromofluorobenzene	*92.0*			*77.0-126*		*01/22/2020 01:39*	WG1414927
(S) 1,2-Dichloroethane-d4	*102*			*70.0-130*		*01/22/2020 01:39*	WG1414927

JC 1/30/20

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

Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	506000		2710	20000	1	01/21/2020 22:13	WG1414762

Sample Narrative:

L1181247-04 WG1414762: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	52600		51.9	1000	1	01/21/2020 17:28	WG1414453
Nitrate	U		22.7	100	1	01/21/2020 17:28	WG1414453
Sulfate	14800		77.4	5000	1	01/21/2020 17:28	WG1414453

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	4610		102	1000	1	01/24/2020 13:00	WG1415857

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	4830		15.0	100	1	01/22/2020 13:54	WG1414629
Manganese	2300		0.250	5.00	1	01/22/2020 13:54	WG1414629

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	1020		0.287	0.678	1	01/22/2020 13:29	WG1415092
Ethane	25.9		0.296	1.29	1	01/22/2020 13:29	WG1415092
Ethene	U		0.422	1.27	1	01/22/2020 13:29	WG1415092

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U		1.05	25.0	1	01/22/2020 01:59	WG1414927
Acrylonitrile	U		0.873	5.00	1	01/22/2020 01:59	WG1414927
Benzene	0.279	J	0.0896	0.500	1	01/22/2020 01:59	WG1414927
Bromobenzene	U		0.133	0.500	1	01/22/2020 01:59	WG1414927
Bromodichloromethane	U		0.0800	0.500	1	01/22/2020 01:59	WG1414927
Bromochloromethane	U		0.145	0.500	1	01/22/2020 01:59	WG1414927
Bromoform	U		0.186	0.500	1	01/22/2020 01:59	WG1414927
Bromomethane	U		0.157	2.50	1	01/22/2020 01:59	WG1414927
n-Butylbenzene	U		0.143	0.500	1	01/22/2020 01:59	WG1414927
sec-Butylbenzene	U		0.134	0.500	1	01/22/2020 01:59	WG1414927
tert-Butylbenzene	U		0.183	0.500	1	01/22/2020 01:59	WG1414927
Carbon disulfide	U		0.101	0.500	1	01/22/2020 01:59	WG1414927
Carbon tetrachloride	U		0.159	0.500	1	01/22/2020 01:59	WG1414927
Chlorobenzene	U		0.140	0.500	1	01/22/2020 01:59	WG1414927
Chlorodibromomethane	U		0.128	0.500	1	01/22/2020 01:59	WG1414927
Chloroethane	U		0.141	2.50	1	01/22/2020 01:59	WG1414927
Chloroform	U		0.0860	0.500	1	01/22/2020 01:59	WG1414927
Chloromethane	U		0.153	1.25	1	01/22/2020 01:59	WG1414927
2-Chlorotoluene	U		0.111	0.500	1	01/22/2020 01:59	WG1414927
4-Chlorotoluene	U		0.0972	0.500	1	01/22/2020 01:59	WG1414927

JC 1/30/20

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	01/22/2020 01:59	WG1414927
1,2-Dibromoethane	U		0.193	0.500	1	01/22/2020 01:59	WG1414927
Dibromomethane	U		0.117	0.500	1	01/22/2020 01:59	WG1414927
1,2-Dichlorobenzene	U		0.101	0.500	1	01/22/2020 01:59	WG1414927
1,3-Dichlorobenzene	U		0.130	0.500	1	01/22/2020 01:59	WG1414927
1,4-Dichlorobenzene	U		0.121	0.500	1	01/22/2020 01:59	WG1414927
Dichlorodifluoromethane	U		0.127	2.50	1	01/22/2020 01:59	WG1414927
1,1-Dichloroethane	U		0.114	0.500	1	01/22/2020 01:59	WG1414927
1,2-Dichloroethane	U		0.108	0.500	1	01/22/2020 01:59	WG1414927
1,1-Dichloroethene	U		0.188	0.500	1	01/22/2020 01:59	WG1414927
cis-1,2-Dichloroethene	11.0		0.0933	0.500	1	01/22/2020 01:59	WG1414927
trans-1,2-Dichloroethene	U		0.152	0.500	1	01/22/2020 01:59	WG1414927
1,2-Dichloropropane	U		0.190	0.500	1	01/22/2020 01:59	WG1414927
1,1-Dichloropropene	U		0.128	0.500	1	01/22/2020 01:59	WG1414927
1,3-Dichloropropane	U		0.147	1.00	1	01/22/2020 01:59	WG1414927
cis-1,3-Dichloropropene	U		0.0976	0.500	1	01/22/2020 01:59	WG1414927
trans-1,3-Dichloropropene	U		0.222	0.500	1	01/22/2020 01:59	WG1414927
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	01/22/2020 01:59	WG1414927
2,2-Dichloropropane	U		0.0929	0.500	1	01/22/2020 01:59	WG1414927
Di-isopropyl ether	U		0.0924	0.500	1	01/22/2020 01:59	WG1414927
Ethylbenzene	U		0.158	0.500	1	01/22/2020 01:59	WG1414927
Hexachloro-1,3-butadiene	U		0.157	1.00	1	01/22/2020 01:59	WG1414927
2-Hexanone	U		0.757	5.00	1	01/22/2020 01:59	WG1414927
n-Hexane	U		0.305	5.00	1	01/22/2020 01:59	WG1414927
Iodomethane	U		0.377	10.0	1	01/22/2020 01:59	WG1414927
Isopropylbenzene	U		0.126	0.500	1	01/22/2020 01:59	WG1414927
p-Isopropyltoluene	U		0.138	0.500	1	01/22/2020 01:59	WG1414927
2-Butanone (MEK)	U		1.28	5.00	1	01/22/2020 01:59	WG1414927
Methylene Chloride	U		1.07	2.50	1	01/22/2020 01:59	WG1414927
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	01/22/2020 01:59	WG1414927
Methyl tert-butyl ether	U		0.102	0.500	1	01/22/2020 01:59	WG1414927
Naphthalene	U		0.174	2.50	1	01/22/2020 01:59	WG1414927
n-Propylbenzene	U		0.162	0.500	1	01/22/2020 01:59	WG1414927
Styrene	U		0.117	0.500	1	01/22/2020 01:59	WG1414927
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	01/22/2020 01:59	WG1414927
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	01/22/2020 01:59	WG1414927
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	01/22/2020 01:59	WG1414927
Tetrachloroethene	U		0.199	0.500	1	01/22/2020 01:59	WG1414927
Toluene	U		0.412	0.500	1	01/22/2020 01:59	WG1414927
1,2,3-Trichlorobenzene	U		0.164	0.500	1	01/22/2020 01:59	WG1414927
1,2,4-Trichlorobenzene	U		0.355	0.500	1	01/22/2020 01:59	WG1414927
1,1,1-Trichloroethane	U		0.0940	0.500	1	01/22/2020 01:59	WG1414927
1,1,2-Trichloroethane	U		0.186	0.500	1	01/22/2020 01:59	WG1414927
Trichloroethene	U		0.153	0.500	1	01/22/2020 01:59	WG1414927
Trichlorofluoromethane	U		0.130	2.50	1	01/22/2020 01:59	WG1414927
1,2,3-Trichloropropane	U		0.247	2.50	1	01/22/2020 01:59	WG1414927
1,2,4-Trimethylbenzene	U		0.123	0.500	1	01/22/2020 01:59	WG1414927
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	01/22/2020 01:59	WG1414927
1,3,5-Trimethylbenzene	U		0.124	0.500	1	01/22/2020 01:59	WG1414927
Vinyl acetate	U		0.645	5.00	1	01/22/2020 01:59	WG1414927
Vinyl chloride	26.2		0.118	0.500	1	01/22/2020 01:59	WG1414927
Xylenes, Total	U		0.316	1.50	1	01/22/2020 01:59	WG1414927
(S) Toluene-d8	*104*			*80.0-120*		*01/22/2020 01:59*	WG1414927
(S) 4-Bromofluorobenzene	*92.1*			*77.0-126*		*01/22/2020 01:59*	WG1414927
(S) 1,2-Dichloroethane-d4	*105*			*70.0-130*		*01/22/2020 01:59*	WG1414927

JC 1/30/20

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

Wet Chemistry by Method 2320 B-2011

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Alkalinity	294000		2710	20000	1	01/21/2020 22:21	WG1414762

Sample Narrative:

L1181247-05 WG1414762: Endpoint pH 4.5

Wet Chemistry by Method 9056A

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Chloride	40600		51.9	1000	1	01/21/2020 17:39	WG1414453
Nitrate	U		22.7	100	1	01/21/2020 17:39	WG1414453
Sulfate	30300		77.4	5000	1	01/21/2020 17:39	WG1414453

Wet Chemistry by Method 9060A

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
TOC (Total Organic Carbon)	7140		102	1000	1	01/24/2020 13:22	WG1415857

Metals (ICPMS) by Method 6020B

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Iron	7270		15.0	100	1	01/22/2020 13:58	WG1414629
Manganese	3000		0.250	5.00	1	01/22/2020 13:58	WG1414629

Volatile Organic Compounds (GC) by Method RSK175

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Methane	1610		0.287	0.678	1	01/23/2020 12:34	WG1415128
Ethane	U		0.296	1.29	1	01/23/2020 12:34	WG1415128
Ethene	U		0.422	1.27	1	01/23/2020 12:34	WG1415128

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

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Acetone	1.59	J	1.05	25.0	1	01/22/2020 02:19	WG1414927
Acrylonitrile	U		0.873	5.00	1	01/22/2020 02:19	WG1414927
Benzene	U		0.0896	0.500	1	01/22/2020 02:19	WG1414927
Bromobenzene	U		0.133	0.500	1	01/22/2020 02:19	WG1414927
Bromodichloromethane	U		0.0800	0.500	1	01/22/2020 02:19	WG1414927
Bromochloromethane	U		0.145	0.500	1	01/22/2020 02:19	WG1414927
Bromoform	U		0.186	0.500	1	01/22/2020 02:19	WG1414927
Bromomethane	U		0.157	2.50	1	01/22/2020 02:19	WG1414927
n-Butylbenzene	U		0.143	0.500	1	01/22/2020 02:19	WG1414927
sec-Butylbenzene	2.96		0.134	0.500	1	01/22/2020 02:19	WG1414927
tert-Butylbenzene	1.54		0.183	0.500	1	01/22/2020 02:19	WG1414927
Carbon disulfide	U		0.101	0.500	1	01/22/2020 02:19	WG1414927
Carbon tetrachloride	U		0.159	0.500	1	01/22/2020 02:19	WG1414927
Chlorobenzene	U		0.140	0.500	1	01/22/2020 02:19	WG1414927
Chlorodibromomethane	U		0.128	0.500	1	01/22/2020 02:19	WG1414927
Chloroethane	U		0.141	2.50	1	01/22/2020 02:19	WG1414927
Chloroform	U		0.0860	0.500	1	01/22/2020 02:19	WG1414927
Chloromethane	U		0.153	1.25	1	01/22/2020 02:19	WG1414927
2-Chlorotoluene	U		0.111	0.500	1	01/22/2020 02:19	WG1414927
4-Chlorotoluene	U		0.0972	0.500	1	01/22/2020 02:19	WG1414927

JC 1/30/20

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

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	01/22/2020 02:19	WG1414927
1,2-Dibromoethane	U		0.193	0.500	1	01/22/2020 02:19	WG1414927
Dibromomethane	U		0.117	0.500	1	01/22/2020 02:19	WG1414927
1,2-Dichlorobenzene	U		0.101	0.500	1	01/22/2020 02:19	WG1414927
1,3-Dichlorobenzene	U		0.130	0.500	1	01/22/2020 02:19	WG1414927
1,4-Dichlorobenzene	U		0.121	0.500	1	01/22/2020 02:19	WG1414927
Dichlorodifluoromethane	U		0.127	2.50	1	01/22/2020 02:19	WG1414927
1,1-Dichloroethane	U		0.114	0.500	1	01/22/2020 02:19	WG1414927
1,2-Dichloroethane	U		0.108	0.500	1	01/22/2020 02:19	WG1414927
1,1-Dichloroethene	U		0.188	0.500	1	01/22/2020 02:19	WG1414927
cis-1,2-Dichloroethene	U		0.0933	0.500	1	01/22/2020 02:19	WG1414927
trans-1,2-Dichloroethene	U		0.152	0.500	1	01/22/2020 02:19	WG1414927
1,2-Dichloropropane	U		0.190	0.500	1	01/22/2020 02:19	WG1414927
1,1-Dichloropropene	U		0.128	0.500	1	01/22/2020 02:19	WG1414927
1,3-Dichloropropane	U		0.147	1.00	1	01/22/2020 02:19	WG1414927
cis-1,3-Dichloropropene	U		0.0976	0.500	1	01/22/2020 02:19	WG1414927
trans-1,3-Dichloropropene	U		0.222	0.500	1	01/22/2020 02:19	WG1414927
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	01/22/2020 02:19	WG1414927
2,2-Dichloropropane	U		0.0929	0.500	1	01/22/2020 02:19	WG1414927
Di-isopropyl ether	U		0.0924	0.500	1	01/22/2020 02:19	WG1414927
Ethylbenzene	U		0.158	0.500	1	01/22/2020 02:19	WG1414927
Hexachloro-1,3-butadiene	U		0.157	1.00	1	01/22/2020 02:19	WG1414927
2-Hexanone	U		0.757	5.00	1	01/22/2020 02:19	WG1414927
n-Hexane	U		0.305	5.00	1	01/22/2020 02:19	WG1414927
Iodomethane	U		0.377	10.0	1	01/22/2020 02:19	WG1414927
Isopropylbenzene	6.56		0.126	0.500	1	01/22/2020 02:19	WG1414927
p-Isopropyltoluene	U		0.138	0.500	1	01/22/2020 02:19	WG1414927
2-Butanone (MEK)	U		1.28	5.00	1	01/22/2020 02:19	WG1414927
Methylene Chloride	U		1.07	2.50	1	01/22/2020 02:19	WG1414927
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	01/22/2020 02:19	WG1414927
Methyl tert-butyl ether	U		0.102	0.500	1	01/22/2020 02:19	WG1414927
Naphthalene	U		0.174	2.50	1	01/22/2020 02:19	WG1414927
n-Propylbenzene	4.76		0.162	0.500	1	01/22/2020 02:19	WG1414927
Styrene	U		0.117	0.500	1	01/22/2020 02:19	WG1414927
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	01/22/2020 02:19	WG1414927
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	01/22/2020 02:19	WG1414927
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	01/22/2020 02:19	WG1414927
Tetrachloroethene	U		0.199	0.500	1	01/22/2020 02:19	WG1414927
Toluene	U		0.412	0.500	1	01/22/2020 02:19	WG1414927
1,2,3-Trichlorobenzene	U		0.164	0.500	1	01/22/2020 02:19	WG1414927
1,2,4-Trichlorobenzene	U		0.355	0.500	1	01/22/2020 02:19	WG1414927
1,1,1-Trichloroethane	U		0.0940	0.500	1	01/22/2020 02:19	WG1414927
1,1,2-Trichloroethane	U		0.186	0.500	1	01/22/2020 02:19	WG1414927
Trichloroethene	U		0.153	0.500	1	01/22/2020 02:19	WG1414927
Trichlorofluoromethane	U		0.130	2.50	1	01/22/2020 02:19	WG1414927
1,2,3-Trichloropropane	U		0.247	2.50	1	01/22/2020 02:19	WG1414927
1,2,4-Trimethylbenzene	U		0.123	0.500	1	01/22/2020 02:19	WG1414927
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	01/22/2020 02:19	WG1414927
1,3,5-Trimethylbenzene	U		0.124	0.500	1	01/22/2020 02:19	WG1414927
Vinyl acetate	U		0.645	5.00	1	01/22/2020 02:19	WG1414927
Vinyl chloride	U		0.118	0.500	1	01/22/2020 02:19	WG1414927
Xylenes, Total	U		0.316	1.50	1	01/22/2020 02:19	WG1414927
(S) Toluene-d8	*107*			*80.0-120*		*01/22/2020 02:19*	WG1414927
(S) 4-Bromofluorobenzene	*99.0*			*77.0-126*		*01/22/2020 02:19*	WG1414927
(S) 1,2-Dichloroethane-d4	*107*			*70.0-130*		*01/22/2020 02:19*	WG1414927

JC 1/30/20

Wet Chemistry by Method 2320 B-2011

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Alkalinity	346000		2710	20000	1	01/21/2020 22:29	WG1414762

Sample Narrative:

L1181247-06 WG1414762: Endpoint pH 4.5

Wet Chemistry by Method 9056A

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Chloride	19800		51.9	1000	1	01/21/2020 17:50	WG1414453
Nitrate	U		22.7	100	1	01/21/2020 17:50	WG1414453
Sulfate	15600		77.4	5000	1	01/21/2020 17:50	WG1414453

Wet Chemistry by Method 9060A

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
TOC (Total Organic Carbon)	5720		102	1000	1	01/24/2020 13:43	WG1415857

Metals (ICPMS) by Method 6020B

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Iron	4660		15.0	100	1	01/22/2020 14:01	WG1414629
Manganese	957		0.250	5.00	1	01/22/2020 14:01	WG1414629

Volatile Organic Compounds (GC) by Method RSK175

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Methane	1080		0.287	0.678	1	01/23/2020 12:36	WG1415128
Ethane	2.74		0.296	1.29	1	01/23/2020 12:36	WG1415128
Ethene	U		0.422	1.27	1	01/23/2020 12:36	WG1415128

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

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Acetone	U		1.05	25.0	1	01/22/2020 02:40	WG1414927
Acrylonitrile	U		0.873	5.00	1	01/22/2020 02:40	WG1414927
Benzene	U		0.0896	0.500	1	01/22/2020 02:40	WG1414927
Bromobenzene	U		0.133	0.500	1	01/22/2020 02:40	WG1414927
Bromodichloromethane	U		0.0800	0.500	1	01/22/2020 02:40	WG1414927
Bromochloromethane	U		0.145	0.500	1	01/22/2020 02:40	WG1414927
Bromoform	U		0.186	0.500	1	01/22/2020 02:40	WG1414927
Bromomethane	U		0.157	2.50	1	01/22/2020 02:40	WG1414927
n-Butylbenzene	U		0.143	0.500	1	01/22/2020 02:40	WG1414927
sec-Butylbenzene	U		0.134	0.500	1	01/22/2020 02:40	WG1414927
tert-Butylbenzene	U		0.183	0.500	1	01/22/2020 02:40	WG1414927
Carbon disulfide	U		0.101	0.500	1	01/22/2020 02:40	WG1414927
Carbon tetrachloride	U		0.159	0.500	1	01/22/2020 02:40	WG1414927
Chlorobenzene	U		0.140	0.500	1	01/22/2020 02:40	WG1414927
Chlorodibromomethane	U		0.128	0.500	1	01/22/2020 02:40	WG1414927
Chloroethane	U		0.141	2.50	1	01/22/2020 02:40	WG1414927
Chloroform	U		0.0860	0.500	1	01/22/2020 02:40	WG1414927
Chloromethane	U		0.153	1.25	1	01/22/2020 02:40	WG1414927
2-Chlorotoluene	U		0.111	0.500	1	01/22/2020 02:40	WG1414927
4-Chlorotoluene	U		0.0972	0.500	1	01/22/2020 02:40	WG1414927

JC 1/30/20

MW115-012020

Collected date/time: 01/20/20 13:10

SAMPLE RESULTS - 06

L1181247

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	01/22/2020 02:40	WG1414927
1,2-Dibromoethane	U		0.193	0.500	1	01/22/2020 02:40	WG1414927
Dibromomethane	U		0.117	0.500	1	01/22/2020 02:40	WG1414927
1,2-Dichlorobenzene	U		0.101	0.500	1	01/22/2020 02:40	WG1414927
1,3-Dichlorobenzene	U		0.130	0.500	1	01/22/2020 02:40	WG1414927
1,4-Dichlorobenzene	U		0.121	0.500	1	01/22/2020 02:40	WG1414927
Dichlorodifluoromethane	U		0.127	2.50	1	01/22/2020 02:40	WG1414927
1,1-Dichloroethane	U		0.114	0.500	1	01/22/2020 02:40	WG1414927
1,2-Dichloroethane	U		0.108	0.500	1	01/22/2020 02:40	WG1414927
1,1-Dichloroethene	U		0.188	0.500	1	01/22/2020 02:40	WG1414927
cis-1,2-Dichloroethene	0.880		0.0933	0.500	1	01/22/2020 02:40	WG1414927
trans-1,2-Dichloroethene	U		0.152	0.500	1	01/22/2020 02:40	WG1414927
1,2-Dichloropropane	U		0.190	0.500	1	01/22/2020 02:40	WG1414927
1,1-Dichloropropene	U		0.128	0.500	1	01/22/2020 02:40	WG1414927
1,3-Dichloropropane	U		0.147	1.00	1	01/22/2020 02:40	WG1414927
cis-1,3-Dichloropropene	U		0.0976	0.500	1	01/22/2020 02:40	WG1414927
trans-1,3-Dichloropropene	U		0.222	0.500	1	01/22/2020 02:40	WG1414927
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	01/22/2020 02:40	WG1414927
2,2-Dichloropropane	U		0.0929	0.500	1	01/22/2020 02:40	WG1414927
Di-isopropyl ether	U		0.0924	0.500	1	01/22/2020 02:40	WG1414927
Ethylbenzene	U		0.158	0.500	1	01/22/2020 02:40	WG1414927
Hexachloro-1,3-butadiene	U		0.157	1.00	1	01/22/2020 02:40	WG1414927
2-Hexanone	U		0.757	5.00	1	01/22/2020 02:40	WG1414927
n-Hexane	U		0.305	5.00	1	01/22/2020 02:40	WG1414927
Iodomethane	U		0.377	10.0	1	01/22/2020 02:40	WG1414927
Isopropylbenzene	U		0.126	0.500	1	01/22/2020 02:40	WG1414927
p-Isopropyltoluene	U		0.138	0.500	1	01/22/2020 02:40	WG1414927
2-Butanone (MEK)	U		1.28	5.00	1	01/22/2020 02:40	WG1414927
Methylene Chloride	U		1.07	2.50	1	01/22/2020 02:40	WG1414927
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	01/22/2020 02:40	WG1414927
Methyl tert-butyl ether	U		0.102	0.500	1	01/22/2020 02:40	WG1414927
Naphthalene	U		0.174	2.50	1	01/22/2020 02:40	WG1414927
n-Propylbenzene	U		0.162	0.500	1	01/22/2020 02:40	WG1414927
Styrene	U		0.117	0.500	1	01/22/2020 02:40	WG1414927
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	01/22/2020 02:40	WG1414927
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	01/22/2020 02:40	WG1414927
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	01/22/2020 02:40	WG1414927
Tetrachloroethene	U		0.199	0.500	1	01/22/2020 02:40	WG1414927
Toluene	U		0.412	0.500	1	01/22/2020 02:40	WG1414927
1,2,3-Trichlorobenzene	U		0.164	0.500	1	01/22/2020 02:40	WG1414927
1,2,4-Trichlorobenzene	U		0.355	0.500	1	01/22/2020 02:40	WG1414927
1,1,1-Trichloroethane	U		0.0940	0.500	1	01/22/2020 02:40	WG1414927
1,1,2-Trichloroethane	U		0.186	0.500	1	01/22/2020 02:40	WG1414927
Trichloroethene	U		0.153	0.500	1	01/22/2020 02:40	WG1414927
Trichlorofluoromethane	U		0.130	2.50	1	01/22/2020 02:40	WG1414927
1,2,3-Trichloropropane	U		0.247	2.50	1	01/22/2020 02:40	WG1414927
1,2,4-Trimethylbenzene	U		0.123	0.500	1	01/22/2020 02:40	WG1414927
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	01/22/2020 02:40	WG1414927
1,3,5-Trimethylbenzene	U		0.124	0.500	1	01/22/2020 02:40	WG1414927
Vinyl acetate	U		0.645	5.00	1	01/22/2020 02:40	WG1414927
Vinyl chloride	26.9		0.118	0.500	1	01/22/2020 02:40	WG1414927
Xylenes, Total	U		0.316	1.50	1	01/22/2020 02:40	WG1414927
(S) Toluene-d8	*104*			*80.0-120*		*01/22/2020 02:40*	WG1414927
(S) 4-Bromofluorobenzene	*93.9*			*77.0-126*		*01/22/2020 02:40*	WG1414927
(S) 1,2-Dichloroethane-d4	*105*			*70.0-130*		*01/22/2020 02:40*	WG1414927

JC 1/30/20

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

Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	348000		2710	20000	1	01/21/2020 22:37	WG1414762

Sample Narrative:

L1181247-07 WG1414762: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	37100		51.9	1000	1	01/21/2020 18:01	WG1414453
Nitrate	U		22.7	100	1	01/21/2020 18:01	WG1414453
Sulfate	32800		77.4	5000	1	01/21/2020 18:01	WG1414453

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	4160	~~B~~	102	1000	1	01/24/2020 15:36	WG1416628

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	5100		15.0	100	1	01/22/2020 14:04	WG1414629
Manganese	1110		0.250	5.00	1	01/22/2020 14:04	WG1414629

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	309		0.287	0.678	1	01/23/2020 12:38	WG1415128
Ethane	47.9		0.296	1.29	1	01/23/2020 12:38	WG1415128
Ethene	U		0.422	1.27	1	01/23/2020 12:38	WG1415128

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U		1.05	25.0	1	01/22/2020 03:00	WG1414927
Acrylonitrile	U		0.873	5.00	1	01/22/2020 03:00	WG1414927
Benzene	U		0.0896	0.500	1	01/22/2020 03:00	WG1414927
Bromobenzene	U		0.133	0.500	1	01/22/2020 03:00	WG1414927
Bromodichloromethane	U		0.0800	0.500	1	01/22/2020 03:00	WG1414927
Bromochloromethane	U		0.145	0.500	1	01/22/2020 03:00	WG1414927
Bromoform	U		0.186	0.500	1	01/22/2020 03:00	WG1414927
Bromomethane	U		0.157	2.50	1	01/22/2020 03:00	WG1414927
n-Butylbenzene	U		0.143	0.500	1	01/22/2020 03:00	WG1414927
sec-Butylbenzene	U		0.134	0.500	1	01/22/2020 03:00	WG1414927
tert-Butylbenzene	U		0.183	0.500	1	01/22/2020 03:00	WG1414927
Carbon disulfide	U		0.101	0.500	1	01/22/2020 03:00	WG1414927
Carbon tetrachloride	U		0.159	0.500	1	01/22/2020 03:00	WG1414927
Chlorobenzene	U		0.140	0.500	1	01/22/2020 03:00	WG1414927
Chlorodibromomethane	U		0.128	0.500	1	01/22/2020 03:00	WG1414927
Chloroethane	U		0.141	2.50	1	01/22/2020 03:00	WG1414927
Chloroform	U		0.0860	0.500	1	01/22/2020 03:00	WG1414927
Chloromethane	U		0.153	1.25	1	01/22/2020 03:00	WG1414927
2-Chlorotoluene	U		0.111	0.500	1	01/22/2020 03:00	WG1414927
4-Chlorotoluene	U		0.0972	0.500	1	01/22/2020 03:00	WG1414927

JC 1/30/20

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

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	01/22/2020 03:00	WG1414927
1,2-Dibromoethane	U		0.193	0.500	1	01/22/2020 03:00	WG1414927
Dibromomethane	U		0.117	0.500	1	01/22/2020 03:00	WG1414927
1,2-Dichlorobenzene	U		0.101	0.500	1	01/22/2020 03:00	WG1414927
1,3-Dichlorobenzene	U		0.130	0.500	1	01/22/2020 03:00	WG1414927
1,4-Dichlorobenzene	U		0.121	0.500	1	01/22/2020 03:00	WG1414927
Dichlorodifluoromethane	U		0.127	2.50	1	01/22/2020 03:00	WG1414927
1,1-Dichloroethane	U		0.114	0.500	1	01/22/2020 03:00	WG1414927
1,2-Dichloroethane	U		0.108	0.500	1	01/22/2020 03:00	WG1414927
1,1-Dichloroethene	1.12		0.188	0.500	1	01/22/2020 03:00	WG1414927
cis-1,2-Dichloroethene	229		0.467	2.50	5	01/25/2020 18:59	WG1416868
trans-1,2-Dichloroethene	U		0.152	0.500	1	01/22/2020 03:00	WG1414927
1,2-Dichloropropane	U		0.190	0.500	1	01/22/2020 03:00	WG1414927
1,1-Dichloropropene	U		0.128	0.500	1	01/22/2020 03:00	WG1414927
1,3-Dichloropropane	U		0.147	1.00	1	01/22/2020 03:00	WG1414927
cis-1,3-Dichloropropene	U		0.0976	0.500	1	01/22/2020 03:00	WG1414927
trans-1,3-Dichloropropene	U		0.222	0.500	1	01/22/2020 03:00	WG1414927
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	01/22/2020 03:00	WG1414927
2,2-Dichloropropane	U		0.0929	0.500	1	01/22/2020 03:00	WG1414927
Di-isopropyl ether	U		0.0924	0.500	1	01/22/2020 03:00	WG1414927
Ethylbenzene	U		0.158	0.500	1	01/22/2020 03:00	WG1414927
Hexachloro-1,3-butadiene	U		0.157	1.00	1	01/22/2020 03:00	WG1414927
2-Hexanone	U		0.757	5.00	1	01/22/2020 03:00	WG1414927
n-Hexane	U		0.305	5.00	1	01/22/2020 03:00	WG1414927
Iodomethane	U		0.377	10.0	1	01/22/2020 03:00	WG1414927
Isopropylbenzene	U		0.126	0.500	1	01/22/2020 03:00	WG1414927
p-Isopropyltoluene	U		0.138	0.500	1	01/22/2020 03:00	WG1414927
2-Butanone (MEK)	U		1.28	5.00	1	01/22/2020 03:00	WG1414927
Methylene Chloride	U		1.07	2.50	1	01/22/2020 03:00	WG1414927
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	01/22/2020 03:00	WG1414927
Methyl tert-butyl ether	U		0.102	0.500	1	01/22/2020 03:00	WG1414927
Naphthalene	U		0.174	2.50	1	01/22/2020 03:00	WG1414927
n-Propylbenzene	U		0.162	0.500	1	01/22/2020 03:00	WG1414927
Styrene	U		0.117	0.500	1	01/22/2020 03:00	WG1414927
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	01/22/2020 03:00	WG1414927
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	01/22/2020 03:00	WG1414927
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	01/22/2020 03:00	WG1414927
Tetrachloroethene	U		0.199	0.500	1	01/22/2020 03:00	WG1414927
Toluene	0.549		0.412	0.500	1	01/22/2020 03:00	WG1414927
1,2,3-Trichlorobenzene	U		0.164	0.500	1	01/22/2020 03:00	WG1414927
1,2,4-Trichlorobenzene	U		0.355	0.500	1	01/22/2020 03:00	WG1414927
1,1,1-Trichloroethane	U		0.0940	0.500	1	01/22/2020 03:00	WG1414927
1,1,2-Trichloroethane	U		0.186	0.500	1	01/22/2020 03:00	WG1414927
Trichloroethene	0.178	J	0.153	0.500	1	01/22/2020 03:00	WG1414927
Trichlorofluoromethane	U		0.130	2.50	1	01/22/2020 03:00	WG1414927
1,2,3-Trichloropropane	U		0.247	2.50	1	01/22/2020 03:00	WG1414927
1,2,4-Trimethylbenzene	U		0.123	0.500	1	01/22/2020 03:00	WG1414927
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	01/22/2020 03:00	WG1414927
1,3,5-Trimethylbenzene	U		0.124	0.500	1	01/22/2020 03:00	WG1414927
Vinyl acetate	U		0.645	5.00	1	01/22/2020 03:00	WG1414927
Vinyl chloride	64.9		0.118	0.500	1	01/22/2020 03:00	WG1414927
Xylenes, Total	U		0.316	1.50	1	01/22/2020 03:00	WG1414927
(S) Toluene-d8	*104*			*80.0-120*		*01/22/2020 03:00*	WG1414927
(S) Toluene-d8	*101*			*80.0-120*		*01/25/2020 18:59*	WG1416868
(S) 4-Bromofluorobenzene	*93.6*			*77.0-126*		*01/22/2020 03:00*	WG1414927
(S) 4-Bromofluorobenzene	*102*			*77.0-126*		*01/25/2020 18:59*	WG1416868

JC 1/30/20

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
(S) 1,2-Dichloroethane-d4	*106*			*70.0-130*		*01/22/2020 03:00*	WG1414927
(S) 1,2-Dichloroethane-d4	*102*			*70.0-130*		*01/25/2020 18:59*	WG1416868

JC 1/30/20

Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Alkalinity	220000		2710	20000	1	01/21/2020 22:46	WG1414762

Sample Narrative:

L1181269-01 WG1414762: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chloride	12900		51.9	1000	1	01/21/2020 18:12	WG1414453
Nitrate	3300		22.7	100	1	01/21/2020 18:12	WG1414453
Sulfate	76600		77.4	5000	1	01/21/2020 18:12	WG1414453

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
TOC (Total Organic Carbon)	5070		102	1000	1	01/24/2020 15:49	WG1416628

Metals (ICPMS) by Method 6020B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Iron	58.5	J	15.0	100	1	01/22/2020 14:08	WG1414629
Manganese	13.4		0.250	5.00	1	01/22/2020 14:08	WG1414629

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Gasoline Range Organics-NWTPH	U		31.6	100	1	01/23/2020 02:38	WG1414614
(S) a,a,a-Trifluorotoluene(FID)	*111*			*78.0-120*		*01/23/2020 02:38*	WG1414614

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Methane	U		0.287	0.678	1	01/23/2020 12:41	WG1415128
Ethane	U		0.296	1.29	1	01/23/2020 12:41	WG1415128
Ethene	U		0.422	1.27	1	01/23/2020 12:41	WG1415128

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	U		1.05	25.0	1	01/22/2020 03:20	WG1414927
Acrylonitrile	U		0.873	5.00	1	01/22/2020 03:20	WG1414927
Benzene	U		0.0896	0.500	1	01/22/2020 03:20	WG1414927
Bromobenzene	U		0.133	0.500	1	01/22/2020 03:20	WG1414927
Bromodichloromethane	U		0.0800	0.500	1	01/22/2020 03:20	WG1414927
Bromochloromethane	U		0.145	0.500	1	01/22/2020 03:20	WG1414927
Bromoform	U		0.186	0.500	1	01/22/2020 03:20	WG1414927
Bromomethane	U		0.157	2.50	1	01/22/2020 03:20	WG1414927
n-Butylbenzene	U		0.143	0.500	1	01/22/2020 03:20	WG1414927
sec-Butylbenzene	U		0.134	0.500	1	01/22/2020 03:20	WG1414927
tert-Butylbenzene	U		0.183	0.500	1	01/22/2020 03:20	WG1414927
Carbon disulfide	U		0.101	0.500	1	01/22/2020 03:20	WG1414927
Carbon tetrachloride	U		0.159	0.500	1	01/22/2020 03:20	WG1414927

JC 1/30/20

MW-923-012020

Collected date/time: 01/20/20 08:00

SAMPLE RESULTS - 01

L1181269

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

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chlorobenzene	U		0.140	0.500	1	01/22/2020 03:20	WG1414927
Chlorodibromomethane	U		0.128	0.500	1	01/22/2020 03:20	WG1414927
Chloroethane	U		0.141	2.50	1	01/22/2020 03:20	WG1414927
Chloroform	U		0.0860	0.500	1	01/22/2020 03:20	WG1414927
Chloromethane	U		0.153	1.25	1	01/22/2020 03:20	WG1414927
2-Chlorotoluene	U		0.111	0.500	1	01/22/2020 03:20	WG1414927
4-Chlorotoluene	U		0.0972	0.500	1	01/22/2020 03:20	WG1414927
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	01/22/2020 03:20	WG1414927
1,2-Dibromoethane	U		0.193	0.500	1	01/22/2020 03:20	WG1414927
Dibromomethane	U		0.117	0.500	1	01/22/2020 03:20	WG1414927
1,2-Dichlorobenzene	U		0.101	0.500	1	01/22/2020 03:20	WG1414927
1,3-Dichlorobenzene	U		0.130	0.500	1	01/22/2020 03:20	WG1414927
1,4-Dichlorobenzene	U		0.121	0.500	1	01/22/2020 03:20	WG1414927
Dichlorodifluoromethane	U		0.127	2.50	1	01/22/2020 03:20	WG1414927
1,1-Dichloroethane	U		0.114	0.500	1	01/22/2020 03:20	WG1414927
1,2-Dichloroethane	U		0.108	0.500	1	01/22/2020 03:20	WG1414927
1,1-Dichloroethene	U		0.188	0.500	1	01/22/2020 03:20	WG1414927
cis-1,2-Dichloroethene	16.0		0.0933	0.500	1	01/25/2020 19:19	WG1416868
trans-1,2-Dichloroethene	0.199	J	0.152	0.500	1	01/22/2020 03:20	WG1414927
1,2-Dichloropropane	U		0.190	0.500	1	01/22/2020 03:20	WG1414927
1,1-Dichloropropene	U		0.128	0.500	1	01/22/2020 03:20	WG1414927
1,3-Dichloropropane	U		0.147	1.00	1	01/22/2020 03:20	WG1414927
cis-1,3-Dichloropropene	U		0.0976	0.500	1	01/22/2020 03:20	WG1414927
trans-1,3-Dichloropropene	U		0.222	0.500	1	01/22/2020 03:20	WG1414927
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	01/22/2020 03:20	WG1414927
2,2-Dichloropropane	U		0.0929	0.500	1	01/22/2020 03:20	WG1414927
Di-isopropyl ether	U		0.0924	0.500	1	01/22/2020 03:20	WG1414927
Ethylbenzene	U		0.158	0.500	1	01/22/2020 03:20	WG1414927
Hexachloro-1,3-butadiene	U		0.157	1.00	1	01/22/2020 03:20	WG1414927
2-Hexanone	U		0.757	5.00	1	01/22/2020 03:20	WG1414927
n-Hexane	U		0.305	5.00	1	01/22/2020 03:20	WG1414927
Iodomethane	U		0.377	10.0	1	01/22/2020 03:20	WG1414927
Isopropylbenzene	U		0.126	0.500	1	01/22/2020 03:20	WG1414927
p-Isopropyltoluene	U		0.138	0.500	1	01/22/2020 03:20	WG1414927
2-Butanone (MEK)	U		1.28	5.00	1	01/22/2020 03:20	WG1414927
Methylene Chloride	U		1.07	2.50	1	01/22/2020 03:20	WG1414927
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	01/22/2020 03:20	WG1414927
Methyl tert-butyl ether	U		0.102	0.500	1	01/22/2020 03:20	WG1414927
Naphthalene	U		0.174	2.50	1	01/22/2020 03:20	WG1414927
n-Propylbenzene	U		0.162	0.500	1	01/22/2020 03:20	WG1414927
Styrene	U		0.117	0.500	1	01/22/2020 03:20	WG1414927
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	01/22/2020 03:20	WG1414927
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	01/22/2020 03:20	WG1414927
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	01/22/2020 03:20	WG1414927
Tetrachloroethene	132		0.199	0.500	1	01/22/2020 03:20	WG1414927
Toluene	U		0.412	0.500	1	01/22/2020 03:20	WG1414927
1,2,3-Trichlorobenzene	U		0.164	0.500	1	01/22/2020 03:20	WG1414927
1,2,4-Trichlorobenzene	U		0.355	0.500	1	01/22/2020 03:20	WG1414927
1,1,1-Trichloroethane	U		0.0940	0.500	1	01/22/2020 03:20	WG1414927
1,1,2-Trichloroethane	U		0.186	0.500	1	01/22/2020 03:20	WG1414927
Trichloroethene	24.6		0.153	0.500	1	01/22/2020 03:20	WG1414927
Trichlorofluoromethane	U		0.130	2.50	1	01/22/2020 03:20	WG1414927
1,2,3-Trichloropropane	U		0.247	2.50	1	01/22/2020 03:20	WG1414927
1,2,4-Trimethylbenzene	U		0.123	0.500	1	01/22/2020 03:20	WG1414927
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	01/22/2020 03:20	WG1414927
1,3,5-Trimethylbenzene	U		0.124	0.500	1	01/22/2020 03:20	WG1414927

JC 1/30/20

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Vinyl acetate	U		0.645	5.00	1	01/22/2020 03:20	WG1414927
Vinyl chloride	U		0.118	0.500	1	01/22/2020 03:20	WG1414927
Xylenes, Total	U		0.316	1.50	1	01/22/2020 03:20	WG1414927
(S) Toluene-d8	*104*			*80.0-120*		*01/22/2020 03:20*	WG1414927
(S) Toluene-d8	*103*			*80.0-120*		*01/25/2020 19:19*	WG1416868
(S) 4-Bromofluorobenzene	*91.1*			*77.0-126*		*01/22/2020 03:20*	WG1414927
(S) 4-Bromofluorobenzene	*100*			*77.0-126*		*01/25/2020 19:19*	WG1416868
(S) 1,2-Dichloroethane-d4	*108*			*70.0-130*		*01/22/2020 03:20*	WG1414927
(S) 1,2-Dichloroethane-d4	*101*			*70.0-130*		*01/25/2020 19:19*	WG1416868

JC 1/30/20

Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	600000		2710	20000	1	01/21/2020 23:05	WG1414762

Sample Narrative:

L1181269-02 WG1414762: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	48900		51.9	1000	1	01/21/2020 18:55	WG1414453
Nitrate	U		22.7	100	1	01/21/2020 18:55	WG1414453
Sulfate	75800		77.4	5000	1	01/21/2020 18:55	WG1414453

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	21300		102	1000	1	01/24/2020 16:04	WG1416628

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	3200		15.0	100	1	01/22/2020 14:28	WG1414629
Manganese	3130		0.250	5.00	1	01/22/2020 14:28	WG1414629

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	2160	Z, J+	31.6	100	1	01/23/2020 03:02	WG1414614
(S) a,a,a-Trifluorotoluene(FID)	*113*			*78.0-120*		*01/23/2020 03:02*	WG1414614

Sample Narrative:

L1181269-02 WG1414614: no discernible petroleum pattern

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	2440		0.287	0.678	1	01/23/2020 12:43	WG1415128
Ethane	189		0.296	1.29	1	01/23/2020 12:43	WG1415128
Ethene	U		0.422	1.27	1	01/23/2020 12:43	WG1415128

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	10.5	U ~~J~~	10.5	250	10	01/22/2020 03:41	WG1414927
Acrylonitrile	U		8.73	50.0	10	01/22/2020 03:41	WG1414927
Benzene	1.64	J	0.896	5.00	10	01/22/2020 03:41	WG1414927
Bromobenzene	U		1.33	5.00	10	01/22/2020 03:41	WG1414927
Bromodichloromethane	U		0.800	5.00	10	01/22/2020 03:41	WG1414927
Bromochloromethane	U		1.45	5.00	10	01/22/2020 03:41	WG1414927
Bromoform	U		1.86	5.00	10	01/22/2020 03:41	WG1414927
Bromomethane	U		1.57	25.0	10	01/22/2020 03:41	WG1414927
n-Butylbenzene	U		1.43	5.00	10	01/22/2020 03:41	WG1414927
sec-Butylbenzene	U		1.34	5.00	10	01/22/2020 03:41	WG1414927

JC 2/5/2020

MW-156-012020

Collected date/time: 01/20/20 09:00

SAMPLE RESULTS - 02

L1181269

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
tert-Butylbenzene	U		1.83	5.00	10	01/22/2020 03:41	WG1414927
Carbon disulfide	U		1.01	5.00	10	01/22/2020 03:41	WG1414927
Carbon tetrachloride	U		1.59	5.00	10	01/22/2020 03:41	WG1414927
Chlorobenzene	U		1.40	5.00	10	01/22/2020 03:41	WG1414927
Chlorodibromomethane	U		1.28	5.00	10	01/22/2020 03:41	WG1414927
Chloroethane	U		1.41	25.0	10	01/22/2020 03:41	WG1414927
Chloroform	U		0.860	5.00	10	01/22/2020 03:41	WG1414927
Chloromethane	U		1.53	12.5	10	01/22/2020 03:41	WG1414927
2-Chlorotoluene	U		1.11	5.00	10	01/22/2020 03:41	WG1414927
4-Chlorotoluene	U		0.972	5.00	10	01/22/2020 03:41	WG1414927
1,2-Dibromo-3-Chloropropane	U		3.25	25.0	10	01/22/2020 03:41	WG1414927
1,2-Dibromoethane	U		1.93	5.00	10	01/22/2020 03:41	WG1414927
Dibromomethane	U		1.17	5.00	10	01/22/2020 03:41	WG1414927
1,2-Dichlorobenzene	U		1.01	5.00	10	01/22/2020 03:41	WG1414927
1,3-Dichlorobenzene	U		1.30	5.00	10	01/22/2020 03:41	WG1414927
1,4-Dichlorobenzene	U		1.21	5.00	10	01/22/2020 03:41	WG1414927
Dichlorodifluoromethane	U		1.27	25.0	10	01/22/2020 03:41	WG1414927
1,1-Dichloroethane	U		1.14	5.00	10	01/22/2020 03:41	WG1414927
1,2-Dichloroethane	U		1.08	5.00	10	01/22/2020 03:41	WG1414927
1,1-Dichloroethene	7.48		1.88	5.00	10	01/22/2020 03:41	WG1414927
cis-1,2-Dichloroethene	1590		0.933	5.00	10	01/22/2020 03:41	WG1414927
trans-1,2-Dichloroethene	7.04		1.52	5.00	10	01/22/2020 03:41	WG1414927
1,2-Dichloropropane	U		1.90	5.00	10	01/22/2020 03:41	WG1414927
1,1-Dichloropropene	U		1.28	5.00	10	01/22/2020 03:41	WG1414927
1,3-Dichloropropane	U		1.47	10.0	10	01/22/2020 03:41	WG1414927
cis-1,3-Dichloropropene	U		0.976	5.00	10	01/22/2020 03:41	WG1414927
trans-1,3-Dichloropropene	U		2.22	5.00	10	01/22/2020 03:41	WG1414927
trans-1,4-Dichloro-2-butene	U		2.57	50.0	10	01/22/2020 03:41	WG1414927
2,2-Dichloropropane	U		0.929	5.00	10	01/22/2020 03:41	WG1414927
Di-isopropyl ether	U		0.924	5.00	10	01/22/2020 03:41	WG1414927
Ethylbenzene	U		1.58	5.00	10	01/22/2020 03:41	WG1414927
Hexachloro-1,3-butadiene	U		1.57	10.0	10	01/22/2020 03:41	WG1414927
2-Hexanone	U		7.57	50.0	10	01/22/2020 03:41	WG1414927
n-Hexane	U		3.05	50.0	10	01/22/2020 03:41	WG1414927
Iodomethane	U		3.77	100	10	01/22/2020 03:41	WG1414927
Isopropylbenzene	U		1.26	5.00	10	01/22/2020 03:41	WG1414927
p-Isopropyltoluene	U		1.38	5.00	10	01/22/2020 03:41	WG1414927
2-Butanone (MEK)	U		12.8	50.0	10	01/22/2020 03:41	WG1414927
Methylene Chloride	U		10.7	25.0	10	01/22/2020 03:41	WG1414927
4-Methyl-2-pentanone (MIBK)	U		8.23	50.0	10	01/22/2020 03:41	WG1414927
Methyl tert-butyl ether	U		1.02	5.00	10	01/22/2020 03:41	WG1414927
Naphthalene	U		1.74	25.0	10	01/22/2020 03:41	WG1414927
n-Propylbenzene	U		1.62	5.00	10	01/22/2020 03:41	WG1414927
Styrene	U		1.17	5.00	10	01/22/2020 03:41	WG1414927
1,1,1,2-Tetrachloroethane	U		1.20	5.00	10	01/22/2020 03:41	WG1414927
1,1,2,2-Tetrachloroethane	U		1.30	5.00	10	01/22/2020 03:41	WG1414927
1,1,2-Trichlorotrifluoroethane	U		1.64	5.00	10	01/22/2020 03:41	WG1414927
Tetrachloroethene	792		1.99	5.00	10	01/22/2020 03:41	WG1414927
Toluene	U		4.12	5.00	10	01/22/2020 03:41	WG1414927
1,2,3-Trichlorobenzene	U		1.64	5.00	10	01/22/2020 03:41	WG1414927
1,2,4-Trichlorobenzene	U		3.55	5.00	10	01/22/2020 03:41	WG1414927
1,1,1-Trichloroethane	U		0.940	5.00	10	01/22/2020 03:41	WG1414927
1,1,2-Trichloroethane	U		1.86	5.00	10	01/22/2020 03:41	WG1414927
Trichloroethene	534		1.53	5.00	10	01/22/2020 03:41	WG1414927
Trichlorofluoromethane	U		1.30	25.0	10	01/22/2020 03:41	WG1414927
1,2,3-Trichloropropane	U		2.47	25.0	10	01/22/2020 03:41	WG1414927

JC 2/5/2020

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

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,2,4-Trimethylbenzene	U		1.23	5.00	10	01/22/2020 03:41	WG1414927
1,2,3-Trimethylbenzene	U		0.739	5.00	10	01/22/2020 03:41	WG1414927
1,3,5-Trimethylbenzene	U		1.24	5.00	10	01/22/2020 03:41	WG1414927
Vinyl acetate	U		6.45	50.0	10	01/22/2020 03:41	WG1414927
Vinyl chloride	99.6		1.18	5.00	10	01/22/2020 03:41	WG1414927
Xylenes, Total	U		3.16	15.0	10	01/22/2020 03:41	WG1414927
(S) Toluene-d8	*106*			*80.0-120*		*01/22/2020 03:41*	WG1414927
(S) 4-Bromofluorobenzene	*92.7*			*77.0-126*		*01/22/2020 03:41*	WG1414927
(S) 1,2-Dichloroethane-d4	*104*			*70.0-130*		*01/22/2020 03:41*	WG1414927

JC 2/5/2020

Wet Chemistry by Method 2320 B-2011

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Alkalinity	467000		2710	20000	1	01/21/2020 23:14	WG1414762

Sample Narrative:

L1181269-03 WG1414762: Endpoint pH 4.5

Wet Chemistry by Method 9056A

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Chloride	42100		51.9	1000	1	01/21/2020 19:17	WG1414453
Nitrate	U		22.7	100	1	01/21/2020 19:17	WG1414453
Sulfate	53200		77.4	5000	1	01/21/2020 19:17	WG1414453

Wet Chemistry by Method 9060A

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
TOC (Total Organic Carbon)	20000		102	1000	1	01/24/2020 16:18	WG1416628

Metals (ICPMS) by Method 6020B

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Iron	6270		15.0	100	1	01/22/2020 14:31	WG1414629
Manganese	1720		0.250	5.00	1	01/22/2020 14:31	WG1414629

Volatile Organic Compounds (GC) by Method NWTPHGX

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Gasoline Range Organics-NWTPH	1650	Z, J+	31.6	100	1	01/23/2020 03:26	WG1414614
(S) a,a,a-Trifluorotoluene(FID)	*112*			*78.0-120*		*01/23/2020 03:26*	WG1414614

Sample Narrative:

L1181269-03 WG1414614: no discernible petroleum pattern

Volatile Organic Compounds (GC) by Method RSK175

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Methane	4250		0.287	0.678	1	01/23/2020 13:59	WG1415128
Ethane	58.4		0.296	1.29	1	01/23/2020 13:59	WG1415128
Ethene	91.0		0.422	1.27	1	01/23/2020 13:59	WG1415128

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

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Acetone	U		1.05	25.0	1	01/22/2020 04:01	WG1414927
Acrylonitrile	U		0.873	5.00	1	01/22/2020 04:01	WG1414927
Benzene	0.308	J	0.0896	0.500	1	01/22/2020 04:01	WG1414927
Bromobenzene	U		0.133	0.500	1	01/22/2020 04:01	WG1414927
Bromodichloromethane	U		0.0800	0.500	1	01/22/2020 04:01	WG1414927
Bromochloromethane	U		0.145	0.500	1	01/22/2020 04:01	WG1414927
Bromoform	U		0.186	0.500	1	01/22/2020 04:01	WG1414927
Bromomethane	U		0.157	2.50	1	01/22/2020 04:01	WG1414927
n-Butylbenzene	U		0.143	0.500	1	01/22/2020 04:01	WG1414927
sec-Butylbenzene	U		0.134	0.500	1	01/22/2020 04:01	WG1414927

JC 2/5/2020

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
tert-Butylbenzene	U		0.183	0.500	1	01/22/2020 04:01	WG1414927
Carbon disulfide	U		0.101	0.500	1	01/22/2020 04:01	WG1414927
Carbon tetrachloride	U		0.159	0.500	1	01/22/2020 04:01	WG1414927
Chlorobenzene	U		0.140	0.500	1	01/22/2020 04:01	WG1414927
Chlorodibromomethane	U		0.128	0.500	1	01/22/2020 04:01	WG1414927
Chloroethane	U		0.141	2.50	1	01/22/2020 04:01	WG1414927
Chloroform	U		0.0860	0.500	1	01/22/2020 04:01	WG1414927
Chloromethane	U		0.153	1.25	1	01/22/2020 04:01	WG1414927
2-Chlorotoluene	U		0.111	0.500	1	01/22/2020 04:01	WG1414927
4-Chlorotoluene	U		0.0972	0.500	1	01/22/2020 04:01	WG1414927
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	01/22/2020 04:01	WG1414927
1,2-Dibromoethane	U		0.193	0.500	1	01/22/2020 04:01	WG1414927
Dibromomethane	U		0.117	0.500	1	01/22/2020 04:01	WG1414927
1,2-Dichlorobenzene	U		0.101	0.500	1	01/22/2020 04:01	WG1414927
1,3-Dichlorobenzene	U		0.130	0.500	1	01/22/2020 04:01	WG1414927
1,4-Dichlorobenzene	U		0.121	0.500	1	01/22/2020 04:01	WG1414927
Dichlorodifluoromethane	U		0.127	2.50	1	01/22/2020 04:01	WG1414927
1,1-Dichloroethane	U		0.114	0.500	1	01/22/2020 04:01	WG1414927
1,2-Dichloroethane	U		0.108	0.500	1	01/22/2020 04:01	WG1414927
1,1-Dichloroethene	7.81		0.188	0.500	1	01/22/2020 04:01	WG1414927
cis-1,2-Dichloroethene	2040		2.33	12.5	25	01/25/2020 19:39	WG1416868
trans-1,2-Dichloroethene	8.95		0.152	0.500	1	01/22/2020 04:01	WG1414927
1,2-Dichloropropane	U		0.190	0.500	1	01/22/2020 04:01	WG1414927
1,1-Dichloropropene	U		0.128	0.500	1	01/22/2020 04:01	WG1414927
1,3-Dichloropropane	U		0.147	1.00	1	01/22/2020 04:01	WG1414927
cis-1,3-Dichloropropene	U		0.0976	0.500	1	01/22/2020 04:01	WG1414927
trans-1,3-Dichloropropene	U		0.222	0.500	1	01/22/2020 04:01	WG1414927
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	01/22/2020 04:01	WG1414927
2,2-Dichloropropane	U		0.0929	0.500	1	01/22/2020 04:01	WG1414927
Di-isopropyl ether	U		0.0924	0.500	1	01/22/2020 04:01	WG1414927
Ethylbenzene	U		0.158	0.500	1	01/22/2020 04:01	WG1414927
Hexachloro-1,3-butadiene	U		0.157	1.00	1	01/22/2020 04:01	WG1414927
2-Hexanone	U		0.757	5.00	1	01/22/2020 04:01	WG1414927
n-Hexane	U		0.305	5.00	1	01/22/2020 04:01	WG1414927
Iodomethane	U		0.377	10.0	1	01/22/2020 04:01	WG1414927
Isopropylbenzene	U		0.126	0.500	1	01/22/2020 04:01	WG1414927
p-Isopropyltoluene	U		0.138	0.500	1	01/22/2020 04:01	WG1414927
2-Butanone (MEK)	U		1.28	5.00	1	01/22/2020 04:01	WG1414927
Methylene Chloride	U		1.07	2.50	1	01/22/2020 04:01	WG1414927
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	01/22/2020 04:01	WG1414927
Methyl tert-butyl ether	U		0.102	0.500	1	01/22/2020 04:01	WG1414927
Naphthalene	U		0.174	2.50	1	01/22/2020 04:01	WG1414927
n-Propylbenzene	U		0.162	0.500	1	01/22/2020 04:01	WG1414927
Styrene	U		0.117	0.500	1	01/22/2020 04:01	WG1414927
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	01/22/2020 04:01	WG1414927
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	01/22/2020 04:01	WG1414927
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	01/22/2020 04:01	WG1414927
Tetrachloroethene	39.4		0.199	0.500	1	01/22/2020 04:01	WG1414927
Toluene	U		0.412	0.500	1	01/22/2020 04:01	WG1414927
1,2,3-Trichlorobenzene	U		0.164	0.500	1	01/22/2020 04:01	WG1414927
1,2,4-Trichlorobenzene	U		0.355	0.500	1	01/22/2020 04:01	WG1414927
1,1,1-Trichloroethane	U		0.0940	0.500	1	01/22/2020 04:01	WG1414927
1,1,2-Trichloroethane	U		0.186	0.500	1	01/22/2020 04:01	WG1414927
Trichloroethene	109		0.153	0.500	1	01/22/2020 04:01	WG1414927
Trichlorofluoromethane	U		0.130	2.50	1	01/22/2020 04:01	WG1414927
1,2,3-Trichloropropane	U		0.247	2.50	1	01/22/2020 04:01	WG1414927

JC 2/5/2020

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

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

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
1,2,4-Trimethylbenzene	U		0.123	0.500	1	01/22/2020 04:01	WG1414927
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	01/22/2020 04:01	WG1414927
1,3,5-Trimethylbenzene	U		0.124	0.500	1	01/22/2020 04:01	WG1414927
Vinyl acetate	U		0.645	5.00	1	01/22/2020 04:01	WG1414927
Vinyl chloride	941		2.95	12.5	25	01/25/2020 19:39	WG1416868
Xylenes, Total	U		0.316	1.50	1	01/22/2020 04:01	WG1414927
(S) Toluene-d8	*105*			*80.0-120*		*01/22/2020 04:01*	WG1414927
(S) Toluene-d8	*103*			*80.0-120*		*01/25/2020 19:39*	WG1416868
(S) 4-Bromofluorobenzene	*92.4*			*77.0-126*		*01/22/2020 04:01*	WG1414927
(S) 4-Bromofluorobenzene	*102*			*77.0-126*		*01/25/2020 19:39*	WG1416868
(S) 1,2-Dichloroethane-d4	*105*			*70.0-130*		*01/22/2020 04:01*	WG1414927
(S) 1,2-Dichloroethane-d4	*103*			*70.0-130*		*01/25/2020 19:39*	WG1416868

JC 2/5/2020

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

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

Wet Chemistry by Method 2320 B-2011

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Alkalinity	158000		2710	20000	1	01/21/2020 23:22	WG1414762

Sample Narrative:

L1181269-04 WG1414762: Endpoint pH 4.5

Wet Chemistry by Method 9056A

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Chloride	16400		51.9	1000	1	01/21/2020 19:28	WG1414453
Nitrate	U		22.7	100	1	01/21/2020 19:28	WG1414453
Sulfate	117000		387	25000	5	01/21/2020 19:39	WG1414453

Wet Chemistry by Method 9060A

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
TOC (Total Organic Carbon)	5220		102	1000	1	01/24/2020 16:33	WG1416628

Metals (ICPMS) by Method 6020B

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Iron	1750		15.0	100	1	01/22/2020 14:35	WG1414629
Manganese	380		0.250	5.00	1	01/22/2020 14:35	WG1414629

Volatile Organic Compounds (GC) by Method NWTPHGX

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Gasoline Range Organics-NWTPH	U		31.6	100	1	01/24/2020 07:14	WG1416017
(S) a,a,a-Trifluorotoluene(FID)	*111*			*78.0-120*		*01/24/2020 07:14*	WG1416017

Volatile Organic Compounds (GC) by Method RSK175

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Methane	1090		0.287	0.678	1	01/23/2020 12:48	WG1415128
Ethane	3.20		0.296	1.29	1	01/23/2020 12:48	WG1415128
Ethene	5.65		0.422	1.27	1	01/23/2020 12:48	WG1415128

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

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Acetone	U		1.05	25.0	1	01/22/2020 04:21	WG1414927
Acrylonitrile	U		0.873	5.00	1	01/22/2020 04:21	WG1414927
Benzene	U		0.0896	0.500	1	01/22/2020 04:21	WG1414927
Bromobenzene	U		0.133	0.500	1	01/22/2020 04:21	WG1414927
Bromodichloromethane	U		0.0800	0.500	1	01/22/2020 04:21	WG1414927
Bromochloromethane	U		0.145	0.500	1	01/22/2020 04:21	WG1414927
Bromoform	U		0.186	0.500	1	01/22/2020 04:21	WG1414927
Bromomethane	U		0.157	2.50	1	01/22/2020 04:21	WG1414927
n-Butylbenzene	U		0.143	0.500	1	01/22/2020 04:21	WG1414927
sec-Butylbenzene	U		0.134	0.500	1	01/22/2020 04:21	WG1414927
tert-Butylbenzene	U		0.183	0.500	1	01/22/2020 04:21	WG1414927
Carbon disulfide	U		0.101	0.500	1	01/22/2020 04:21	WG1414927
Carbon tetrachloride	U		0.159	0.500	1	01/22/2020 04:21	WG1414927

JC 1/30/20

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chlorobenzene	U		0.140	0.500	1	01/22/2020 04:21	WG1414927
Chlorodibromomethane	U		0.128	0.500	1	01/22/2020 04:21	WG1414927
Chloroethane	U		0.141	2.50	1	01/22/2020 04:21	WG1414927
Chloroform	U		0.0860	0.500	1	01/22/2020 04:21	WG1414927
Chloromethane	U		0.153	1.25	1	01/22/2020 04:21	WG1414927
2-Chlorotoluene	U		0.111	0.500	1	01/22/2020 04:21	WG1414927
4-Chlorotoluene	U		0.0972	0.500	1	01/22/2020 04:21	WG1414927
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	01/22/2020 04:21	WG1414927
1,2-Dibromoethane	U		0.193	0.500	1	01/22/2020 04:21	WG1414927
Dibromomethane	U		0.117	0.500	1	01/22/2020 04:21	WG1414927
1,2-Dichlorobenzene	U		0.101	0.500	1	01/22/2020 04:21	WG1414927
1,3-Dichlorobenzene	U		0.130	0.500	1	01/22/2020 04:21	WG1414927
1,4-Dichlorobenzene	U		0.121	0.500	1	01/22/2020 04:21	WG1414927
Dichlorodifluoromethane	U		0.127	2.50	1	01/22/2020 04:21	WG1414927
1,1-Dichloroethane	U		0.114	0.500	1	01/22/2020 04:21	WG1414927
1,2-Dichloroethane	U		0.108	0.500	1	01/22/2020 04:21	WG1414927
1,1-Dichloroethene	U		0.188	0.500	1	01/22/2020 04:21	WG1414927
cis-1,2-Dichloroethene	U		0.0933	0.500	1	01/25/2020 20:00	WG1416868
trans-1,2-Dichloroethene	U		0.152	0.500	1	01/22/2020 04:21	WG1414927
1,2-Dichloropropane	U		0.190	0.500	1	01/22/2020 04:21	WG1414927
1,1-Dichloropropene	U		0.128	0.500	1	01/22/2020 04:21	WG1414927
1,3-Dichloropropane	U		0.147	1.00	1	01/22/2020 04:21	WG1414927
cis-1,3-Dichloropropene	U		0.0976	0.500	1	01/22/2020 04:21	WG1414927
trans-1,3-Dichloropropene	U		0.222	0.500	1	01/22/2020 04:21	WG1414927
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	01/22/2020 04:21	WG1414927
2,2-Dichloropropane	U		0.0929	0.500	1	01/22/2020 04:21	WG1414927
Di-isopropyl ether	U		0.0924	0.500	1	01/22/2020 04:21	WG1414927
Ethylbenzene	U		0.158	0.500	1	01/22/2020 04:21	WG1414927
Hexachloro-1,3-butadiene	U		0.157	1.00	1	01/22/2020 04:21	WG1414927
2-Hexanone	U		0.757	5.00	1	01/22/2020 04:21	WG1414927
n-Hexane	U		0.305	5.00	1	01/22/2020 04:21	WG1414927
Iodomethane	U		0.377	10.0	1	01/22/2020 04:21	WG1414927
Isopropylbenzene	U		0.126	0.500	1	01/22/2020 04:21	WG1414927
p-Isopropyltoluene	U		0.138	0.500	1	01/22/2020 04:21	WG1414927
2-Butanone (MEK)	U		1.28	5.00	1	01/22/2020 04:21	WG1414927
Methylene Chloride	U		1.07	2.50	1	01/22/2020 04:21	WG1414927
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	01/22/2020 04:21	WG1414927
Methyl tert-butyl ether	U		0.102	0.500	1	01/22/2020 04:21	WG1414927
Naphthalene	U		0.174	2.50	1	01/22/2020 04:21	WG1414927
n-Propylbenzene	U		0.162	0.500	1	01/22/2020 04:21	WG1414927
Styrene	U		0.117	0.500	1	01/22/2020 04:21	WG1414927
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	01/22/2020 04:21	WG1414927
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	01/22/2020 04:21	WG1414927
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	01/22/2020 04:21	WG1414927
Tetrachloroethene	U		0.199	0.500	1	01/22/2020 04:21	WG1414927
Toluene	U		0.412	0.500	1	01/22/2020 04:21	WG1414927
1,2,3-Trichlorobenzene	U		0.164	0.500	1	01/22/2020 04:21	WG1414927
1,2,4-Trichlorobenzene	U		0.355	0.500	1	01/22/2020 04:21	WG1414927
1,1,1-Trichloroethane	U		0.0940	0.500	1	01/22/2020 04:21	WG1414927
1,1,2-Trichloroethane	U		0.186	0.500	1	01/22/2020 04:21	WG1414927
Trichloroethene	0.163	J	0.153	0.500	1	01/22/2020 04:21	WG1414927
Trichlorofluoromethane	U		0.130	2.50	1	01/22/2020 04:21	WG1414927
1,2,3-Trichloropropane	U		0.247	2.50	1	01/22/2020 04:21	WG1414927
1,2,4-Trimethylbenzene	U		0.123	0.500	1	01/22/2020 04:21	WG1414927
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	01/22/2020 04:21	WG1414927
1,3,5-Trimethylbenzene	U		0.124	0.500	1	01/22/2020 04:21	WG1414927

JC 1/30/20

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Vinyl acetate	U		0.645	5.00	1	01/22/2020 04:21	WG1414927
Vinyl chloride	0.305	J	0.118	0.500	1	01/25/2020 20:00	WG1416868
Xylenes, Total	U		0.316	1.50	1	01/22/2020 04:21	WG1414927
(S) Toluene-d8	*105*			*80.0-120*		*01/22/2020 04:21*	WG1414927
(S) Toluene-d8	*101*			*80.0-120*		*01/25/2020 20:00*	WG1416868
(S) 4-Bromofluorobenzene	*93.9*			*77.0-126*		*01/22/2020 04:21*	WG1414927
(S) 4-Bromofluorobenzene	*103*			*77.0-126*		*01/25/2020 20:00*	WG1416868
(S) 1,2-Dichloroethane-d4	*107*			*70.0-130*		*01/22/2020 04:21*	WG1414927
(S) 1,2-Dichloroethane-d4	*104*			*70.0-130*		*01/25/2020 20:00*	WG1416868

JC 1/30/20

Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	220000		2710	20000	1	01/21/2020 23:31	WG1414762

Sample Narrative:

L1181269-05 WG1414762: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	12800		51.9	1000	1	01/21/2020 19:50	WG1414453
Nitrate	3360		22.7	100	1	01/21/2020 19:50	WG1414453
Sulfate	76400		77.4	5000	1	01/21/2020 19:50	WG1414453

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	4700		102	1000	1	01/24/2020 16:48	WG1416628

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	89.3	J	15.0	100	1	01/22/2020 14:38	WG1414629
Manganese	15.6		0.250	5.00	1	01/22/2020 14:38	WG1414629

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	U		31.6	100	1	01/24/2020 07:38	WG1416017
(S) a,a,a-Trifluorotoluene(FID)	*112*			*78.0-120*		*01/24/2020 07:38*	WG1416017

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	46.7		0.287	0.678	1	01/23/2020 12:50	WG1415128
Ethane	U		0.296	1.29	1	01/23/2020 12:50	WG1415128
Ethene	U		0.422	1.27	1	01/23/2020 12:50	WG1415128

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U		1.05	25.0	1	01/22/2020 04:41	WG1414927
Acrylonitrile	U		0.873	5.00	1	01/22/2020 04:41	WG1414927
Benzene	U		0.0896	0.500	1	01/22/2020 04:41	WG1414927
Bromobenzene	U		0.133	0.500	1	01/22/2020 04:41	WG1414927
Bromodichloromethane	U		0.0800	0.500	1	01/22/2020 04:41	WG1414927
Bromochloromethane	U		0.145	0.500	1	01/22/2020 04:41	WG1414927
Bromoform	U		0.186	0.500	1	01/22/2020 04:41	WG1414927
Bromomethane	U		0.157	2.50	1	01/22/2020 04:41	WG1414927
n-Butylbenzene	U		0.143	0.500	1	01/22/2020 04:41	WG1414927
sec-Butylbenzene	U		0.134	0.500	1	01/22/2020 04:41	WG1414927
tert-Butylbenzene	U		0.183	0.500	1	01/22/2020 04:41	WG1414927
Carbon disulfide	U		0.101	0.500	1	01/22/2020 04:41	WG1414927
Carbon tetrachloride	U		0.159	0.500	1	01/22/2020 04:41	WG1414927

JC 1/30/20

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chlorobenzene	U		0.140	0.500	1	01/22/2020 04:41	WG1414927
Chlorodibromomethane	U		0.128	0.500	1	01/22/2020 04:41	WG1414927
Chloroethane	U		0.141	2.50	1	01/22/2020 04:41	WG1414927
Chloroform	U		0.0860	0.500	1	01/22/2020 04:41	WG1414927
Chloromethane	U		0.153	1.25	1	01/22/2020 04:41	WG1414927
2-Chlorotoluene	U		0.111	0.500	1	01/22/2020 04:41	WG1414927
4-Chlorotoluene	U		0.0972	0.500	1	01/22/2020 04:41	WG1414927
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	01/22/2020 04:41	WG1414927
1,2-Dibromoethane	U		0.193	0.500	1	01/22/2020 04:41	WG1414927
Dibromomethane	U		0.117	0.500	1	01/22/2020 04:41	WG1414927
1,2-Dichlorobenzene	U		0.101	0.500	1	01/22/2020 04:41	WG1414927
1,3-Dichlorobenzene	U		0.130	0.500	1	01/22/2020 04:41	WG1414927
1,4-Dichlorobenzene	U		0.121	0.500	1	01/22/2020 04:41	WG1414927
Dichlorodifluoromethane	U		0.127	2.50	1	01/22/2020 04:41	WG1414927
1,1-Dichloroethane	U		0.114	0.500	1	01/22/2020 04:41	WG1414927
1,2-Dichloroethane	U		0.108	0.500	1	01/22/2020 04:41	WG1414927
1,1-Dichloroethene	U		0.188	0.500	1	01/22/2020 04:41	WG1414927
cis-1,2-Dichloroethene	16.5		0.0933	0.500	1	01/22/2020 04:41	WG1414927
trans-1,2-Dichloroethene	0.232	J	0.152	0.500	1	01/22/2020 04:41	WG1414927
1,2-Dichloropropane	U		0.190	0.500	1	01/22/2020 04:41	WG1414927
1,1-Dichloropropene	U		0.128	0.500	1	01/22/2020 04:41	WG1414927
1,3-Dichloropropane	U		0.147	1.00	1	01/22/2020 04:41	WG1414927
cis-1,3-Dichloropropene	U		0.0976	0.500	1	01/22/2020 04:41	WG1414927
trans-1,3-Dichloropropene	U		0.222	0.500	1	01/22/2020 04:41	WG1414927
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	01/22/2020 04:41	WG1414927
2,2-Dichloropropane	U		0.0929	0.500	1	01/22/2020 04:41	WG1414927
Di-isopropyl ether	U		0.0924	0.500	1	01/22/2020 04:41	WG1414927
Ethylbenzene	U		0.158	0.500	1	01/22/2020 04:41	WG1414927
Hexachloro-1,3-butadiene	U		0.157	1.00	1	01/22/2020 04:41	WG1414927
2-Hexanone	U		0.757	5.00	1	01/22/2020 04:41	WG1414927
n-Hexane	U		0.305	5.00	1	01/22/2020 04:41	WG1414927
Iodomethane	U		0.377	10.0	1	01/22/2020 04:41	WG1414927
Isopropylbenzene	U		0.126	0.500	1	01/22/2020 04:41	WG1414927
p-Isopropyltoluene	U		0.138	0.500	1	01/22/2020 04:41	WG1414927
2-Butanone (MEK)	U		1.28	5.00	1	01/22/2020 04:41	WG1414927
Methylene Chloride	U		1.07	2.50	1	01/22/2020 04:41	WG1414927
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	01/22/2020 04:41	WG1414927
Methyl tert-butyl ether	U		0.102	0.500	1	01/22/2020 04:41	WG1414927
Naphthalene	U		0.174	2.50	1	01/22/2020 04:41	WG1414927
n-Propylbenzene	U		0.162	0.500	1	01/22/2020 04:41	WG1414927
Styrene	U		0.117	0.500	1	01/22/2020 04:41	WG1414927
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	01/22/2020 04:41	WG1414927
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	01/22/2020 04:41	WG1414927
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	01/22/2020 04:41	WG1414927
Tetrachloroethene	138		0.199	0.500	1	01/22/2020 04:41	WG1414927
Toluene	U		0.412	0.500	1	01/22/2020 04:41	WG1414927
1,2,3-Trichlorobenzene	U		0.164	0.500	1	01/22/2020 04:41	WG1414927
1,2,4-Trichlorobenzene	U		0.355	0.500	1	01/22/2020 04:41	WG1414927
1,1,1-Trichloroethane	U		0.0940	0.500	1	01/22/2020 04:41	WG1414927
1,1,2-Trichloroethane	U		0.186	0.500	1	01/22/2020 04:41	WG1414927
Trichloroethene	25.4		0.153	0.500	1	01/22/2020 04:41	WG1414927
Trichlorofluoromethane	U		0.130	2.50	1	01/22/2020 04:41	WG1414927
1,2,3-Trichloropropane	U		0.247	2.50	1	01/22/2020 04:41	WG1414927
1,2,4-Trimethylbenzene	U		0.123	0.500	1	01/22/2020 04:41	WG1414927
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	01/22/2020 04:41	WG1414927
1,3,5-Trimethylbenzene	U		0.124	0.500	1	01/22/2020 04:41	WG1414927

JC 1/30/20

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Vinyl acetate	U		0.645	5.00	1	01/22/2020 04:41	WG1414927
Vinyl chloride	U		0.118	0.500	1	01/22/2020 04:41	WG1414927
Xylenes, Total	U		0.316	1.50	1	01/22/2020 04:41	WG1414927
(S) Toluene-d8	*106*			*80.0-120*		*01/22/2020 04:41*	WG1414927
(S) 4-Bromofluorobenzene	*93.1*			*77.0-126*		*01/22/2020 04:41*	WG1414927
(S) 1,2-Dichloroethane-d4	*107*			*70.0-130*		*01/22/2020 04:41*	WG1414927

JC 1/30/20

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

Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	300000		2710	20000	1	01/21/2020 23:39	WG1414762

Sample Narrative:

L1181269-06 WG1414762: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	27800		51.9	1000	1	01/21/2020 20:00	WG1414453
Nitrate	U		22.7	100	1	01/21/2020 20:00	WG1414453
Sulfate	16100		77.4	5000	1	01/21/2020 20:00	WG1414453

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	5620		102	1000	1	01/24/2020 18:23	WG1416628

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	3280		15.0	100	1	01/22/2020 14:41	WG1414629
Manganese	982		0.250	5.00	1	01/22/2020 14:41	WG1414629

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	U		31.6	100	1	01/24/2020 08:02	WG1416017
(S) a,a,a-Trifluorotoluene(FID)	*111*			*78.0-120*		*01/24/2020 08:02*	WG1416017

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	323		0.287	0.678	1	01/23/2020 12:52	WG1415128
Ethane	U		0.296	1.29	1	01/23/2020 12:52	WG1415128
Ethene	U		0.422	1.27	1	01/23/2020 12:52	WG1415128

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U		1.05	25.0	1	01/22/2020 05:02	WG1414927
Acrylonitrile	U		0.873	5.00	1	01/22/2020 05:02	WG1414927
Benzene	U		0.0896	0.500	1	01/22/2020 05:02	WG1414927
Bromobenzene	U		0.133	0.500	1	01/22/2020 05:02	WG1414927
Bromodichloromethane	U		0.0800	0.500	1	01/22/2020 05:02	WG1414927
Bromochloromethane	U		0.145	0.500	1	01/22/2020 05:02	WG1414927
Bromoform	U		0.186	0.500	1	01/22/2020 05:02	WG1414927
Bromomethane	U		0.157	2.50	1	01/22/2020 05:02	WG1414927
n-Butylbenzene	U		0.143	0.500	1	01/22/2020 05:02	WG1414927
sec-Butylbenzene	U		0.134	0.500	1	01/22/2020 05:02	WG1414927
tert-Butylbenzene	U		0.183	0.500	1	01/22/2020 05:02	WG1414927
Carbon disulfide	U		0.101	0.500	1	01/22/2020 05:02	WG1414927
Carbon tetrachloride	U		0.159	0.500	1	01/22/2020 05:02	WG1414927

JC 1/30/20

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chlorobenzene	U		0.140	0.500	1	01/22/2020 05:02	WG1414927
Chlorodibromomethane	U		0.128	0.500	1	01/22/2020 05:02	WG1414927
Chloroethane	U		0.141	2.50	1	01/22/2020 05:02	WG1414927
Chloroform	U		0.0860	0.500	1	01/22/2020 05:02	WG1414927
Chloromethane	U		0.153	1.25	1	01/22/2020 05:02	WG1414927
2-Chlorotoluene	U		0.111	0.500	1	01/22/2020 05:02	WG1414927
4-Chlorotoluene	U		0.0972	0.500	1	01/22/2020 05:02	WG1414927
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	01/22/2020 05:02	WG1414927
1,2-Dibromoethane	U		0.193	0.500	1	01/22/2020 05:02	WG1414927
Dibromomethane	U		0.117	0.500	1	01/22/2020 05:02	WG1414927
1,2-Dichlorobenzene	U		0.101	0.500	1	01/22/2020 05:02	WG1414927
1,3-Dichlorobenzene	U		0.130	0.500	1	01/22/2020 05:02	WG1414927
1,4-Dichlorobenzene	U		0.121	0.500	1	01/22/2020 05:02	WG1414927
Dichlorodifluoromethane	U		0.127	2.50	1	01/22/2020 05:02	WG1414927
1,1-Dichloroethane	U		0.114	0.500	1	01/22/2020 05:02	WG1414927
1,2-Dichloroethane	U		0.108	0.500	1	01/22/2020 05:02	WG1414927
1,1-Dichloroethene	U		0.188	0.500	1	01/22/2020 05:02	WG1414927
cis-1,2-Dichloroethene	1.38		0.0933	0.500	1	01/22/2020 05:02	WG1414927
trans-1,2-Dichloroethene	U		0.152	0.500	1	01/22/2020 05:02	WG1414927
1,2-Dichloropropane	U		0.190	0.500	1	01/22/2020 05:02	WG1414927
1,1-Dichloropropene	U		0.128	0.500	1	01/22/2020 05:02	WG1414927
1,3-Dichloropropane	U		0.147	1.00	1	01/22/2020 05:02	WG1414927
cis-1,3-Dichloropropene	U		0.0976	0.500	1	01/22/2020 05:02	WG1414927
trans-1,3-Dichloropropene	U		0.222	0.500	1	01/22/2020 05:02	WG1414927
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	01/22/2020 05:02	WG1414927
2,2-Dichloropropane	U		0.0929	0.500	1	01/22/2020 05:02	WG1414927
Di-isopropyl ether	U		0.0924	0.500	1	01/22/2020 05:02	WG1414927
Ethylbenzene	U		0.158	0.500	1	01/22/2020 05:02	WG1414927
Hexachloro-1,3-butadiene	U		0.157	1.00	1	01/22/2020 05:02	WG1414927
2-Hexanone	U		0.757	5.00	1	01/22/2020 05:02	WG1414927
n-Hexane	U		0.305	5.00	1	01/22/2020 05:02	WG1414927
Iodomethane	U		0.377	10.0	1	01/22/2020 05:02	WG1414927
Isopropylbenzene	U		0.126	0.500	1	01/22/2020 05:02	WG1414927
p-Isopropyltoluene	U		0.138	0.500	1	01/22/2020 05:02	WG1414927
2-Butanone (MEK)	U		1.28	5.00	1	01/22/2020 05:02	WG1414927
Methylene Chloride	U		1.07	2.50	1	01/22/2020 05:02	WG1414927
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	01/22/2020 05:02	WG1414927
Methyl tert-butyl ether	U		0.102	0.500	1	01/22/2020 05:02	WG1414927
Naphthalene	U		0.174	2.50	1	01/22/2020 05:02	WG1414927
n-Propylbenzene	U		0.162	0.500	1	01/22/2020 05:02	WG1414927
Styrene	U		0.117	0.500	1	01/22/2020 05:02	WG1414927
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	01/22/2020 05:02	WG1414927
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	01/22/2020 05:02	WG1414927
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	01/22/2020 05:02	WG1414927
Tetrachloroethene	0.208	J	0.199	0.500	1	01/22/2020 05:02	WG1414927
Toluene	U		0.412	0.500	1	01/22/2020 05:02	WG1414927
1,2,3-Trichlorobenzene	U		0.164	0.500	1	01/22/2020 05:02	WG1414927
1,2,4-Trichlorobenzene	U		0.355	0.500	1	01/22/2020 05:02	WG1414927
1,1,1-Trichloroethane	U		0.0940	0.500	1	01/22/2020 05:02	WG1414927
1,1,2-Trichloroethane	U		0.186	0.500	1	01/22/2020 05:02	WG1414927
Trichloroethene	0.348	J	0.153	0.500	1	01/22/2020 05:02	WG1414927
Trichlorofluoromethane	U		0.130	2.50	1	01/22/2020 05:02	WG1414927
1,2,3-Trichloropropane	U		0.247	2.50	1	01/22/2020 05:02	WG1414927
1,2,4-Trimethylbenzene	U		0.123	0.500	1	01/22/2020 05:02	WG1414927
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	01/22/2020 05:02	WG1414927
1,3,5-Trimethylbenzene	U		0.124	0.500	1	01/22/2020 05:02	WG1414927

JC 1/30/20

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Vinyl acetate	U		0.645	5.00	1	01/22/2020 05:02	WG1414927
Vinyl chloride	0.568		0.118	0.500	1	01/22/2020 05:02	WG1414927
Xylenes, Total	U		0.316	1.50	1	01/22/2020 05:02	WG1414927
(S) Toluene-d8	*107*			*80.0-120*		*01/22/2020 05:02*	WG1414927
(S) 4-Bromofluorobenzene	*93.9*			*77.0-126*		*01/22/2020 05:02*	WG1414927
(S) 1,2-Dichloroethane-d4	*106*			*70.0-130*		*01/22/2020 05:02*	WG1414927

JC 1/30/20

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

Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	244000		2710	20000	1	01/21/2020 23:48	WG1414762

Sample Narrative:

L1181269-07 WG1414762: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	13900		51.9	1000	1	01/21/2020 20:11	WG1414453
Nitrate	4730		22.7	100	1	01/21/2020 20:11	WG1414453
Sulfate	77200		77.4	5000	1	01/21/2020 20:11	WG1414453

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	3430	B	102	1000	1	01/24/2020 18:35	WG1416628

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	443		15.0	100	1	01/22/2020 14:45	WG1414629
Manganese	39.2		0.250	5.00	1	01/22/2020 14:45	WG1414629

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	44.9	J	31.6	100	1	01/24/2020 08:26	WG1416017
(S) a,a,a-Trifluorotoluene(FID)	*111*			*78.0-120*		*01/24/2020 08:26*	WG1416017

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	12.0		0.287	0.678	1	01/23/2020 12:59	WG1415128
Ethane	U		0.296	1.29	1	01/23/2020 12:59	WG1415128
Ethene	U		0.422	1.27	1	01/23/2020 12:59	WG1415128

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U		1.05	25.0	1	01/22/2020 05:22	WG1414927
Acrylonitrile	U		0.873	5.00	1	01/22/2020 05:22	WG1414927
Benzene	U		0.0896	0.500	1	01/22/2020 05:22	WG1414927
Bromobenzene	U		0.133	0.500	1	01/22/2020 05:22	WG1414927
Bromodichloromethane	U		0.0800	0.500	1	01/22/2020 05:22	WG1414927
Bromochloromethane	U		0.145	0.500	1	01/22/2020 05:22	WG1414927
Bromoform	U		0.186	0.500	1	01/22/2020 05:22	WG1414927
Bromomethane	U		0.157	2.50	1	01/22/2020 05:22	WG1414927
n-Butylbenzene	U		0.143	0.500	1	01/22/2020 05:22	WG1414927
sec-Butylbenzene	U		0.134	0.500	1	01/22/2020 05:22	WG1414927
tert-Butylbenzene	U		0.183	0.500	1	01/22/2020 05:22	WG1414927
Carbon disulfide	U		0.101	0.500	1	01/22/2020 05:22	WG1414927
Carbon tetrachloride	U		0.159	0.500	1	01/22/2020 05:22	WG1414927

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chlorobenzene	U		0.140	0.500	1	01/22/2020 05:22	WG1414927
Chlorodibromomethane	U		0.128	0.500	1	01/22/2020 05:22	WG1414927
Chloroethane	U		0.141	2.50	1	01/22/2020 05:22	WG1414927
Chloroform	U		0.0860	0.500	1	01/22/2020 05:22	WG1414927
Chloromethane	U		0.153	1.25	1	01/22/2020 05:22	WG1414927
2-Chlorotoluene	U		0.111	0.500	1	01/22/2020 05:22	WG1414927
4-Chlorotoluene	U		0.0972	0.500	1	01/22/2020 05:22	WG1414927
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	01/22/2020 05:22	WG1414927
1,2-Dibromoethane	U		0.193	0.500	1	01/22/2020 05:22	WG1414927
Dibromomethane	U		0.117	0.500	1	01/22/2020 05:22	WG1414927
1,2-Dichlorobenzene	U		0.101	0.500	1	01/22/2020 05:22	WG1414927
1,3-Dichlorobenzene	U		0.130	0.500	1	01/22/2020 05:22	WG1414927
1,4-Dichlorobenzene	U		0.121	0.500	1	01/22/2020 05:22	WG1414927
Dichlorodifluoromethane	U		0.127	2.50	1	01/22/2020 05:22	WG1414927
1,1-Dichloroethane	U		0.114	0.500	1	01/22/2020 05:22	WG1414927
1,2-Dichloroethane	U		0.108	0.500	1	01/22/2020 05:22	WG1414927
1,1-Dichloroethene	U		0.188	0.500	1	01/22/2020 05:22	WG1414927
cis-1,2-Dichloroethene	12.7		0.0933	0.500	1	01/22/2020 05:22	WG1414927
trans-1,2-Dichloroethene	U		0.152	0.500	1	01/22/2020 05:22	WG1414927
1,2-Dichloropropane	U		0.190	0.500	1	01/22/2020 05:22	WG1414927
1,1-Dichloropropene	U		0.128	0.500	1	01/22/2020 05:22	WG1414927
1,3-Dichloropropane	U		0.147	1.00	1	01/22/2020 05:22	WG1414927
cis-1,3-Dichloropropene	U		0.0976	0.500	1	01/22/2020 05:22	WG1414927
trans-1,3-Dichloropropene	U		0.222	0.500	1	01/22/2020 05:22	WG1414927
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	01/22/2020 05:22	WG1414927
2,2-Dichloropropane	U		0.0929	0.500	1	01/22/2020 05:22	WG1414927
Di-isopropyl ether	U		0.0924	0.500	1	01/22/2020 05:22	WG1414927
Ethylbenzene	U		0.158	0.500	1	01/22/2020 05:22	WG1414927
Hexachloro-1,3-butadiene	U		0.157	1.00	1	01/22/2020 05:22	WG1414927
2-Hexanone	U		0.757	5.00	1	01/22/2020 05:22	WG1414927
n-Hexane	U		0.305	5.00	1	01/22/2020 05:22	WG1414927
Iodomethane	U		0.377	10.0	1	01/22/2020 05:22	WG1414927
Isopropylbenzene	U		0.126	0.500	1	01/22/2020 05:22	WG1414927
p-Isopropyltoluene	U		0.138	0.500	1	01/22/2020 05:22	WG1414927
2-Butanone (MEK)	U		1.28	5.00	1	01/22/2020 05:22	WG1414927
Methylene Chloride	U		1.07	2.50	1	01/22/2020 05:22	WG1414927
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	01/22/2020 05:22	WG1414927
Methyl tert-butyl ether	U		0.102	0.500	1	01/22/2020 05:22	WG1414927
Naphthalene	U		0.174	2.50	1	01/22/2020 05:22	WG1414927
n-Propylbenzene	U		0.162	0.500	1	01/22/2020 05:22	WG1414927
Styrene	U		0.117	0.500	1	01/22/2020 05:22	WG1414927
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	01/22/2020 05:22	WG1414927
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	01/22/2020 05:22	WG1414927
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	01/22/2020 05:22	WG1414927
Tetrachloroethene	98.3		0.199	0.500	1	01/22/2020 05:22	WG1414927
Toluene	U		0.412	0.500	1	01/22/2020 05:22	WG1414927
1,2,3-Trichlorobenzene	U		0.164	0.500	1	01/22/2020 05:22	WG1414927
1,2,4-Trichlorobenzene	U		0.355	0.500	1	01/22/2020 05:22	WG1414927
1,1,1-Trichloroethane	U		0.0940	0.500	1	01/22/2020 05:22	WG1414927
1,1,2-Trichloroethane	U		0.186	0.500	1	01/22/2020 05:22	WG1414927
Trichloroethene	21.8		0.153	0.500	1	01/22/2020 05:22	WG1414927
Trichlorofluoromethane	U		0.130	2.50	1	01/22/2020 05:22	WG1414927
1,2,3-Trichloropropane	U		0.247	2.50	1	01/22/2020 05:22	WG1414927
1,2,4-Trimethylbenzene	U		0.123	0.500	1	01/22/2020 05:22	WG1414927
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	01/22/2020 05:22	WG1414927
1,3,5-Trimethylbenzene	U		0.124	0.500	1	01/22/2020 05:22	WG1414927

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Vinyl acetate	U		0.645	5.00	1	01/22/2020 05:22	WG1414927
Vinyl chloride	U		0.118	0.500	1	01/22/2020 05:22	WG1414927
Xylenes, Total	U		0.316	1.50	1	01/22/2020 05:22	WG1414927
(S) Toluene-d8	*104*			*80.0-120*		*01/22/2020 05:22*	WG1414927
(S) 4-Bromofluorobenzene	*94.3*			*77.0-126*		*01/22/2020 05:22*	WG1414927
(S) 1,2-Dichloroethane-d4	*107*			*70.0-130*		*01/22/2020 05:22*	WG1414927

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Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	U		31.6	100	1	01/24/2020 06:50	WG1416017
(S) a,a,a-Trifluorotoluene(FID)	*111*			*78.0-120*		*01/24/2020 06:50*	WG1416017

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	1.43	J	1.05	25.0	1	01/21/2020 22:24	WG1414927
Acrylonitrile	U		0.873	5.00	1	01/21/2020 22:24	WG1414927
Benzene	U		0.0896	0.500	1	01/21/2020 22:24	WG1414927
Bromobenzene	U		0.133	0.500	1	01/21/2020 22:24	WG1414927
Bromodichloromethane	U		0.0800	0.500	1	01/21/2020 22:24	WG1414927
Bromochloromethane	U		0.145	0.500	1	01/21/2020 22:24	WG1414927
Bromoform	U		0.186	0.500	1	01/21/2020 22:24	WG1414927
Bromomethane	U		0.157	2.50	1	01/21/2020 22:24	WG1414927
n-Butylbenzene	U		0.143	0.500	1	01/21/2020 22:24	WG1414927
sec-Butylbenzene	U		0.134	0.500	1	01/21/2020 22:24	WG1414927
tert-Butylbenzene	U		0.183	0.500	1	01/21/2020 22:24	WG1414927
Carbon disulfide	U		0.101	0.500	1	01/21/2020 22:24	WG1414927
Carbon tetrachloride	U		0.159	0.500	1	01/21/2020 22:24	WG1414927
Chlorobenzene	U		0.140	0.500	1	01/21/2020 22:24	WG1414927
Chlorodibromomethane	U		0.128	0.500	1	01/21/2020 22:24	WG1414927
Chloroethane	U		0.141	2.50	1	01/21/2020 22:24	WG1414927
Chloroform	U		0.0860	0.500	1	01/21/2020 22:24	WG1414927
Chloromethane	U		0.153	1.25	1	01/21/2020 22:24	WG1414927
2-Chlorotoluene	U		0.111	0.500	1	01/21/2020 22:24	WG1414927
4-Chlorotoluene	U		0.0972	0.500	1	01/21/2020 22:24	WG1414927
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	01/21/2020 22:24	WG1414927
1,2-Dibromoethane	U		0.193	0.500	1	01/21/2020 22:24	WG1414927
Dibromomethane	U		0.117	0.500	1	01/21/2020 22:24	WG1414927
1,2-Dichlorobenzene	U		0.101	0.500	1	01/21/2020 22:24	WG1414927
1,3-Dichlorobenzene	U		0.130	0.500	1	01/21/2020 22:24	WG1414927
1,4-Dichlorobenzene	U		0.121	0.500	1	01/21/2020 22:24	WG1414927
Dichlorodifluoromethane	U		0.127	2.50	1	01/21/2020 22:24	WG1414927
1,1-Dichloroethane	U		0.114	0.500	1	01/21/2020 22:24	WG1414927
1,2-Dichloroethane	U		0.108	0.500	1	01/21/2020 22:24	WG1414927
1,1-Dichloroethene	U		0.188	0.500	1	01/21/2020 22:24	WG1414927
cis-1,2-Dichloroethene	U		0.0933	0.500	1	01/21/2020 22:24	WG1414927
trans-1,2-Dichloroethene	U		0.152	0.500	1	01/21/2020 22:24	WG1414927
1,2-Dichloropropane	U		0.190	0.500	1	01/21/2020 22:24	WG1414927
1,1-Dichloropropene	U		0.128	0.500	1	01/21/2020 22:24	WG1414927
1,3-Dichloropropane	U		0.147	1.00	1	01/21/2020 22:24	WG1414927
cis-1,3-Dichloropropene	U		0.0976	0.500	1	01/21/2020 22:24	WG1414927
trans-1,3-Dichloropropene	U		0.222	0.500	1	01/21/2020 22:24	WG1414927
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	01/21/2020 22:24	WG1414927
2,2-Dichloropropane	U		0.0929	0.500	1	01/21/2020 22:24	WG1414927
Di-isopropyl ether	U		0.0924	0.500	1	01/21/2020 22:24	WG1414927
Ethylbenzene	U		0.158	0.500	1	01/21/2020 22:24	WG1414927
Hexachloro-1,3-butadiene	U		0.157	1.00	1	01/21/2020 22:24	WG1414927
2-Hexanone	U		0.757	5.00	1	01/21/2020 22:24	WG1414927
n-Hexane	U		0.305	5.00	1	01/21/2020 22:24	WG1414927
Iodomethane	U		0.377	10.0	1	01/21/2020 22:24	WG1414927
Isopropylbenzene	U		0.126	0.500	1	01/21/2020 22:24	WG1414927
p-Isopropyltoluene	U		0.138	0.500	1	01/21/2020 22:24	WG1414927
2-Butanone (MEK)	U		1.28	5.00	1	01/21/2020 22:24	WG1414927

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

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Methylene Chloride	U		1.07	2.50	1	01/21/2020 22:24	WG1414927
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	01/21/2020 22:24	WG1414927
Methyl tert-butyl ether	U		0.102	0.500	1	01/21/2020 22:24	WG1414927
Naphthalene	U		0.174	2.50	1	01/21/2020 22:24	WG1414927
n-Propylbenzene	U		0.162	0.500	1	01/21/2020 22:24	WG1414927
Styrene	U		0.117	0.500	1	01/21/2020 22:24	WG1414927
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	01/21/2020 22:24	WG1414927
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	01/21/2020 22:24	WG1414927
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	01/21/2020 22:24	WG1414927
Tetrachloroethene	U		0.199	0.500	1	01/21/2020 22:24	WG1414927
Toluene	U		0.412	0.500	1	01/21/2020 22:24	WG1414927
1,2,3-Trichlorobenzene	U		0.164	0.500	1	01/21/2020 22:24	WG1414927
1,2,4-Trichlorobenzene	U		0.355	0.500	1	01/21/2020 22:24	WG1414927
1,1,1-Trichloroethane	U		0.0940	0.500	1	01/21/2020 22:24	WG1414927
1,1,2-Trichloroethane	U		0.186	0.500	1	01/21/2020 22:24	WG1414927
Trichloroethene	U		0.153	0.500	1	01/21/2020 22:24	WG1414927
Trichlorofluoromethane	U		0.130	2.50	1	01/21/2020 22:24	WG1414927
1,2,3-Trichloropropane	U		0.247	2.50	1	01/21/2020 22:24	WG1414927
1,2,4-Trimethylbenzene	U		0.123	0.500	1	01/21/2020 22:24	WG1414927
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	01/21/2020 22:24	WG1414927
1,3,5-Trimethylbenzene	U		0.124	0.500	1	01/21/2020 22:24	WG1414927
Vinyl acetate	U		0.645	5.00	1	01/21/2020 22:24	WG1414927
Vinyl chloride	U		0.118	0.500	1	01/21/2020 22:24	WG1414927
Xylenes, Total	U		0.316	1.50	1	01/21/2020 22:24	WG1414927
(S) Toluene-d8	*106*			*80.0-120*		*01/21/2020 22:24*	WG1414927
(S) 4-Bromofluorobenzene	*91.0*			*77.0-126*		*01/21/2020 22:24*	WG1414927
(S) 1,2-Dichloroethane-d4	*105*			*70.0-130*		*01/21/2020 22:24*	WG1414927

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

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MEMORANDUM

TO: Project File **DATE:** February 13, 2020

FROM: Jessie Compeau

SUBJECT: Laboratory Data Validation Review

PROJECT: American Linen Data Validation

PROJECT #: 1413.001.02.501E

TASK: EIM Data Validation Level EPA2A for 1st Quarter 2020 – Groundwater Samples

LAB: Pace Sample Delivery Groups (SDGs): L1180825, L1181649, L1182058, L1182069, L1182482, and L1182486

Thirty-three (33) groundwater samples (including one field duplicate sample), and three trip blanks were collected as part of the Remedial Investigation (RI) first quarter of 2020 groundwater sampling event at the Former American Linen Supply Site, in Seattle, Washington, January 17, and 21-23, 2020. The samples were shipped and delivered to Pace Lab Sciences (Pace) of Mount Juliet, TN for laboratory analysis. Selected samples were analyzed for the following:

- Volatile organic compounds (VOCs) by United States Environmental Protection Agency (USEPA) Method 8260D;
- Total petroleum hydrocarbons as gasoline (TPH-Gx) by NWTPH-Gx per analytical method stipulated by Washington State Department of Ecology;
- VOCs (dissolved gases – methane, ethane, and ethene) by EPA SOP RSK 175;
- Alkalinity by Method 2320 B-2011;
- Anions (chloride, nitrate, and sulfate) by USEPA Method 9056A;
- Total Organic Carbon (TOC) by USEPA Method 9060A; and
- Metals (iron and manganese) by USEPA Method 6020B.

The first quarter of RI sampling was conducted January of 2020. Results are reported in multiple SDGs from Pace. Pace SDGs are reviewed in groups (less than 10 SDGs) for each data validation report. Group 2 analytical results are reported in SDGs L1180825, L1181649, L1182058, L1182069, L1182482, and L1182486. The quality assurance review of the laboratory data associated with Group 2 is summarized below.

DATA QUALIFICATIONS

Guidelines established by USEPA for a limited data validation review of analytical data along with Pace control limit criteria were used to validate the data. The comments presented in this memorandum refer to the laboratory's performance in meeting the quality control criteria

outlined in the USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (USEPA, 2017) and USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Superfund Methods Data Review (USEPA, 2017). Following Guidelines, non-project-specific laboratory duplicates and matrix spike results were not evaluated as part of this data validation.

DATA VALIDATION

Completeness

All samples were collected and analyzed as requested with the following exception:

- SDG L1180825: On January 19, 2020 PES forwarded a revised chain of custody (COC) to Pace. Revised COC includes dates of sample collection, depth of sample collection, and type of sample (grab or composite). No action is taken other than to note this.
- SDG L1180825: Pace was contacted on February 11, 2020 to review the gasoline range organic result for sample MW120-011720. On February 12, 2020 Pace reissued and revised report for SDG L1180825. The revised report includes a sample narrative indicating "no discernible petroleum pattern" for sample MW120-011720. Refer to Compound Identification and Quantitation Limits for additional information.
- SDG L1182482: Pace was contacted on February 11, 2020 to review gasoline range organic results for samples MW-170-012320 and MW-172-012320. On February 12, 2020 Pace reissued and revised report for SDG L1182482. The revised report includes sample narratives indicating "no discernible petroleum pattern" for two samples (MW-170-012320 and MW-172-012320). Refer to Compound Identification and Quantitation Limits for additional information.

Sample Collection and Preservation

Samples were collected in laboratory-supplied sample containers preserved as appropriate for the individual analyses conducted. The samples were packed on ice in coolers and delivered by courier to the analytical laboratory. The laboratory reported that the coolers were received at a cooler temperature less than the recommended temperature preservation of 6°C. Samples were received in good condition. No data were qualified based upon the sample collection and preservation information.

Holding Times

USEPA Method 8260D:
All samples were analyzed for VOCs within the EPA recommended holding time of fourteen days for preserved waters from the date of collection. All holding time criteria are met.

NWTPH-Gx Method:
All samples were analyzed within the WA State recommended holding time of fourteen days for preserved waters from the date of sample collection. All holding time criteria are met.

Dissolved Gases (Methane, Ethane, and Ethene) by RSK 175:
All samples were analyzed within the WA State recommended holding time of fourteen days for preserved waters from the date of sample collection. All holding time criteria are met.

USEPA Method 6020B:
All samples were analyzed within the USEPA recommended holding time for iron and manganese of 180 days for preserved waters from the date of sample collection. All holding time criteria are met.

General Chemistry (Alkalinity, Chloride, Sulfate, Nitrate, and TOC):
All samples were analyzed within the USEPA recommended holding time for alkalinity (14 days), chloride (28 days), sulfate (28 days), and nitrate (48 hours), and TOC (28 days) for preserved waters from the date of sample collection. All holding time criteria are met.

Initial and Continuing Calibration

Calibration data for this project are not required for this deliverable however Pace's notes indicate the following:

- Multiple SDGs - *USEPA Method 8260D:* Continuing calibration verification (CCV) issues were noted by Pace for multiple compounds associated with analytical batches in each SDG. These compounds are qualified by the laboratory "J0" to indicate that percent difference CCV is outside of laboratory acceptance criteria. **Associated sample results with laboratory qualified (J0) results are estimated and qualified (J/UJ).**

Method Blank Results

USEPA Method 8260D:
Laboratory method blanks were included with the analytical batches per method requirement. The target analytes were not detected in the method blanks at or above the reporting detection limits (RDLs) with the following exceptions:

- SDG L1180825 – Analytical batch WG1413866: Low levels of n-butylbenzene, sec-butylbenzene, tert-butylbenzene, hexachloro-1,3-butadiene, p-isopropyltoluene, n-propylbenzene, 1,2,3-trichlorobenzene, 1,2,4-trichlorobenzene, 1,2,4-trimethylbenzene, 1,2,3-trimethylbenzene, and 1,3,5-trimethylbenzene are detected in the method blank. No action is taken for most compounds as these are not detected in the associated samples with the following exceptions:
    - A**ssociated 1,2,4-trimethylbenzene detection in sample SCL-MW105-011720 is below the RDL and qualified as not detected (U).**
    - **Associated 1,3,5-trimethylbenzene detection in sample SCL-MW101-011720 is below the RDL and qualified as not detected (U).**
    - **Associated 1,2,4-trimethylbenzene and 1,2,3-trichlorobenzene detections in sample SMW-3-011720 are below the RDL and qualified as not detected (U).**

- SDG L1181649 – Analytical batch WG1415610: Low levels of 2-butanone (MEK) and naphthalene are detected in the method blank. No action is taken for these compounds as these are not detected in the associated samples.

- SDGs L1182058 and L1182069 – Analytical batch WG1417070: A low level of 1,2,3-trichlorobenzene is detected in the method blank. No action is taken for 1,2,3-trichlorobenzene as it is not detected in the associated samples.

- SDG L1182486 – Analytical batch WG1418320: Low levels of naphthalene and 1,2,4-trimethylbenzene are detected in the method blank. No action is taken for either compound as these are not detected in the associated samples.

- SDG L1181247 – Analytical batch WG1414927: Low levels of naphthalene, and 1,2,3-trichlorobenzene are detected in the method blank. No action is taken for 1,2,3-trichlorobenzene as this compound is not detected in the associated samples. **The associated naphthalene detection in sample MW-214-012020 is below the RDL and qualified as not detected (U).**

NWTPH-Gx Method:
Laboratory method blanks were included with the analytical batches per method requirement. The target analyte (gasoline) was not detected in the method blanks at or above the RDLs with one exception:

- SDG L1180825 – Analytical batch WG1414185: A low level gasoline concentration is detected in the method blank. **The associated gasoline range organic (GRO) detection in sample MW-127-011720 is below the RDL and qualified as not detected (U) due to method or trip blank contamination.**

Dissolved Gases (Methane, Ethane, and Ethene) by RSK 175:
Laboratory method blanks were included with the analytical batches per method requirement. The target analytes (dissolved gases) are not detected in the method blanks at or above the RDLs.

USEPA Method 6020B and General Chemistry (Alkalinity, Chloride, Sulfate, Nitrate, and TOC):
Laboratory method blanks were included with the analytical batches per method requirement. The target analytes were detected in the method blanks below the RDLs. Per Guidance, no action is taken for blank detections less than the RDL when associated sample detections are greater than the RDL. General chemistry and metal blank detections are shown below:

SDG	Batch	Method	Analyte	Method Blank Result	Qualifier	RDL	Units	Associated Result(s) Qualified
L1180825	WG1413490	SM2320B	Alkalinity as CaCO3, Total	4240	J	20000	µg/L	NO
L1180825	WG1413868	SM2320B	Alkalinity as CaCO3, Total	4240	J	20000	µg/L	NO
L1180825	WG1414598	9060A	TOC	349	J	1000	µg/L	NO
L1181649	WG1415297	SM2320B	Alkalinity as CaCO3, Total	4440	J	20000	µg/L	NO
L1181649	WG1415232	9056A	Sulfate	483	J	5000	µg/L	**YES**
L1181649	WG1417179	9060A	TOC	381	J	1000	µg/L	NO

SDG	Batch	Method	Analyte	Method Blank Result	Qualifier	RDL	Units	Associated Result(s) Qualified
L1182058	WG1415814	SM2320B	Alkalinity as CaCO3, Total	3430	J	20000	µg/L	NO
L1182058	WG1415788	9056A	Chloride	88.9	J	1000	µg/L	NO
L1182058	WG1415788	9056A	Nitrate	29.0	J	100	µg/L	**YES**
L1182058	WG1415788	9056A	Sulfate	89.1	J	5000	µg/L	NO
L1182058	WG1417179	9060A	TOC	381	J	1000	µg/L	NO
L1182069	WG1415814	SM2320B	Alkalinity as CaCO3, Total	3430	J	20000	µg/L	NO
L1182069	WG1416132	SM2320B	Alkalinity as CaCO3, Total	3900	J	20000	µg/L	NO
L1182069	WG1415788	9056A	Chloride	88.9	J	1000	µg/L	NO
L1182069	WG1415788	9056A	Nitrate	29.0	J	100	µg/L	**YES**
L1182069	WG1415788	9056A	Sulfate	89.1	J	5000	µg/L	NO
L1182069	WG1417710	9060A	TOC	180	J	1000	µg/L	NO
L1182482	WG1416495	SM2320B	Alkalinity as CaCO3, Total	3450	J	20000	µg/L	NO
L1182482	WG1417710	9060A	TOC	180	J	1000	µg/L	NO
L1182482	WG1416647	6020B	Manganese	0.281	J	5.00	µg/L	NO
L1182486	WG1416495	SM2320B	Alkalinity as CaCO3, Total	3450	J	20000	µg/L	NO
L1182486	WG1417710	9060A	TOC	180	J	1000	µg/L	NO
L1182486	WG1418866	9060A	TOC	301	J	1000	µg/L	NO
L1182486	WG1416647	6020B	Manganese	0.281	J	5.00	µg/L	NO

Target analytes were detected in method blanks at low levels with no impact to the associated samples with the following exception:

- SDG L1181649 – Analytical batch WG1415232: A low level of sulfate is detected in the method blank. **Sample MW109-012120 sulfate result is below the RDL and qualified as not detected (U).**

- SDG L1182058 – Analytical batch WG1415788: A low level of nitrate is detected in the method blank. **Samples MW-142-012220, MW-143-012220, GEI-1-012220, and MW123-012220 nitrate results are below the RDL and are qualified as not detected (U).**

- SDG L1182069 – Analytical batch WG1415788: A low level of nitrate is detected in the method blank. **Samples FMW-142-012220, FMW-140-012220, and GEI-2-012220 nitrate results are below the RDL and are qualified as not detected (U).**

Trip Blank Results

USEPA Method 8260D and NWTPH-Gx:
Four trip blanks were collected and analyzed. The target analytes (gasoline and VOCs) were not detected in the trip blanks at or above the RDLs with the following exceptions:

- SDG L1180825: Low levels of gasoline and hexachloro-1,3-butadiene are detected in the trip blank (TB-011720). **A low level of gasoline is detected in the associated sample MW-127-011720 and is qualified as not detected (U) due to method or trip blank contamination.** No action is taken for the gasoline detection in sample MW120-011720 because the detection is greater than the RDL. No action is taken for hexachloro-1,3-butadiene since it was not detected in the associated samples.

- SDG L1182482: A low level of acetone is detected in the trip blank (TB-012320). No action is necessary since acetone is not detected in the associated samples.

Field, Rinsate, or Equipment Blank Results

All Analytical Methods:
A field, rinsate, or equipment blank was not collected.

Field Duplicate Analyses

Field duplicate pairs were submitted and analyzed. Field duplicate sample pair is as follows:

- SDG L1182482: Samples MW-102-012320 and MW-924-012320

Target analyte results are comparable and within a relative percent difference (RPD) of 30% (± 1x RDL for groundwater results <5X the RDL) for the field duplicate pair.

Laboratory Duplicate Analyses

USEPA Method 8260D:
Laboratory duplicate samples were not analyzed. Refer to laboratory control sample/sample duplicate (LCS/LCSD) or matrix spike/matrix spike duplicate (MS/MSD) results for precision data.

NWTPH-Gx Method:
Laboratory duplicate samples were not analyzed. Refer to laboratory control sample/sample duplicate (LCS/LCSD) or matrix spike/matrix spike duplicate (MS/MSD) results for precision data. In some cases, only LCS data are available (SDGs L1179348, L1179855, and L1181269). No action is taken other than note that precision data are not available for several analytical batches.

Dissolved Gases (Methane, Ethane, and Ethene) by RSK 175:
Laboratory duplicate sample analyses were performed on client and non-client samples within the analytical batches. The primary/duplicate RPDs for dissolved gas analyses are within the laboratory control limit of 20%.

USEPA Method 6020B:
Laboratory duplicate samples were not analyzed. Refer to LCS/LCSD or MS/MSD results for precision data.

General Chemistry (Alkalinity, Chloride, Sulfate, Nitrate, and TOC):
Laboratory duplicate sample analyses were performed on client samples and/or on non-client samples. The primary/duplicate RPDs for general chemistry parameters are within the laboratory control RPD limits or ± 1x RDL for groundwater results <5X the RDL.

Surrogate Recoveries

USEPA Method 8260D:
The surrogate recovery results for the samples, laboratory control samples, matrix spike samples, and the blanks are within the laboratory surrogate control limits for all the analyses.

NWTPH-Gx Method:
The surrogate recovery results for the samples, laboratory control samples, matrix spike samples, and the blanks are within the laboratory surrogate control limits for all analyses.

Laboratory Control Samples

USEPA Method 8260D:
Laboratory control sample/laboratory control sample duplicate (LCS/LCSD) or laboratory control sample (LCS) were analyzed by USEPA Method 8260D method. The LCS % Rs or LCS/LCSD % Rs and RPDs for the all target compounds are within the laboratory control criteria for waters with the following discussion:

- SDG L1181649 - Analytical batch WG1415610: LCS % recoveries for chloromethane and 2,2-dichloropropane are above laboratory acceptance criteria and laboratory qualified (J4). No action is needed because these compounds are not detected in the associated samples.

- SDG L1182486 - Analytical batch WG1418320: LCS % recoveries for 2,2-dichloropropane and naphthalene are above laboratory acceptance criteria and laboratory qualified (J4). No action is needed because these compounds are not detected in the associated samples.

NWTPH-Gx Method:
The LCS % Rs or LCS/LCSD % Rs and RPDs for the target compound (gasoline) are within the laboratory control criteria for waters.

Dissolved Gases (Methane, Ethane, and Ethene) by RSK 175:
The LCS/LCSD % Rs and RPDs for the target compound (dissolved gases) are within the laboratory control criteria for waters.

USEPA Method 6020B:
The LCS/LCSD % Rs and RPDs for the target compound (iron and manganese) are within the laboratory control criteria for waters.

General Chemistry (Alkalinity, Chloride, Sulfate, Nitrate, and TOC):
The LCS % Rs for general chemistry parameters are within the laboratory control criteria for waters.

Matrix Spike/Matrix Spike Duplicates

USEPA Method 8260D:

Matrix spike/matrix spike duplicate (MS/MSD) analyses were not performed. Refer to LCS/LCSD results for accuracy and precision data.

NWTPH-Gx Method:
MS/MSD analyses were performed on non-client samples within several analytical batches. The MS/MSD % Rs and RPD were acceptable and within laboratory control limit criteria for water samples. Refer to LCS/LCSD results for accuracy and precision data.

Dissolved Gases (Methane, Ethane, and Ethene) by RSK 175:
MS/MSD analyses were not performed. Refer to LCS results and field duplicate sample for accuracy and precision data.

USEPA Method 6020B:
MS/MSD analyses were performed on client and/or non-client samples within the analytical batches. The MS/MSD % Rs and RPD were acceptable and within laboratory control limit criteria for water samples with the following discussion:

- SDGs L1181649 and L1182058: Matrix spike analysis was performed on client sample MW109-012120 (SDG L1181649) and manganese MS/MSD recoveries are laboratory qualified (V) to indicate that the sample amount is greater than four times the spike amount. Per Guidance, no action is necessary. Refer to LCS/LCSD results for accuracy and precision data.

General Chemistry (Alkalinity, Chloride, Sulfate, Nitrate, and TOC):
MS or MS/MSD analyses were performed on client and/or non-client samples within the analytical batches. In cases where MS/MSD spike analyses are not performed refer to LCS/LCSD or laboratory duplicate data for accuracy and precision data. The MS/MSD % Rs and RPDs are acceptable and within laboratory control limit criteria for water samples with the following discussions:

- SDG L1180825: Nitrate spike analysis was performed on a non-client sample within the analytical batch. MS/MSD recoveries for nitrate are laboratory qualified (E and J5) because the spiked amount exceeded the upper limit of the calibration limit and sample matrix interference. No action is taken other than to note this. Refer to laboratory duplicate and laboratory control sample results for precision and accuracy data.

- SDG L1181649: Chloride spike analysis was performed on a non-client sample within the analytical batch. MS/MSD recoveries for chloride are laboratory qualified (E) because the spiked amount exceeded the upper limit calibration limit. No action is taken other than to note this.

- SDGs L1182058 and L1182069: Sulfate spike analysis was performed on a non-client sample within the analytical batch. MS/MSD recoveries for sulfate are laboratory qualified (E) because the spiked amount exceeded the upper limit calibration limit. No action is taken other than to note this.

Other Quality Control Issues

No laboratory quality control issues were identified in the laboratory report with the following discussions:

- Multiple SDGs: Selected sample narratives for alkalinity results indicate that several sample containers had some headspace and exposure to air may have impacted the reported results. No action was taken other than to note this.

- Electronic data deliverables (EDDs) for these SDGs were provided by the laboratory and data validator qualifiers were entered. In some cases, different chemical synonyms are used between the EDD and the hardcopy however associated Chemical Abstracts Service (CAS) numbers are provided in the EDD to confirm chemical identifications.

Compound Identification and Quantitation Limits

Results of the analyses were reported based on laboratory RDLs for all compounds. RDLs for selected compounds are elevated due to method-required dilutions. No action is taken other than to note this.

Gasoline and gasoline range organics are analyzed for via Volatile Organic Compounds (GC) by Washington State Method NWTPHGx (using a gas chromatograph/flame ionization detector (GC/FID)) and Pace reported gasoline range organic-NWTPH results. Several chlorinated VOC compounds (including cis-1,2-dichloroethene, trans-1,2-dichloroethene, trichloroethene, tetrachloroethene, and vinyl chloride) elute within the gasoline range organics (GRO) retention time range as specified by Washington State (detections falling between the toluene and dodecane range).

Non-petroleum organics (e.g. chlorinated VOC compounds) eluting within the gasoline range contribute to the GRO result and GRO results are likely biased high (J+). PES requested that Pace evaluate chromatograms associated with positive sample detections to confirm the potential presence of gasoline. Per PES's request Pace reviewed selected sample chromatograms against the gasoline standard chromatograms and assigned "no discernible petroleum pattern to GRO results associated with this Task. PES assigned an additional project level qualifier (Z) to GRO results when the chromatogram for the sample does not match a discernible petroleum pattern. Associated chromatograms and qualified samples for this Task are as follows:

Sample ID	Laboratory Identification	Gasoline Range Organic Result (μg/L)	DV Qualifier	Data Validation Comments	Pace Chromatogram Review Notes
MW120-011720	L1180825-05	124	Z, J+	Elevated chlorinated VOCs detected within the GRO elution range. Blank contamination below the RDL.	No discernible petroleum pattern.
MW-170-012320	L1182482-04	20,000	Z, J+	Elevated chlorinated VOCs detected within the GRO elution range	No discernible petroleum pattern
MW-172-012320	L1182482-06	10,700	Z, J+	Elevated chlorinated VOCs detected within the GRO elution range	No discernible petroleum pattern

Project level qualifiers have been included to the PES's project database (Epiphany) as (ZJ+). Washington State EIM valid values were reviewed. In this case no Washington State EIM valid value descriptor is ideal and the default estimated value (J) has been selected as the best match to qualify GRO (ZJ+) data.

Data Assessment

The laboratory data reported for this project were reviewed based on the criteria outlined in:

- USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (USEPA, 2017); and
- USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Superfund Methods Data Review (USEPA, 2017).

Data qualifiers are assigned and laboratory report pages with qualifiers are attached. All data, including qualified data, are judged to be acceptable for their intended use.

Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	211000		2710	20000	1	01/20/2020 20:23	WG1413490

Sample Narrative:

L1180825-01 WG1413490: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	17900		51.9	1000	1	01/18/2020 20:51	WG1413470
Nitrate	U		22.7	100	1	01/18/2020 20:51	WG1413470
Sulfate	63600		77.4	5000	1	01/18/2020 20:51	WG1413470

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	2790	~~B~~	102	1000	1	01/21/2020 19:56	WG1414598

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	1300		15.0	100	1	01/22/2020 15:37	WG1414411
Manganese	488		0.250	5.00	1	01/22/2020 15:37	WG1414411

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	13.3		0.287	0.678	1	01/22/2020 15:06	WG1415090
Ethane	2.01		0.296	1.29	1	01/22/2020 15:06	WG1415090
Ethene	U		0.422	1.27	1	01/22/2020 15:06	WG1415090

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U		1.05	25.0	1	01/20/2020 13:52	WG1413866
Acrylonitrile	U		0.873	5.00	1	01/20/2020 13:52	WG1413866
Benzene	0.113	J	0.0896	0.500	1	01/20/2020 13:52	WG1413866
Bromobenzene	U		0.133	0.500	1	01/20/2020 13:52	WG1413866
Bromodichloromethane	U		0.0800	0.500	1	01/20/2020 13:52	WG1413866
Bromochloromethane	U		0.145	0.500	1	01/20/2020 13:52	WG1413866
Bromoform	U		0.186	0.500	1	01/20/2020 13:52	WG1413866
Bromomethane	U	UJ J0	0.157	2.50	1	01/20/2020 13:52	WG1413866
n-Butylbenzene	U		0.143	0.500	1	01/24/2020 14:33	WG1416291
sec-Butylbenzene	U		0.134	0.500	1	01/20/2020 13:52	WG1413866
tert-Butylbenzene	U		0.183	0.500	1	01/20/2020 13:52	WG1413866
Carbon disulfide	0.792		0.101	0.500	1	01/20/2020 13:52	WG1413866
Carbon tetrachloride	U		0.159	0.500	1	01/20/2020 13:52	WG1413866
Chlorobenzene	U		0.140	0.500	1	01/20/2020 13:52	WG1413866
Chlorodibromomethane	U		0.128	0.500	1	01/20/2020 13:52	WG1413866
Chloroethane	U	UJ J0	0.141	2.50	1	01/20/2020 13:52	WG1413866
Chloroform	U		0.0860	0.500	1	01/20/2020 13:52	WG1413866
Chloromethane	U		0.153	1.25	1	01/20/2020 13:52	WG1413866
2-Chlorotoluene	U		0.111	0.500	1	01/20/2020 13:52	WG1413866
4-Chlorotoluene	U		0.0972	0.500	1	01/20/2020 13:52	WG1413866

JC 2/5/2020

MW-326-011720

Collected date/time: 01/17/20 09:11

SAMPLE RESULTS - 01

L1180825

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	01/20/2020 13:52	WG1413866
1,2-Dibromoethane	U		0.193	0.500	1	01/20/2020 13:52	WG1413866
Dibromomethane	U		0.117	0.500	1	01/20/2020 13:52	WG1413866
1,2-Dichlorobenzene	U		0.101	0.500	1	01/20/2020 13:52	WG1413866
1,3-Dichlorobenzene	U		0.130	0.500	1	01/20/2020 13:52	WG1413866
1,4-Dichlorobenzene	U		0.121	0.500	1	01/20/2020 13:52	WG1413866
Dichlorodifluoromethane	U		0.127	2.50	1	01/20/2020 13:52	WG1413866
1,1-Dichloroethane	U		0.114	0.500	1	01/20/2020 13:52	WG1413866
1,2-Dichloroethane	U		0.108	0.500	1	01/20/2020 13:52	WG1413866
1,1-Dichloroethene	U		0.188	0.500	1	01/20/2020 13:52	WG1413866
cis-1,2-Dichloroethene	9.38		0.0933	0.500	1	01/20/2020 13:52	WG1413866
trans-1,2-Dichloroethene	U		0.152	0.500	1	01/20/2020 13:52	WG1413866
1,2-Dichloropropane	U		0.190	0.500	1	01/20/2020 13:52	WG1413866
1,1-Dichloropropene	U		0.128	0.500	1	01/20/2020 13:52	WG1413866
1,3-Dichloropropane	U		0.147	1.00	1	01/20/2020 13:52	WG1413866
cis-1,3-Dichloropropene	U		0.0976	0.500	1	01/20/2020 13:52	WG1413866
trans-1,3-Dichloropropene	U		0.222	0.500	1	01/20/2020 13:52	WG1413866
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	01/20/2020 13:52	WG1413866
2,2-Dichloropropane	U		0.0929	0.500	1	01/20/2020 13:52	WG1413866
Di-isopropyl ether	U		0.0924	0.500	1	01/20/2020 13:52	WG1413866
Ethylbenzene	U		0.158	0.500	1	01/20/2020 13:52	WG1413866
Hexachloro-1,3-butadiene	U UJ	J0	0.157	1.00	1	01/24/2020 14:33	WG1416291
2-Hexanone	U		0.757	5.00	1	01/20/2020 13:52	WG1413866
n-Hexane	0.371	J	0.305	5.00	1	01/20/2020 13:52	WG1413866
Iodomethane	U		0.377	10.0	1	01/20/2020 13:52	WG1413866
Isopropylbenzene	U		0.126	0.500	1	01/20/2020 13:52	WG1413866
p-Isopropyltoluene	U		0.138	0.500	1	01/20/2020 13:52	WG1413866
2-Butanone (MEK)	U		1.28	5.00	1	01/20/2020 13:52	WG1413866
Methylene Chloride	U		1.07	2.50	1	01/20/2020 13:52	WG1413866
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	01/20/2020 13:52	WG1413866
Methyl tert-butyl ether	U		0.102	0.500	1	01/20/2020 13:52	WG1413866
Naphthalene	U		0.174	2.50	1	01/20/2020 13:52	WG1413866
n-Propylbenzene	U		0.162	0.500	1	01/20/2020 13:52	WG1413866
Styrene	U		0.117	0.500	1	01/20/2020 13:52	WG1413866
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	01/20/2020 13:52	WG1413866
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	01/20/2020 13:52	WG1413866
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	01/20/2020 13:52	WG1413866
Tetrachloroethene	0.834		0.199	0.500	1	01/20/2020 13:52	WG1413866
Toluene	U		0.412	0.500	1	01/20/2020 13:52	WG1413866
1,2,3-Trichlorobenzene	U		0.164	0.500	1	01/20/2020 13:52	WG1413866
1,2,4-Trichlorobenzene	U		0.355	0.500	1	01/20/2020 13:52	WG1413866
1,1,1-Trichloroethane	U		0.0940	0.500	1	01/20/2020 13:52	WG1413866
1,1,2-Trichloroethane	U		0.186	0.500	1	01/20/2020 13:52	WG1413866
Trichloroethene	0.470	J	0.153	0.500	1	01/20/2020 13:52	WG1413866
Trichlorofluoromethane	U		0.130	2.50	1	01/20/2020 13:52	WG1413866
1,2,3-Trichloropropane	U		0.247	2.50	1	01/20/2020 13:52	WG1413866
1,2,4-Trimethylbenzene	U		0.123	0.500	1	01/20/2020 13:52	WG1413866
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	01/20/2020 13:52	WG1413866
1,3,5-Trimethylbenzene	U		0.124	0.500	1	01/20/2020 13:52	WG1413866
Vinyl acetate	U		0.645	5.00	1	01/20/2020 13:52	WG1413866
Vinyl chloride	U UJ	J0	0.118	0.500	1	01/20/2020 13:52	WG1413866
Xylenes, Total	U		0.316	1.50	1	01/20/2020 13:52	WG1413866
(S) Toluene-d8	*97.7*			*80.0-120*		*01/20/2020 13:52*	WG1413866
(S) Toluene-d8	*103*			*80.0-120*		*01/24/2020 14:33*	WG1416291
(S) 4-Bromofluorobenzene	*97.9*			*77.0-126*		*01/20/2020 13:52*	WG1413866
(S) 4-Bromofluorobenzene	*111*			*77.0-126*		*01/24/2020 14:33*	WG1416291

JC 2/5/2020

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

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
(S) 1,2-Dichloroethane-d4	*98.1*			*70.0-130*		*01/20/2020 13:52*	WG1413866
(S) 1,2-Dichloroethane-d4	*106*			*70.0-130*		*01/24/2020 14:33*	WG1416291

JC 2/5/2020

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

Wet Chemistry by Method 2320 B-2011

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Alkalinity	177000		2710	20000	1	01/20/2020 20:32	WG1413490

Sample Narrative:

L1180825-02 WG1413490: Endpoint pH 4.5

Wet Chemistry by Method 9056A

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Chloride	7560		51.9	1000	1	01/18/2020 21:24	WG1413470
Nitrate	U		22.7	100	1	01/18/2020 21:24	WG1413470
Sulfate	6070		77.4	5000	1	01/18/2020 21:24	WG1413470

Wet Chemistry by Method 9060A

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
TOC (Total Organic Carbon)	1210	~~B~~	102	1000	1	01/21/2020 20:09	WG1414598

Metals (ICPMS) by Method 6020B

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Iron	152		15.0	100	1	01/22/2020 15:50	WG1414411
Manganese	477		0.250	5.00	1	01/22/2020 15:50	WG1414411

Volatile Organic Compounds (GC) by Method RSK175

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Methane	149		0.287	0.678	1	01/22/2020 15:40	WG1415090
Ethane	U		0.296	1.29	1	01/22/2020 15:40	WG1415090
Ethene	U		0.422	1.27	1	01/22/2020 15:40	WG1415090

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

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Acetone	U		1.05	25.0	1	01/20/2020 14:14	WG1413866
Acrylonitrile	U		0.873	5.00	1	01/20/2020 14:14	WG1413866
Benzene	U		0.0896	0.500	1	01/20/2020 14:14	WG1413866
Bromobenzene	U		0.133	0.500	1	01/20/2020 14:14	WG1413866
Bromodichloromethane	U		0.0800	0.500	1	01/20/2020 14:14	WG1413866
Bromochloromethane	U		0.145	0.500	1	01/20/2020 14:14	WG1413866
Bromoform	U		0.186	0.500	1	01/20/2020 14:14	WG1413866
Bromomethane	U	UJ J0	0.157	2.50	1	01/20/2020 14:14	WG1413866
n-Butylbenzene	U		0.143	0.500	1	01/20/2020 14:14	WG1413866
sec-Butylbenzene	U		0.134	0.500	1	01/20/2020 14:14	WG1413866
tert-Butylbenzene	U		0.183	0.500	1	01/20/2020 14:14	WG1413866
Carbon disulfide	U		0.101	0.500	1	01/20/2020 14:14	WG1413866
Carbon tetrachloride	U		0.159	0.500	1	01/20/2020 14:14	WG1413866
Chlorobenzene	U		0.140	0.500	1	01/20/2020 14:14	WG1413866
Chlorodibromomethane	U		0.128	0.500	1	01/20/2020 14:14	WG1413866
Chloroethane	U	UJ J0	0.141	2.50	1	01/20/2020 14:14	WG1413866
Chloroform	U		0.0860	0.500	1	01/20/2020 14:14	WG1413866
Chloromethane	U		0.153	1.25	1	01/20/2020 14:14	WG1413866
2-Chlorotoluene	U		0.111	0.500	1	01/20/2020 14:14	WG1413866
4-Chlorotoluene	U		0.0972	0.500	1	01/20/2020 14:14	WG1413866

JC 2/5/2020

MW122-011720

Collected date/time: 01/17/20 09:15

SAMPLE RESULTS - 02

L1180825

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

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch	
Analyte	ug/l		ug/l	ug/l		date / time		
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	01/20/2020 14:14	WG1413866	
1,2-Dibromoethane	U		0.193	0.500	1	01/20/2020 14:14	WG1413866	
Dibromomethane	U		0.117	0.500	1	01/20/2020 14:14	WG1413866	
1,2-Dichlorobenzene	U		0.101	0.500	1	01/20/2020 14:14	WG1413866	
1,3-Dichlorobenzene	U		0.130	0.500	1	01/20/2020 14:14	WG1413866	
1,4-Dichlorobenzene	U		0.121	0.500	1	01/20/2020 14:14	WG1413866	
Dichlorodifluoromethane	U		0.127	2.50	1	01/20/2020 14:14	WG1413866	
1,1-Dichloroethane	U		0.114	0.500	1	01/20/2020 14:14	WG1413866	
1,2-Dichloroethane	U		0.108	0.500	1	01/20/2020 14:14	WG1413866	
1,1-Dichloroethene	U		0.188	0.500	1	01/20/2020 14:14	WG1413866	
cis-1,2-Dichloroethene	U		0.0933	0.500	1	01/20/2020 14:14	WG1413866	
trans-1,2-Dichloroethene	U		0.152	0.500	1	01/20/2020 14:14	WG1413866	
1,2-Dichloropropane	U		0.190	0.500	1	01/20/2020 14:14	WG1413866	
1,1-Dichloropropene	U		0.128	0.500	1	01/20/2020 14:14	WG1413866	
1,3-Dichloropropane	U		0.147	1.00	1	01/20/2020 14:14	WG1413866	
cis-1,3-Dichloropropene	U		0.0976	0.500	1	01/20/2020 14:14	WG1413866	
trans-1,3-Dichloropropene	U		0.222	0.500	1	01/20/2020 14:14	WG1413866	
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	01/20/2020 14:14	WG1413866	
2,2-Dichloropropane	U		0.0929	0.500	1	01/20/2020 14:14	WG1413866	
Di-isopropyl ether	U		0.0924	0.500	1	01/20/2020 14:14	WG1413866	
Ethylbenzene	U		0.158	0.500	1	01/20/2020 14:14	WG1413866	
Hexachloro-1,3-butadiene	U UJ	J0	0.157	1.00	1	01/24/2020 14:53	WG1416291	
2-Hexanone	U		0.757	5.00	1	01/20/2020 14:14	WG1413866	
n-Hexane	U		0.305	5.00	1	01/20/2020 14:14	WG1413866	
Iodomethane	U		0.377	10.0	1	01/20/2020 14:14	WG1413866	
Isopropylbenzene	U		0.126	0.500	1	01/20/2020 14:14	WG1413866	
p-Isopropyltoluene	U		0.138	0.500	1	01/20/2020 14:14	WG1413866	
2-Butanone (MEK)	U		1.28	5.00	1	01/20/2020 14:14	WG1413866	
Methylene Chloride	U		1.07	2.50	1	01/20/2020 14:14	WG1413866	
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	01/20/2020 14:14	WG1413866	
Methyl tert-butyl ether	U		0.102	0.500	1	01/20/2020 14:14	WG1413866	
Naphthalene	U		0.174	2.50	1	01/20/2020 14:14	WG1413866	
n-Propylbenzene	U		0.162	0.500	1	01/20/2020 14:14	WG1413866	
Styrene	U		0.117	0.500	1	01/20/2020 14:14	WG1413866	
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	01/20/2020 14:14	WG1413866	
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	01/20/2020 14:14	WG1413866	
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	01/20/2020 14:14	WG1413866	
Tetrachloroethene	U		0.199	0.500	1	01/20/2020 14:14	WG1413866	
Toluene	U		0.412	0.500	1	01/20/2020 14:14	WG1413866	
1,2,3-Trichlorobenzene	U		0.164	0.500	1	01/20/2020 14:14	WG1413866	
1,2,4-Trichlorobenzene	U		0.355	0.500	1	01/20/2020 14:14	WG1413866	
1,1,1-Trichloroethane	U		0.0940	0.500	1	01/20/2020 14:14	WG1413866	
1,1,2-Trichloroethane	U		0.186	0.500	1	01/20/2020 14:14	WG1413866	
Trichloroethene	U		0.153	0.500	1	01/20/2020 14:14	WG1413866	
Trichlorofluoromethane	U		0.130	2.50	1	01/20/2020 14:14	WG1413866	
1,2,3-Trichloropropane	U		0.247	2.50	1	01/20/2020 14:14	WG1413866	
1,2,4-Trimethylbenzene	U		0.123	0.500	1	01/20/2020 14:14	WG1413866	
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	01/20/2020 14:14	WG1413866	
1,3,5-Trimethylbenzene	U		0.124	0.500	1	01/20/2020 14:14	WG1413866	
Vinyl acetate	U		0.645	5.00	1	01/20/2020 14:14	WG1413866	
Vinyl chloride	U UJ	J0	0.118	0.500	1	01/20/2020 14:14	WG1413866	
Xylenes, Total	U		0.316	1.50	1	01/20/2020 14:14	WG1413866	
(S) Toluene-d8	*95.8*			*80.0-120*		*01/20/2020 14:14*	WG1413866	
(S) Toluene-d8	*89.9*			*80.0-120*		*01/24/2020 14:53*	WG1416291	JC 2/5/2020
(S) 4-Bromofluorobenzene	*92.7*			*77.0-126*		*01/20/2020 14:14*	WG1413866	
(S) 4-Bromofluorobenzene	*90.6*			*77.0-126*		*01/24/2020 14:53*	WG1416291	

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
(S) 1,2-Dichloroethane-d4	*97.2*			*70.0-130*		*01/20/2020 14:14*	WG1413866
(S) 1,2-Dichloroethane-d4	*99.9*			*70.0-130*		*01/24/2020 14:53*	WG1416291

JC 2/5/2020

Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	175000		2710	20000	1	01/20/2020 21:38	WG1413490

Sample Narrative:

L1180825-03 WG1413490: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	20700		51.9	1000	1	01/18/2020 19:45	WG1413470
Nitrate	1590		22.7	100	1	01/18/2020 19:45	WG1413470
Sulfate	93500		77.4	5000	1	01/18/2020 19:45	WG1413470

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	4190		102	1000	1	01/21/2020 21:47	WG1414598

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	802		15.0	100	1	01/22/2020 15:53	WG1414411
Manganese	525		0.250	5.00	1	01/22/2020 15:53	WG1414411

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	4.04		0.287	0.678	1	01/22/2020 15:20	WG1415090
Ethane	U		0.296	1.29	1	01/22/2020 15:20	WG1415090
Ethene	U		0.422	1.27	1	01/22/2020 15:20	WG1415090

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U		1.05	25.0	1	01/20/2020 14:35	WG1413866
Acrylonitrile	U		0.873	5.00	1	01/20/2020 14:35	WG1413866
Benzene	U		0.0896	0.500	1	01/20/2020 14:35	WG1413866
Bromobenzene	U		0.133	0.500	1	01/20/2020 14:35	WG1413866
Bromodichloromethane	U		0.0800	0.500	1	01/20/2020 14:35	WG1413866
Bromochloromethane	U		0.145	0.500	1	01/20/2020 14:35	WG1413866
Bromoform	U		0.186	0.500	1	01/20/2020 14:35	WG1413866
Bromomethane	U	UJ J0	0.157	2.50	1	01/20/2020 14:35	WG1413866
n-Butylbenzene	U		0.143	0.500	1	01/20/2020 14:35	WG1413866
sec-Butylbenzene	U		0.134	0.500	1	01/20/2020 14:35	WG1413866
tert-Butylbenzene	U		0.183	0.500	1	01/20/2020 14:35	WG1413866
Carbon disulfide	U		0.101	0.500	1	01/20/2020 14:35	WG1413866
Carbon tetrachloride	U		0.159	0.500	1	01/20/2020 14:35	WG1413866
Chlorobenzene	U		0.140	0.500	1	01/20/2020 14:35	WG1413866
Chlorodibromomethane	U		0.128	0.500	1	01/20/2020 14:35	WG1413866
Chloroethane	U	UJ J0	0.141	2.50	1	01/20/2020 14:35	WG1413866
Chloroform	U		0.0860	0.500	1	01/20/2020 14:35	WG1413866
Chloromethane	U		0.153	1.25	1	01/20/2020 14:35	WG1413866
2-Chlorotoluene	U		0.111	0.500	1	01/20/2020 14:35	WG1413866
4-Chlorotoluene	U		0.0972	0.500	1	01/20/2020 14:35	WG1413866

JC 2/5/2020

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

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

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	01/20/2020 14:35	WG1413866
1,2-Dibromoethane	U		0.193	0.500	1	01/20/2020 14:35	WG1413866
Dibromomethane	U		0.117	0.500	1	01/20/2020 14:35	WG1413866
1,2-Dichlorobenzene	U		0.101	0.500	1	01/20/2020 14:35	WG1413866
1,3-Dichlorobenzene	U		0.130	0.500	1	01/20/2020 14:35	WG1413866
1,4-Dichlorobenzene	U		0.121	0.500	1	01/20/2020 14:35	WG1413866
Dichlorodifluoromethane	U		0.127	2.50	1	01/20/2020 14:35	WG1413866
1,1-Dichloroethane	U		0.114	0.500	1	01/20/2020 14:35	WG1413866
1,2-Dichloroethane	U		0.108	0.500	1	01/20/2020 14:35	WG1413866
1,1-Dichloroethene	U		0.188	0.500	1	01/20/2020 14:35	WG1413866
cis-1,2-Dichloroethene	U		0.0933	0.500	1	01/20/2020 14:35	WG1413866
trans-1,2-Dichloroethene	U		0.152	0.500	1	01/20/2020 14:35	WG1413866
1,2-Dichloropropane	U		0.190	0.500	1	01/20/2020 14:35	WG1413866
1,1-Dichloropropene	U		0.128	0.500	1	01/20/2020 14:35	WG1413866
1,3-Dichloropropane	U		0.147	1.00	1	01/20/2020 14:35	WG1413866
cis-1,3-Dichloropropene	U		0.0976	0.500	1	01/20/2020 14:35	WG1413866
trans-1,3-Dichloropropene	U		0.222	0.500	1	01/20/2020 14:35	WG1413866
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	01/20/2020 14:35	WG1413866
2,2-Dichloropropane	U		0.0929	0.500	1	01/20/2020 14:35	WG1413866
Di-isopropyl ether	U		0.0924	0.500	1	01/20/2020 14:35	WG1413866
Ethylbenzene	U		0.158	0.500	1	01/20/2020 14:35	WG1413866
Hexachloro-1,3-butadiene	U UJ	J0	0.157	1.00	1	01/24/2020 15:13	WG1416291
2-Hexanone	U		0.757	5.00	1	01/20/2020 14:35	WG1413866
n-Hexane	U		0.305	5.00	1	01/20/2020 14:35	WG1413866
Iodomethane	U		0.377	10.0	1	01/20/2020 14:35	WG1413866
Isopropylbenzene	U		0.126	0.500	1	01/20/2020 14:35	WG1413866
p-Isopropyltoluene	U		0.138	0.500	1	01/20/2020 14:35	WG1413866
2-Butanone (MEK)	U		1.28	5.00	1	01/20/2020 14:35	WG1413866
Methylene Chloride	U		1.07	2.50	1	01/20/2020 14:35	WG1413866
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	01/20/2020 14:35	WG1413866
Methyl tert-butyl ether	U		0.102	0.500	1	01/20/2020 14:35	WG1413866
Naphthalene	U		0.174	2.50	1	01/20/2020 14:35	WG1413866
n-Propylbenzene	U		0.162	0.500	1	01/20/2020 14:35	WG1413866
Styrene	U		0.117	0.500	1	01/20/2020 14:35	WG1413866
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	01/20/2020 14:35	WG1413866
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	01/20/2020 14:35	WG1413866
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	01/20/2020 14:35	WG1413866
Tetrachloroethene	U		0.199	0.500	1	01/20/2020 14:35	WG1413866
Toluene	U		0.412	0.500	1	01/20/2020 14:35	WG1413866
1,2,3-Trichlorobenzene	U		0.164	0.500	1	01/20/2020 14:35	WG1413866
1,2,4-Trichlorobenzene	U		0.355	0.500	1	01/20/2020 14:35	WG1413866
1,1,1-Trichloroethane	U		0.0940	0.500	1	01/20/2020 14:35	WG1413866
1,1,2-Trichloroethane	U		0.186	0.500	1	01/20/2020 14:35	WG1413866
Trichloroethene	U		0.153	0.500	1	01/20/2020 14:35	WG1413866
Trichlorofluoromethane	U		0.130	2.50	1	01/20/2020 14:35	WG1413866
1,2,3-Trichloropropane	U		0.247	2.50	1	01/20/2020 14:35	WG1413866
1,2,4-Trimethylbenzene	U		0.123	0.500	1	01/20/2020 14:35	WG1413866
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	01/20/2020 14:35	WG1413866
1,3,5-Trimethylbenzene	U		0.124	0.500	1	01/20/2020 14:35	WG1413866
Vinyl acetate	U		0.645	5.00	1	01/20/2020 14:35	WG1413866
Vinyl chloride	U UJ	J0	0.118	0.500	1	01/20/2020 14:35	WG1413866
Xylenes, Total	U		0.316	1.50	1	01/20/2020 14:35	WG1413866
(S) Toluene-d8	*97.8*			*80.0-120*		*01/20/2020 14:35*	WG1413866
(S) Toluene-d8	*95.8*			*80.0-120*		*01/24/2020 15:13*	WG1416291
(S) 4-Bromofluorobenzene	*94.5*			*77.0-126*		*01/20/2020 14:35*	WG1413866
(S) 4-Bromofluorobenzene	*114*			*77.0-126*		*01/24/2020 15:13*	WG1416291

JC 2/5/2020

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

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
(S) 1,2-Dichloroethane-d4	*98.6*			*70.0-130*		*01/20/2020 14:35*	WG1413866
(S) 1,2-Dichloroethane-d4	*105*			*70.0-130*		*01/24/2020 15:13*	WG1416291

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

JC 2/5/2020

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

Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	205000		2710	20000	1	01/20/2020 21:48	WG1413490

Sample Narrative:

L1180825-04 WG1413490: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	26600		51.9	1000	1	01/18/2020 22:13	WG1413470
Nitrate	U		22.7	100	1	01/18/2020 22:13	WG1413470
Sulfate	U		77.4	5000	1	01/18/2020 22:13	WG1413470

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	3750		102	1000	1	01/21/2020 22:03	WG1414598

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	9970		15.0	100	1	01/22/2020 15:57	WG1414411
Manganese	614		0.250	5.00	1	01/22/2020 15:57	WG1414411

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	15000		2.87	6.78	10	01/22/2020 16:17	WG1415348
Ethane	U		0.296	1.29	1	01/22/2020 15:23	WG1415090
Ethene	U		0.422	1.27	1	01/22/2020 15:23	WG1415090

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U		1.05	25.0	1	01/20/2020 15:46	WG1413866
Acrylonitrile	U		0.873	5.00	1	01/20/2020 15:46	WG1413866
Benzene	U		0.0896	0.500	1	01/20/2020 15:46	WG1413866
Bromobenzene	U		0.133	0.500	1	01/20/2020 15:46	WG1413866
Bromodichloromethane	U		0.0800	0.500	1	01/20/2020 15:46	WG1413866
Bromochloromethane	U		0.145	0.500	1	01/20/2020 15:46	WG1413866
Bromoform	U		0.186	0.500	1	01/20/2020 15:46	WG1413866
Bromomethane	U UJ	J0	0.157	2.50	1	01/20/2020 15:46	WG1413866
n-Butylbenzene	U		0.143	0.500	1	01/20/2020 15:46	WG1413866
sec-Butylbenzene	U		0.134	0.500	1	01/20/2020 15:46	WG1413866
tert-Butylbenzene	U		0.183	0.500	1	01/20/2020 15:46	WG1413866
Carbon disulfide	U		0.101	0.500	1	01/20/2020 15:46	WG1413866
Carbon tetrachloride	U		0.159	0.500	1	01/20/2020 15:46	WG1413866
Chlorobenzene	U		0.140	0.500	1	01/20/2020 15:46	WG1413866
Chlorodibromomethane	U		0.128	0.500	1	01/20/2020 15:46	WG1413866
Chloroethane	U UJ	J0	0.141	2.50	1	01/20/2020 15:46	WG1413866
Chloroform	U		0.0860	0.500	1	01/20/2020 15:46	WG1413866
Chloromethane	U		0.153	1.25	1	01/20/2020 15:46	WG1413866
2-Chlorotoluene	U		0.111	0.500	1	01/20/2020 15:46	WG1413866
4-Chlorotoluene	U		0.0972	0.500	1	01/20/2020 15:46	WG1413866

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	01/20/2020 15:46	WG1413866
1,2-Dibromoethane	U		0.193	0.500	1	01/20/2020 15:46	WG1413866
Dibromomethane	U		0.117	0.500	1	01/20/2020 15:46	WG1413866
1,2-Dichlorobenzene	U		0.101	0.500	1	01/20/2020 15:46	WG1413866
1,3-Dichlorobenzene	U		0.130	0.500	1	01/20/2020 15:46	WG1413866
1,4-Dichlorobenzene	U		0.121	0.500	1	01/20/2020 15:46	WG1413866
Dichlorodifluoromethane	U		0.127	2.50	1	01/20/2020 15:46	WG1413866
1,1-Dichloroethane	U		0.114	0.500	1	01/20/2020 15:46	WG1413866
1,2-Dichloroethane	U		0.108	0.500	1	01/20/2020 15:46	WG1413866
1,1-Dichloroethene	U		0.188	0.500	1	01/20/2020 15:46	WG1413866
cis-1,2-Dichloroethene	U		0.0933	0.500	1	01/20/2020 15:46	WG1413866
trans-1,2-Dichloroethene	U		0.152	0.500	1	01/20/2020 15:46	WG1413866
1,2-Dichloropropane	U		0.190	0.500	1	01/20/2020 15:46	WG1413866
1,1-Dichloropropene	U		0.128	0.500	1	01/20/2020 15:46	WG1413866
1,3-Dichloropropane	U		0.147	1.00	1	01/20/2020 15:46	WG1413866
cis-1,3-Dichloropropene	U		0.0976	0.500	1	01/20/2020 15:46	WG1413866
trans-1,3-Dichloropropene	U		0.222	0.500	1	01/20/2020 15:46	WG1413866
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	01/20/2020 15:46	WG1413866
2,2-Dichloropropane	U		0.0929	0.500	1	01/20/2020 15:46	WG1413866
Di-isopropyl ether	U		0.0924	0.500	1	01/20/2020 15:46	WG1413866
Ethylbenzene	U		0.158	0.500	1	01/20/2020 15:46	WG1413866
Hexachloro-1,3-butadiene	U		0.157	1.00	1	01/20/2020 15:46	WG1413866
2-Hexanone	U		0.757	5.00	1	01/20/2020 15:46	WG1413866
n-Hexane	U		0.305	5.00	1	01/20/2020 15:46	WG1413866
Iodomethane	U		0.377	10.0	1	01/20/2020 15:46	WG1413866
Isopropylbenzene	U		0.126	0.500	1	01/20/2020 15:46	WG1413866
p-Isopropyltoluene	U		0.138	0.500	1	01/20/2020 15:46	WG1413866
2-Butanone (MEK)	U		1.28	5.00	1	01/20/2020 15:46	WG1413866
Methylene Chloride	U		1.07	2.50	1	01/20/2020 15:46	WG1413866
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	01/20/2020 15:46	WG1413866
Methyl tert-butyl ether	U		0.102	0.500	1	01/20/2020 15:46	WG1413866
Naphthalene	U		0.174	2.50	1	01/20/2020 15:46	WG1413866
n-Propylbenzene	U		0.162	0.500	1	01/20/2020 15:46	WG1413866
Styrene	U		0.117	0.500	1	01/20/2020 15:46	WG1413866
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	01/20/2020 15:46	WG1413866
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	01/20/2020 15:46	WG1413866
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	01/20/2020 15:46	WG1413866
Tetrachloroethene	U		0.199	0.500	1	01/20/2020 15:46	WG1413866
Toluene	U		0.412	0.500	1	01/20/2020 15:46	WG1413866
1,2,3-Trichlorobenzene	U		0.164	0.500	1	01/20/2020 15:46	WG1413866
1,2,4-Trichlorobenzene	U		0.355	0.500	1	01/20/2020 15:46	WG1413866
1,1,1-Trichloroethane	U		0.0940	0.500	1	01/20/2020 15:46	WG1413866
1,1,2-Trichloroethane	U		0.186	0.500	1	01/20/2020 15:46	WG1413866
Trichloroethene	U		0.153	0.500	1	01/20/2020 15:46	WG1413866
Trichlorofluoromethane	U		0.130	2.50	1	01/20/2020 15:46	WG1413866
1,2,3-Trichloropropane	U		0.247	2.50	1	01/20/2020 15:46	WG1413866
1,2,4-Trimethylbenzene	U		0.123	0.500	1	01/20/2020 15:46	WG1413866
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	01/20/2020 15:46	WG1413866
1,3,5-Trimethylbenzene	U		0.124	0.500	1	01/20/2020 15:46	WG1413866
Vinyl acetate	U		0.645	5.00	1	01/20/2020 15:46	WG1413866
Vinyl chloride	U	UJ J0	0.118	0.500	1	01/20/2020 15:46	WG1413866
Xylenes, Total	U		0.316	1.50	1	01/20/2020 15:46	WG1413866
(S) Toluene-d8	*94.5*			*80.0-120*		*01/20/2020 15:46*	WG1413866
(S) 4-Bromofluorobenzene	*118*			*77.0-126*		*01/20/2020 15:46*	WG1413866
(S) 1,2-Dichloroethane-d4	*99.2*			*70.0-130*		*01/20/2020 15:46*	WG1413866

JC 2/5/2020

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

Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	296000		2710	20000	1	01/20/2020 21:19	WG1413490

Sample Narrative:

L1180825-05 WG1413490: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	20900		51.9	1000	1	01/18/2020 22:29	WG1413470
Nitrate	U		22.7	100	1	01/18/2020 22:29	WG1413470
Sulfate	125000		155	10000	2	01/19/2020 13:47	WG1413470

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	3050	~~B~~	102	1000	1	01/21/2020 22:17	WG1414598

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	1590		15.0	100	1	01/22/2020 16:10	WG1414411
Manganese	707		0.250	5.00	1	01/22/2020 16:10	WG1414411

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	124 Z,J+	B	31.6	100	1	01/21/2020 18:22	WG1414185
(S) a,a,a-Trifluorotoluene(FID)	*102*			*78.0-120*		*01/21/2020 18:22*	WG1414185

Sample Narrative:

L1180825-05 WG1414185: No discernable petroleum pattern.

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	104		0.287	0.678	1	01/22/2020 15:26	WG1415090
Ethane	2.53		0.296	1.29	1	01/22/2020 15:26	WG1415090
Ethene	U		0.422	1.27	1	01/22/2020 15:26	WG1415090

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U		1.05	25.0	1	01/20/2020 16:08	WG1413866
Acrylonitrile	U		0.873	5.00	1	01/20/2020 16:08	WG1413866
Benzene	0.0983	J	0.0896	0.500	1	01/20/2020 16:08	WG1413866
Bromobenzene	U		0.133	0.500	1	01/20/2020 16:08	WG1413866
Bromodichloromethane	U		0.0800	0.500	1	01/20/2020 16:08	WG1413866
Bromochloromethane	U		0.145	0.500	1	01/20/2020 16:08	WG1413866
Bromoform	U		0.186	0.500	1	01/20/2020 16:08	WG1413866
Bromomethane	U UJ	J0	0.157	2.50	1	01/20/2020 16:08	WG1413866
n-Butylbenzene	U		0.143	0.500	1	01/20/2020 16:08	WG1413866
sec-Butylbenzene	U		0.134	0.500	1	01/20/2020 16:08	WG1413866

JC 2/12/2020

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
tert-Butylbenzene	U		0.183	0.500	1	01/20/2020 16:08	WG1413866
Carbon disulfide	U		0.101	0.500	1	01/20/2020 16:08	WG1413866
Carbon tetrachloride	U		0.159	0.500	1	01/20/2020 16:08	WG1413866
Chlorobenzene	U		0.140	0.500	1	01/20/2020 16:08	WG1413866
Chlorodibromomethane	U		0.128	0.500	1	01/20/2020 16:08	WG1413866
Chloroethane	U UJ	J0	0.141	2.50	1	01/20/2020 16:08	WG1413866
Chloroform	U		0.0860	0.500	1	01/20/2020 16:08	WG1413866
Chloromethane	U		0.153	1.25	1	01/20/2020 16:08	WG1413866
2-Chlorotoluene	U		0.111	0.500	1	01/20/2020 16:08	WG1413866
4-Chlorotoluene	U		0.0972	0.500	1	01/20/2020 16:08	WG1413866
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	01/20/2020 16:08	WG1413866
1,2-Dibromoethane	U		0.193	0.500	1	01/20/2020 16:08	WG1413866
Dibromomethane	U		0.117	0.500	1	01/20/2020 16:08	WG1413866
1,2-Dichlorobenzene	U		0.101	0.500	1	01/20/2020 16:08	WG1413866
1,3-Dichlorobenzene	U		0.130	0.500	1	01/20/2020 16:08	WG1413866
1,4-Dichlorobenzene	U		0.121	0.500	1	01/20/2020 16:08	WG1413866
Dichlorodifluoromethane	U		0.127	2.50	1	01/20/2020 16:08	WG1413866
1,1-Dichloroethane	1.80		0.114	0.500	1	01/20/2020 16:08	WG1413866
1,2-Dichloroethane	0.751		0.108	0.500	1	01/20/2020 16:08	WG1413866
1,1-Dichloroethene	0.586		0.188	0.500	1	01/20/2020 16:08	WG1413866
cis-1,2-Dichloroethene	45.0		0.0933	0.500	1	01/20/2020 16:08	WG1413866
trans-1,2-Dichloroethene	0.241	J	0.152	0.500	1	01/20/2020 16:08	WG1413866
1,2-Dichloropropane	1.20		0.190	0.500	1	01/20/2020 16:08	WG1413866
1,1-Dichloropropene	U		0.128	0.500	1	01/20/2020 16:08	WG1413866
1,3-Dichloropropane	U		0.147	1.00	1	01/20/2020 16:08	WG1413866
cis-1,3-Dichloropropene	U		0.0976	0.500	1	01/20/2020 16:08	WG1413866
trans-1,3-Dichloropropene	U		0.222	0.500	1	01/20/2020 16:08	WG1413866
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	01/20/2020 16:08	WG1413866
2,2-Dichloropropane	U		0.0929	0.500	1	01/20/2020 16:08	WG1413866
Di-isopropyl ether	U		0.0924	0.500	1	01/20/2020 16:08	WG1413866
Ethylbenzene	U		0.158	0.500	1	01/20/2020 16:08	WG1413866
Hexachloro-1,3-butadiene	U UJ	J0	0.157	1.00	1	01/24/2020 15:33	WG1416291
2-Hexanone	U		0.757	5.00	1	01/20/2020 16:08	WG1413866
n-Hexane	U		0.305	5.00	1	01/20/2020 16:08	WG1413866
Iodomethane	U		0.377	10.0	1	01/20/2020 16:08	WG1413866
Isopropylbenzene	U		0.126	0.500	1	01/20/2020 16:08	WG1413866
p-Isopropyltoluene	U		0.138	0.500	1	01/20/2020 16:08	WG1413866
2-Butanone (MEK)	U		1.28	5.00	1	01/20/2020 16:08	WG1413866
Methylene Chloride	U		1.07	2.50	1	01/20/2020 16:08	WG1413866
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	01/20/2020 16:08	WG1413866
Methyl tert-butyl ether	U		0.102	0.500	1	01/20/2020 16:08	WG1413866
Naphthalene	U		0.174	2.50	1	01/20/2020 16:08	WG1413866
n-Propylbenzene	U		0.162	0.500	1	01/20/2020 16:08	WG1413866
Styrene	U		0.117	0.500	1	01/20/2020 16:08	WG1413866
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	01/20/2020 16:08	WG1413866
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	01/20/2020 16:08	WG1413866
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	01/20/2020 16:08	WG1413866
Tetrachloroethene	61.2		0.199	0.500	1	01/20/2020 16:08	WG1413866
Toluene	U		0.412	0.500	1	01/20/2020 16:08	WG1413866
1,2,3-Trichlorobenzene	U		0.164	0.500	1	01/20/2020 16:08	WG1413866
1,2,4-Trichlorobenzene	U		0.355	0.500	1	01/20/2020 16:08	WG1413866
1,1,1-Trichloroethane	U		0.0940	0.500	1	01/20/2020 16:08	WG1413866
1,1,2-Trichloroethane	U		0.186	0.500	1	01/20/2020 16:08	WG1413866
Trichloroethene	21.6		0.153	0.500	1	01/20/2020 16:08	WG1413866
Trichlorofluoromethane	U		0.130	2.50	1	01/20/2020 16:08	WG1413866
1,2,3-Trichloropropane	U		0.247	2.50	1	01/20/2020 16:08	WG1413866

JC 2/12/2020

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

Analyte	Result ug/l		Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,2,4-Trimethylbenzene	U			0.123	0.500	1	01/20/2020 16:08	WG1413866
1,2,3-Trimethylbenzene	U			0.0739	0.500	1	01/20/2020 16:08	WG1413866
1,3,5-Trimethylbenzene	U			0.124	0.500	1	01/20/2020 16:08	WG1413866
Vinyl acetate	U			0.645	5.00	1	01/20/2020 16:08	WG1413866
Vinyl chloride	2.38	UJ	J0	0.118	0.500	1	01/20/2020 16:08	WG1413866
Xylenes, Total	U			0.316	1.50	1	01/20/2020 16:08	WG1413866
(S) Toluene-d8	*98.0*				*80.0-120*		*01/20/2020 16:08*	WG1413866
(S) Toluene-d8	*101*				*80.0-120*		*01/24/2020 15:33*	WG1416291
(S) 4-Bromofluorobenzene	*92.8*				*77.0-126*		*01/20/2020 16:08*	WG1413866
(S) 4-Bromofluorobenzene	*102*				*77.0-126*		*01/24/2020 15:33*	WG1416291
(S) 1,2-Dichloroethane-d4	*99.4*				*70.0-130*		*01/20/2020 16:08*	WG1413866
(S) 1,2-Dichloroethane-d4	*108*				*70.0-130*		*01/24/2020 15:33*	WG1416291

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

JC 2/12/2020

Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	672000		2710	20000	1	01/20/2020 23:23	WG1413868

Sample Narrative:

L1180825-06 WG1413868: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	17700		51.9	1000	1	01/18/2020 22:46	WG1413470
Nitrate	U		22.7	100	1	01/18/2020 22:46	WG1413470
Sulfate	U		77.4	5000	1	01/18/2020 22:46	WG1413470

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	5000		102	1000	1	01/21/2020 23:19	WG1414598

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	16200		15.0	100	1	01/22/2020 16:14	WG1414411
Manganese	397		0.250	5.00	1	01/22/2020 16:14	WG1414411

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	23800		2.87	6.78	10	01/22/2020 16:26	WG1415348
Ethane	3.99		0.296	1.29	1	01/22/2020 15:28	WG1415090
Ethene	32.9		0.422	1.27	1	01/22/2020 15:28	WG1415090

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U		1.05	25.0	1	01/20/2020 16:29	WG1413866
Acrylonitrile	U		0.873	5.00	1	01/20/2020 16:29	WG1413866
Benzene	17.6		0.0896	0.500	1	01/20/2020 16:29	WG1413866
Bromobenzene	U		0.133	0.500	1	01/20/2020 16:29	WG1413866
Bromodichloromethane	U		0.0800	0.500	1	01/20/2020 16:29	WG1413866
Bromochloromethane	U		0.145	0.500	1	01/20/2020 16:29	WG1413866
Bromoform	U		0.186	0.500	1	01/20/2020 16:29	WG1413866
Bromomethane	U	UJ J0	0.157	2.50	1	01/20/2020 16:29	WG1413866
n-Butylbenzene	U		0.143	0.500	1	01/20/2020 16:29	WG1413866
sec-Butylbenzene	U		0.134	0.500	1	01/20/2020 16:29	WG1413866
tert-Butylbenzene	U		0.183	0.500	1	01/20/2020 16:29	WG1413866
Carbon disulfide	U		0.101	0.500	1	01/20/2020 16:29	WG1413866
Carbon tetrachloride	U		0.159	0.500	1	01/20/2020 16:29	WG1413866
Chlorobenzene	U		0.140	0.500	1	01/20/2020 16:29	WG1413866
Chlorodibromomethane	U		0.128	0.500	1	01/20/2020 16:29	WG1413866
Chloroethane	U	UJ J0	0.141	2.50	1	01/20/2020 16:29	WG1413866
Chloroform	U		0.0860	0.500	1	01/20/2020 16:29	WG1413866
Chloromethane	U		0.153	1.25	1	01/20/2020 16:29	WG1413866
2-Chlorotoluene	U		0.111	0.500	1	01/20/2020 16:29	WG1413866
4-Chlorotoluene	U		0.0972	0.500	1	01/20/2020 16:29	WG1413866

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	01/20/2020 16:29	WG1413866
1,2-Dibromoethane	U		0.193	0.500	1	01/20/2020 16:29	WG1413866
Dibromomethane	U		0.117	0.500	1	01/20/2020 16:29	WG1413866
1,2-Dichlorobenzene	U		0.101	0.500	1	01/20/2020 16:29	WG1413866
1,3-Dichlorobenzene	U		0.130	0.500	1	01/20/2020 16:29	WG1413866
1,4-Dichlorobenzene	U		0.121	0.500	1	01/20/2020 16:29	WG1413866
Dichlorodifluoromethane	U		0.127	2.50	1	01/20/2020 16:29	WG1413866
1,1-Dichloroethane	U		0.114	0.500	1	01/20/2020 16:29	WG1413866
1,2-Dichloroethane	U		0.108	0.500	1	01/20/2020 16:29	WG1413866
1,1-Dichloroethene	U		0.188	0.500	1	01/20/2020 16:29	WG1413866
cis-1,2-Dichloroethene	1.03		0.0933	0.500	1	01/20/2020 16:29	WG1413866
trans-1,2-Dichloroethene	U		0.152	0.500	1	01/20/2020 16:29	WG1413866
1,2-Dichloropropane	U		0.190	0.500	1	01/20/2020 16:29	WG1413866
1,1-Dichloropropene	U		0.128	0.500	1	01/20/2020 16:29	WG1413866
1,3-Dichloropropane	U		0.147	1.00	1	01/20/2020 16:29	WG1413866
cis-1,3-Dichloropropene	U		0.0976	0.500	1	01/20/2020 16:29	WG1413866
trans-1,3-Dichloropropene	U		0.222	0.500	1	01/20/2020 16:29	WG1413866
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	01/20/2020 16:29	WG1413866
2,2-Dichloropropane	U		0.0929	0.500	1	01/20/2020 16:29	WG1413866
Di-isopropyl ether	U		0.0924	0.500	1	01/20/2020 16:29	WG1413866
Ethylbenzene	U		0.158	0.500	1	01/20/2020 16:29	WG1413866
Hexachloro-1,3-butadiene	U	UJ J0	0.157	1.00	1	01/24/2020 15:52	WG1416291
2-Hexanone	U		0.757	5.00	1	01/20/2020 16:29	WG1413866
n-Hexane	U		0.305	5.00	1	01/20/2020 16:29	WG1413866
Iodomethane	U		0.377	10.0	1	01/20/2020 16:29	WG1413866
Isopropylbenzene	U		0.126	0.500	1	01/20/2020 16:29	WG1413866
p-Isopropyltoluene	U		0.138	0.500	1	01/20/2020 16:29	WG1413866
2-Butanone (MEK)	U		1.28	5.00	1	01/20/2020 16:29	WG1413866
Methylene Chloride	U		1.07	2.50	1	01/20/2020 16:29	WG1413866
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	01/20/2020 16:29	WG1413866
Methyl tert-butyl ether	U		0.102	0.500	1	01/20/2020 16:29	WG1413866
Naphthalene	U		0.174	2.50	1	01/20/2020 16:29	WG1413866
n-Propylbenzene	U		0.162	0.500	1	01/20/2020 16:29	WG1413866
Styrene	U		0.117	0.500	1	01/20/2020 16:29	WG1413866
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	01/20/2020 16:29	WG1413866
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	01/20/2020 16:29	WG1413866
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	01/20/2020 16:29	WG1413866
Tetrachloroethene	1.66		0.199	0.500	1	01/20/2020 16:29	WG1413866
Toluene	0.448	J	0.412	0.500	1	01/20/2020 16:29	WG1413866
1,2,3-Trichlorobenzene	U		0.164	0.500	1	01/20/2020 16:29	WG1413866
1,2,4-Trichlorobenzene	U		0.355	0.500	1	01/20/2020 16:29	WG1413866
1,1,1-Trichloroethane	U		0.0940	0.500	1	01/20/2020 16:29	WG1413866
1,1,2-Trichloroethane	U		0.186	0.500	1	01/20/2020 16:29	WG1413866
Trichloroethene	U		0.153	0.500	1	01/20/2020 16:29	WG1413866
Trichlorofluoromethane	U		0.130	2.50	1	01/20/2020 16:29	WG1413866
1,2,3-Trichloropropane	U		0.247	2.50	1	01/20/2020 16:29	WG1413866
1,2,4-Trimethylbenzene	U		0.123	0.500	1	01/20/2020 16:29	WG1413866
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	01/20/2020 16:29	WG1413866
1,3,5-Trimethylbenzene	U		0.124	0.500	1	01/20/2020 16:29	WG1413866
Vinyl acetate	U		0.645	5.00	1	01/20/2020 16:29	WG1413866
Vinyl chloride	13.1	J J0	0.118	0.500	1	01/20/2020 16:29	WG1413866
Xylenes, Total	U		0.316	1.50	1	01/20/2020 16:29	WG1413866
(S) Toluene-d8	*96.4*			*80.0-120*		*01/20/2020 16:29*	WG1413866
(S) Toluene-d8	*99.6*			*80.0-120*		*01/24/2020 15:52*	WG1416291
(S) 4-Bromofluorobenzene	*93.9*			*77.0-126*		*01/20/2020 16:29*	WG1413866
(S) 4-Bromofluorobenzene	*114*			*77.0-126*		*01/24/2020 15:52*	WG1416291

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
(S) 1,2-Dichloroethane-d4	*98.9*			*70.0-130*		*01/20/2020 16:29*	WG1413866
(S) 1,2-Dichloroethane-d4	*98.3*			*70.0-130*		*01/24/2020 15:52*	WG1416291

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Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	133000		2710	20000	1	01/20/2020 23:31	WG1413868

Sample Narrative:

L1180825-07 WG1413868: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	24700		51.9	1000	1	01/18/2020 23:02	WG1413470
Nitrate	728		22.7	100	1	01/18/2020 23:02	WG1413470
Sulfate	74500		77.4	5000	1	01/18/2020 23:02	WG1413470

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	2030	~~B~~	102	1000	1	01/21/2020 23:32	WG1414598

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	4060		15.0	100	1	01/22/2020 16:17	WG1414411
Manganese	184		0.250	5.00	1	01/22/2020 16:17	WG1414411

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	61.3 U	~~B J~~	31.6	100	1	01/21/2020 18:44	WG1414185
(S) a,a,a-Trifluorotoluene(FID)	*101*			*78.0-120*		*01/21/2020 18:44*	WG1414185

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	69.0		0.287	0.678	1	01/22/2020 15:32	WG1415090
Ethane	U		0.296	1.29	1	01/22/2020 15:32	WG1415090
Ethene	U		0.422	1.27	1	01/22/2020 15:32	WG1415090

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U		1.05	25.0	1	01/20/2020 16:51	WG1413866
Acrylonitrile	U		0.873	5.00	1	01/20/2020 16:51	WG1413866
Benzene	U		0.0896	0.500	1	01/20/2020 16:51	WG1413866
Bromobenzene	U		0.133	0.500	1	01/20/2020 16:51	WG1413866
Bromodichloromethane	U		0.0800	0.500	1	01/20/2020 16:51	WG1413866
Bromochloromethane	U		0.145	0.500	1	01/20/2020 16:51	WG1413866
Bromoform	U		0.186	0.500	1	01/20/2020 16:51	WG1413866
Bromomethane	U UJ	J0	0.157	2.50	1	01/20/2020 16:51	WG1413866
n-Butylbenzene	U		0.143	0.500	1	01/20/2020 16:51	WG1413866
sec-Butylbenzene	U		0.134	0.500	1	01/20/2020 16:51	WG1413866
tert-Butylbenzene	U		0.183	0.500	1	01/20/2020 16:51	WG1413866
Carbon disulfide	U		0.101	0.500	1	01/20/2020 16:51	WG1413866
Carbon tetrachloride	U		0.159	0.500	1	01/20/2020 16:51	WG1413866

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MW-127-011720

Collected date/time: 01/17/20 14:10

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chlorobenzene	U		0.140	0.500	1	01/20/2020 16:51	WG1413866
Chlorodibromomethane	U		0.128	0.500	1	01/20/2020 16:51	WG1413866
Chloroethane	U	UJ J0	0.141	2.50	1	01/20/2020 16:51	WG1413866
Chloroform	U		0.0860	0.500	1	01/20/2020 16:51	WG1413866
Chloromethane	U		0.153	1.25	1	01/20/2020 16:51	WG1413866
2-Chlorotoluene	U		0.111	0.500	1	01/20/2020 16:51	WG1413866
4-Chlorotoluene	U		0.0972	0.500	1	01/20/2020 16:51	WG1413866
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	01/20/2020 16:51	WG1413866
1,2-Dibromoethane	U		0.193	0.500	1	01/20/2020 16:51	WG1413866
Dibromomethane	U		0.117	0.500	1	01/20/2020 16:51	WG1413866
1,2-Dichlorobenzene	U		0.101	0.500	1	01/20/2020 16:51	WG1413866
1,3-Dichlorobenzene	U		0.130	0.500	1	01/20/2020 16:51	WG1413866
1,4-Dichlorobenzene	U		0.121	0.500	1	01/20/2020 16:51	WG1413866
Dichlorodifluoromethane	U		0.127	2.50	1	01/20/2020 16:51	WG1413866
1,1-Dichloroethane	0.568		0.114	0.500	1	01/20/2020 16:51	WG1413866
1,2-Dichloroethane	U		0.108	0.500	1	01/20/2020 16:51	WG1413866
1,1-Dichloroethene	U		0.188	0.500	1	01/20/2020 16:51	WG1413866
cis-1,2-Dichloroethene	0.630		0.0933	0.500	1	01/20/2020 16:51	WG1413866
trans-1,2-Dichloroethene	U		0.152	0.500	1	01/20/2020 16:51	WG1413866
1,2-Dichloropropane	U		0.190	0.500	1	01/20/2020 16:51	WG1413866
1,1-Dichloropropene	U		0.128	0.500	1	01/20/2020 16:51	WG1413866
1,3-Dichloropropane	U		0.147	1.00	1	01/20/2020 16:51	WG1413866
cis-1,3-Dichloropropene	U		0.0976	0.500	1	01/20/2020 16:51	WG1413866
trans-1,3-Dichloropropene	U		0.222	0.500	1	01/20/2020 16:51	WG1413866
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	01/20/2020 16:51	WG1413866
2,2-Dichloropropane	U		0.0929	0.500	1	01/20/2020 16:51	WG1413866
Di-isopropyl ether	U		0.0924	0.500	1	01/20/2020 16:51	WG1413866
Ethylbenzene	U		0.158	0.500	1	01/20/2020 16:51	WG1413866
Hexachloro-1,3-butadiene	U		0.157	1.00	1	01/20/2020 16:51	WG1413866
2-Hexanone	U		0.757	5.00	1	01/20/2020 16:51	WG1413866
n-Hexane	U		0.305	5.00	1	01/20/2020 16:51	WG1413866
Iodomethane	U		0.377	10.0	1	01/20/2020 16:51	WG1413866
Isopropylbenzene	U		0.126	0.500	1	01/20/2020 16:51	WG1413866
p-Isopropyltoluene	U		0.138	0.500	1	01/20/2020 16:51	WG1413866
2-Butanone (MEK)	U		1.28	5.00	1	01/20/2020 16:51	WG1413866
Methylene Chloride	U		1.07	2.50	1	01/20/2020 16:51	WG1413866
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	01/20/2020 16:51	WG1413866
Methyl tert-butyl ether	U		0.102	0.500	1	01/20/2020 16:51	WG1413866
Naphthalene	U		0.174	2.50	1	01/20/2020 16:51	WG1413866
n-Propylbenzene	U		0.162	0.500	1	01/20/2020 16:51	WG1413866
Styrene	U		0.117	0.500	1	01/20/2020 16:51	WG1413866
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	01/20/2020 16:51	WG1413866
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	01/20/2020 16:51	WG1413866
1,1,2-Trichlorotrifluoroethane	0.425	J	0.164	0.500	1	01/20/2020 16:51	WG1413866
Tetrachloroethene	U		0.199	0.500	1	01/20/2020 16:51	WG1413866
Toluene	0.689		0.412	0.500	1	01/20/2020 16:51	WG1413866
1,2,3-Trichlorobenzene	U		0.164	0.500	1	01/20/2020 16:51	WG1413866
1,2,4-Trichlorobenzene	U		0.355	0.500	1	01/20/2020 16:51	WG1413866
1,1,1-Trichloroethane	0.111	J	0.0940	0.500	1	01/20/2020 16:51	WG1413866
1,1,2-Trichloroethane	U		0.186	0.500	1	01/20/2020 16:51	WG1413866
Trichloroethene	U		0.153	0.500	1	01/20/2020 16:51	WG1413866
Trichlorofluoromethane	U		0.130	2.50	1	01/20/2020 16:51	WG1413866
1,2,3-Trichloropropane	U		0.247	2.50	1	01/20/2020 16:51	WG1413866
1,2,4-Trimethylbenzene	U		0.123	0.500	1	01/20/2020 16:51	WG1413866
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	01/20/2020 16:51	WG1413866
1,3,5-Trimethylbenzene	U		0.124	0.500	1	01/20/2020 16:51	WG1413866

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Vinyl acetate	U		0.645	5.00	1	01/20/2020 16:51	WG1413866
Vinyl chloride	U	UJ J0	0.118	0.500	1	01/20/2020 16:51	WG1413866
Xylenes, Total	0.342	J	0.316	1.50	1	01/20/2020 16:51	WG1413866
(S) Toluene-d8	*96.7*			*80.0-120*		*01/20/2020 16:51*	WG1413866
(S) 4-Bromofluorobenzene	*91.9*			*77.0-126*		*01/20/2020 16:51*	WG1413866
(S) 1,2-Dichloroethane-d4	*102*			*70.0-130*		*01/20/2020 16:51*	WG1413866

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

JC 2/5/2020

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

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U		1.05	25.0	1	01/20/2020 17:13	WG1413866
Acrylonitrile	U		0.873	5.00	1	01/20/2020 17:13	WG1413866
Benzene	142		0.0896	0.500	1	01/20/2020 17:13	WG1413866
Bromobenzene	U		0.133	0.500	1	01/20/2020 17:13	WG1413866
Bromodichloromethane	U		0.0800	0.500	1	01/20/2020 17:13	WG1413866
Bromochloromethane	U		0.145	0.500	1	01/20/2020 17:13	WG1413866
Bromoform	U		0.186	0.500	1	01/20/2020 17:13	WG1413866
Bromomethane	U	UJ J0	0.157	2.50	1	01/20/2020 17:13	WG1413866
n-Butylbenzene	U		0.143	0.500	1	01/20/2020 17:13	WG1413866
sec-Butylbenzene	5.10		0.134	0.500	1	01/20/2020 17:13	WG1413866
tert-Butylbenzene	U		0.183	0.500	1	01/20/2020 17:13	WG1413866
Carbon disulfide	U		0.101	0.500	1	01/20/2020 17:13	WG1413866
Carbon tetrachloride	U		0.159	0.500	1	01/20/2020 17:13	WG1413866
Chlorobenzene	U		0.140	0.500	1	01/20/2020 17:13	WG1413866
Chlorodibromomethane	U		0.128	0.500	1	01/20/2020 17:13	WG1413866
Chloroethane	U	UJ J0	0.141	2.50	1	01/20/2020 17:13	WG1413866
Chloroform	U		0.0860	0.500	1	01/20/2020 17:13	WG1413866
Chloromethane	U		0.153	1.25	1	01/20/2020 17:13	WG1413866
2-Chlorotoluene	U		0.111	0.500	1	01/20/2020 17:13	WG1413866
4-Chlorotoluene	U		0.0972	0.500	1	01/20/2020 17:13	WG1413866
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	01/20/2020 17:13	WG1413866
1,2-Dibromoethane	U		0.193	0.500	1	01/20/2020 17:13	WG1413866
Dibromomethane	U		0.117	0.500	1	01/20/2020 17:13	WG1413866
1,2-Dichlorobenzene	U		0.101	0.500	1	01/20/2020 17:13	WG1413866
1,3-Dichlorobenzene	U		0.130	0.500	1	01/20/2020 17:13	WG1413866
1,4-Dichlorobenzene	U		0.121	0.500	1	01/20/2020 17:13	WG1413866
Dichlorodifluoromethane	U		0.127	2.50	1	01/20/2020 17:13	WG1413866
1,1-Dichloroethane	U		0.114	0.500	1	01/20/2020 17:13	WG1413866
1,2-Dichloroethane	U		0.108	0.500	1	01/20/2020 17:13	WG1413866
1,1-Dichloroethene	U		0.188	0.500	1	01/20/2020 17:13	WG1413866
cis-1,2-Dichloroethene	U		0.0933	0.500	1	01/20/2020 17:13	WG1413866
trans-1,2-Dichloroethene	U		0.152	0.500	1	01/20/2020 17:13	WG1413866
1,2-Dichloropropane	U		0.190	0.500	1	01/20/2020 17:13	WG1413866
1,1-Dichloropropene	U		0.128	0.500	1	01/20/2020 17:13	WG1413866
1,3-Dichloropropane	U		0.147	1.00	1	01/20/2020 17:13	WG1413866
cis-1,3-Dichloropropene	U		0.0976	0.500	1	01/20/2020 17:13	WG1413866
trans-1,3-Dichloropropene	U		0.222	0.500	1	01/20/2020 17:13	WG1413866
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	01/20/2020 17:13	WG1413866
2,2-Dichloropropane	U		0.0929	0.500	1	01/20/2020 17:13	WG1413866
Di-isopropyl ether	U		0.0924	0.500	1	01/20/2020 17:13	WG1413866
Ethylbenzene	54.6		0.158	0.500	1	01/20/2020 17:13	WG1413866
Hexachloro-1,3-butadiene	U		0.157	1.00	1	01/20/2020 17:13	WG1413866
2-Hexanone	U		0.757	5.00	1	01/20/2020 17:13	WG1413866
n-Hexane	U		0.305	5.00	1	01/20/2020 17:13	WG1413866
Iodomethane	U		0.377	10.0	1	01/20/2020 17:13	WG1413866
Isopropylbenzene	97.7		0.126	0.500	1	01/20/2020 17:13	WG1413866
p-Isopropyltoluene	1.01		0.138	0.500	1	01/24/2020 16:12	WG1416291
2-Butanone (MEK)	U		1.28	5.00	1	01/20/2020 17:13	WG1413866
Methylene Chloride	U		1.07	2.50	1	01/20/2020 17:13	WG1413866
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	01/20/2020 17:13	WG1413866
Methyl tert-butyl ether	U		0.102	0.500	1	01/20/2020 17:13	WG1413866
Naphthalene	4.55		0.174	2.50	1	01/20/2020 17:13	WG1413866
n-Propylbenzene	187		0.162	0.500	1	01/20/2020 17:13	WG1413866
Styrene	U		0.117	0.500	1	01/20/2020 17:13	WG1413866
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	01/20/2020 17:13	WG1413866
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	01/20/2020 17:13	WG1413866

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	01/20/2020 17:13	WG1413866
Tetrachloroethene	U		0.199	0.500	1	01/20/2020 17:13	WG1413866
Toluene	14.9		0.412	0.500	1	01/20/2020 17:13	WG1413866
1,2,3-Trichlorobenzene	U		0.164	0.500	1	01/20/2020 17:13	WG1413866
1,2,4-Trichlorobenzene	U		0.355	0.500	1	01/20/2020 17:13	WG1413866
1,1,1-Trichloroethane	U		0.0940	0.500	1	01/20/2020 17:13	WG1413866
1,1,2-Trichloroethane	U		0.186	0.500	1	01/20/2020 17:13	WG1413866
Trichloroethene	U		0.153	0.500	1	01/20/2020 17:13	WG1413866
Trichlorofluoromethane	U		0.130	2.50	1	01/20/2020 17:13	WG1413866
1,2,3-Trichloropropane	U		0.247	2.50	1	01/20/2020 17:13	WG1413866
1,2,4-Trimethylbenzene	0.477	U ~~B J~~	0.123	0.500	1	01/20/2020 17:13	WG1413866
1,2,3-Trimethylbenzene	12.2		0.0739	0.500	1	01/20/2020 17:13	WG1413866
1,3,5-Trimethylbenzene	3.53		0.124	0.500	1	01/20/2020 17:13	WG1413866
Vinyl acetate	U		0.645	5.00	1	01/20/2020 17:13	WG1413866
Vinyl chloride	U	UJ J0	0.118	0.500	1	01/20/2020 17:13	WG1413866
Xylenes, Total	28.6		0.316	1.50	1	01/20/2020 17:13	WG1413866
(S) Toluene-d8	*95.3*			*80.0-120*		*01/20/2020 17:13*	WG1413866
(S) Toluene-d8	*101*			*80.0-120*		*01/24/2020 16:12*	WG1416291
(S) 4-Bromofluorobenzene	*96.0*			*77.0-126*		*01/20/2020 17:13*	WG1413866
(S) 4-Bromofluorobenzene	*111*			*77.0-126*		*01/24/2020 16:12*	WG1416291
(S) 1,2-Dichloroethane-d4	*99.4*			*70.0-130*		*01/20/2020 17:13*	WG1413866
(S) 1,2-Dichloroethane-d4	*109*			*70.0-130*		*01/24/2020 16:12*	WG1416291

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	7.66	J	1.05	25.0	1	01/20/2020 17:34	WG1413866
Acrylonitrile	U		0.873	5.00	1	01/20/2020 17:34	WG1413866
Benzene	15.4		0.0896	0.500	1	01/20/2020 17:34	WG1413866
Bromobenzene	U		0.133	0.500	1	01/20/2020 17:34	WG1413866
Bromodichloromethane	U		0.0800	0.500	1	01/20/2020 17:34	WG1413866
Bromochloromethane	U		0.145	0.500	1	01/20/2020 17:34	WG1413866
Bromoform	U		0.186	0.500	1	01/20/2020 17:34	WG1413866
Bromomethane	U	UJ J0	0.157	2.50	1	01/20/2020 17:34	WG1413866
n-Butylbenzene	14.2		0.143	0.500	1	01/20/2020 17:34	WG1413866
sec-Butylbenzene	15.6		0.134	0.500	1	01/20/2020 17:34	WG1413866
tert-Butylbenzene	U		0.183	0.500	1	01/20/2020 17:34	WG1413866
Carbon disulfide	U		0.101	0.500	1	01/20/2020 17:34	WG1413866
Carbon tetrachloride	U		0.159	0.500	1	01/20/2020 17:34	WG1413866
Chlorobenzene	U		0.140	0.500	1	01/20/2020 17:34	WG1413866
Chlorodibromomethane	U		0.128	0.500	1	01/20/2020 17:34	WG1413866
Chloroethane	U	UJ J0	0.141	2.50	1	01/20/2020 17:34	WG1413866
Chloroform	U		0.0860	0.500	1	01/20/2020 17:34	WG1413866
Chloromethane	U		0.153	1.25	1	01/20/2020 17:34	WG1413866
2-Chlorotoluene	U		0.111	0.500	1	01/20/2020 17:34	WG1413866
4-Chlorotoluene	U		0.0972	0.500	1	01/20/2020 17:34	WG1413866
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	01/20/2020 17:34	WG1413866
1,2-Dibromoethane	U		0.193	0.500	1	01/20/2020 17:34	WG1413866
Dibromomethane	U		0.117	0.500	1	01/20/2020 17:34	WG1413866
1,2-Dichlorobenzene	U		0.101	0.500	1	01/20/2020 17:34	WG1413866
1,3-Dichlorobenzene	U		0.130	0.500	1	01/20/2020 17:34	WG1413866
1,4-Dichlorobenzene	U		0.121	0.500	1	01/20/2020 17:34	WG1413866
Dichlorodifluoromethane	U		0.127	2.50	1	01/20/2020 17:34	WG1413866
1,1-Dichloroethane	U		0.114	0.500	1	01/20/2020 17:34	WG1413866
1,2-Dichloroethane	U		0.108	0.500	1	01/20/2020 17:34	WG1413866
1,1-Dichloroethene	U		0.188	0.500	1	01/20/2020 17:34	WG1413866
cis-1,2-Dichloroethene	U		0.0933	0.500	1	01/20/2020 17:34	WG1413866
trans-1,2-Dichloroethene	U		0.152	0.500	1	01/20/2020 17:34	WG1413866
1,2-Dichloropropane	U		0.190	0.500	1	01/20/2020 17:34	WG1413866
1,1-Dichloropropene	U		0.128	0.500	1	01/20/2020 17:34	WG1413866
1,3-Dichloropropane	U		0.147	1.00	1	01/20/2020 17:34	WG1413866
cis-1,3-Dichloropropene	U		0.0976	0.500	1	01/20/2020 17:34	WG1413866
trans-1,3-Dichloropropene	U		0.222	0.500	1	01/20/2020 17:34	WG1413866
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	01/20/2020 17:34	WG1413866
2,2-Dichloropropane	U		0.0929	0.500	1	01/20/2020 17:34	WG1413866
Di-isopropyl ether	0.133	J	0.0924	0.500	1	01/20/2020 17:34	WG1413866
Ethylbenzene	1.61		0.158	0.500	1	01/20/2020 17:34	WG1413866
Hexachloro-1,3-butadiene	U		0.157	1.00	1	01/20/2020 17:34	WG1413866
2-Hexanone	U		0.757	5.00	1	01/20/2020 17:34	WG1413866
n-Hexane	U		0.305	5.00	1	01/20/2020 17:34	WG1413866
Iodomethane	U		0.377	10.0	1	01/20/2020 17:34	WG1413866
Isopropylbenzene	37.2		0.126	0.500	1	01/20/2020 17:34	WG1413866
p-Isopropyltoluene	U		0.138	0.500	1	01/20/2020 17:34	WG1413866
2-Butanone (MEK)	U		1.28	5.00	1	01/20/2020 17:34	WG1413866
Methylene Chloride	U		1.07	2.50	1	01/20/2020 17:34	WG1413866
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	01/20/2020 17:34	WG1413866
Methyl tert-butyl ether	U		0.102	0.500	1	01/20/2020 17:34	WG1413866
Naphthalene	U		0.174	2.50	1	01/20/2020 17:34	WG1413866
n-Propylbenzene	125		0.162	0.500	1	01/20/2020 17:34	WG1413866
Styrene	U		0.117	0.500	1	01/20/2020 17:34	WG1413866
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	01/20/2020 17:34	WG1413866
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	01/20/2020 17:34	WG1413866

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

	Result		Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l			ug/l	ug/l		date / time	
1,1,2-Trichlorotrifluoroethane	U			0.164	0.500	1	01/20/2020 17:34	WG1413866
Tetrachloroethene	U			0.199	0.500	1	01/20/2020 17:34	WG1413866
Toluene	0.611			0.412	0.500	1	01/20/2020 17:34	WG1413866
1,2,3-Trichlorobenzene	U			0.164	0.500	1	01/20/2020 17:34	WG1413866
1,2,4-Trichlorobenzene	U			0.355	0.500	1	01/20/2020 17:34	WG1413866
1,1,1-Trichloroethane	U			0.0940	0.500	1	01/20/2020 17:34	WG1413866
1,1,2-Trichloroethane	U			0.186	0.500	1	01/20/2020 17:34	WG1413866
Trichloroethene	U			0.153	0.500	1	01/20/2020 17:34	WG1413866
Trichlorofluoromethane	U			0.130	2.50	1	01/20/2020 17:34	WG1413866
1,2,3-Trichloropropane	U			0.247	2.50	1	01/20/2020 17:34	WG1413866
1,2,4-Trimethylbenzene	2.48			0.123	0.500	1	01/20/2020 17:34	WG1413866
1,2,3-Trimethylbenzene	2.93			0.0739	0.500	1	01/20/2020 17:34	WG1413866
1,3,5-Trimethylbenzene	0.500	U	~~B J~~	0.124	0.500	1	01/20/2020 17:34	WG1413866
Vinyl acetate	U			0.645	5.00	1	01/20/2020 17:34	WG1413866
Vinyl chloride	U	UJ	J0	0.118	0.500	1	01/20/2020 17:34	WG1413866
Xylenes, Total	3.66			0.316	1.50	1	01/20/2020 17:34	WG1413866
(S) Toluene-d8	*95.3*				*80.0-120*		*01/20/2020 17:34*	WG1413866
(S) 4-Bromofluorobenzene	*97.0*				*77.0-126*		*01/20/2020 17:34*	WG1413866
(S) 1,2-Dichloroethane-d4	*98.9*				*70.0-130*		*01/20/2020 17:34*	WG1413866

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	U		1.05	25.0	1	01/20/2020 17:56	WG1413866
Acrylonitrile	U		0.873	5.00	1	01/20/2020 17:56	WG1413866
Benzene	U		0.0896	0.500	1	01/20/2020 17:56	WG1413866
Bromobenzene	U		0.133	0.500	1	01/20/2020 17:56	WG1413866
Bromodichloromethane	U		0.0800	0.500	1	01/20/2020 17:56	WG1413866
Bromochloromethane	U		0.145	0.500	1	01/20/2020 17:56	WG1413866
Bromoform	U		0.186	0.500	1	01/20/2020 17:56	WG1413866
Bromomethane	U UJ	J0	0.157	2.50	1	01/20/2020 17:56	WG1413866
n-Butylbenzene	U		0.143	0.500	1	01/24/2020 16:32	WG1416291
sec-Butylbenzene	U		0.134	0.500	1	01/24/2020 16:32	WG1416291
tert-Butylbenzene	U		0.183	0.500	1	01/20/2020 17:56	WG1413866
Carbon disulfide	U		0.101	0.500	1	01/20/2020 17:56	WG1413866
Carbon tetrachloride	U		0.159	0.500	1	01/20/2020 17:56	WG1413866
Chlorobenzene	U		0.140	0.500	1	01/20/2020 17:56	WG1413866
Chlorodibromomethane	U		0.128	0.500	1	01/20/2020 17:56	WG1413866
Chloroethane	U UJ	J0	0.141	2.50	1	01/20/2020 17:56	WG1413866
Chloroform	U		0.0860	0.500	1	01/20/2020 17:56	WG1413866
Chloromethane	U		0.153	1.25	1	01/20/2020 17:56	WG1413866
2-Chlorotoluene	U		0.111	0.500	1	01/20/2020 17:56	WG1413866
4-Chlorotoluene	U		0.0972	0.500	1	01/20/2020 17:56	WG1413866
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	01/20/2020 17:56	WG1413866
1,2-Dibromoethane	U		0.193	0.500	1	01/20/2020 17:56	WG1413866
Dibromomethane	U		0.117	0.500	1	01/20/2020 17:56	WG1413866
1,2-Dichlorobenzene	U		0.101	0.500	1	01/20/2020 17:56	WG1413866
1,3-Dichlorobenzene	U		0.130	0.500	1	01/20/2020 17:56	WG1413866
1,4-Dichlorobenzene	U		0.121	0.500	1	01/20/2020 17:56	WG1413866
Dichlorodifluoromethane	U		0.127	2.50	1	01/20/2020 17:56	WG1413866
1,1-Dichloroethane	U		0.114	0.500	1	01/20/2020 17:56	WG1413866
1,2-Dichloroethane	U		0.108	0.500	1	01/20/2020 17:56	WG1413866
1,1-Dichloroethene	U		0.188	0.500	1	01/20/2020 17:56	WG1413866
cis-1,2-Dichloroethene	U		0.0933	0.500	1	01/20/2020 17:56	WG1413866
trans-1,2-Dichloroethene	U		0.152	0.500	1	01/20/2020 17:56	WG1413866
1,2-Dichloropropane	U		0.190	0.500	1	01/20/2020 17:56	WG1413866
1,1-Dichloropropene	U		0.128	0.500	1	01/20/2020 17:56	WG1413866
1,3-Dichloropropane	U		0.147	1.00	1	01/20/2020 17:56	WG1413866
cis-1,3-Dichloropropene	U		0.0976	0.500	1	01/20/2020 17:56	WG1413866
trans-1,3-Dichloropropene	U		0.222	0.500	1	01/20/2020 17:56	WG1413866
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	01/20/2020 17:56	WG1413866
2,2-Dichloropropane	U		0.0929	0.500	1	01/20/2020 17:56	WG1413866
Di-isopropyl ether	U		0.0924	0.500	1	01/20/2020 17:56	WG1413866
Ethylbenzene	U		0.158	0.500	1	01/20/2020 17:56	WG1413866
Hexachloro-1,3-butadiene	U		0.157	1.00	1	01/20/2020 17:56	WG1413866
2-Hexanone	U		0.757	5.00	1	01/20/2020 17:56	WG1413866
n-Hexane	U		0.305	5.00	1	01/20/2020 17:56	WG1413866
Iodomethane	U		0.377	10.0	1	01/20/2020 17:56	WG1413866
Isopropylbenzene	2.44		0.126	0.500	1	01/20/2020 17:56	WG1413866
p-Isopropyltoluene	U		0.138	0.500	1	01/20/2020 17:56	WG1413866
2-Butanone (MEK)	U		1.28	5.00	1	01/20/2020 17:56	WG1413866
Methylene Chloride	U		1.07	2.50	1	01/20/2020 17:56	WG1413866
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	01/20/2020 17:56	WG1413866
Methyl tert-butyl ether	U		0.102	0.500	1	01/20/2020 17:56	WG1413866
Naphthalene	0.460	J	0.174	2.50	1	01/20/2020 17:56	WG1413866
n-Propylbenzene	9.81		0.162	0.500	1	01/20/2020 17:56	WG1413866
Styrene	U		0.117	0.500	1	01/20/2020 17:56	WG1413866
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	01/20/2020 17:56	WG1413866
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	01/20/2020 17:56	WG1413866

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	01/20/2020 17:56	WG1413866
Tetrachloroethene	U		0.199	0.500	1	01/20/2020 17:56	WG1413866
Toluene	U		0.412	0.500	1	01/20/2020 17:56	WG1413866
1,2,3-Trichlorobenzene	U		0.164	0.500	1	01/20/2020 17:56	WG1413866
1,2,4-Trichlorobenzene	U		0.355	0.500	1	01/20/2020 17:56	WG1413866
1,1,1-Trichloroethane	U		0.0940	0.500	1	01/20/2020 17:56	WG1413866
1,1,2-Trichloroethane	U		0.186	0.500	1	01/20/2020 17:56	WG1413866
Trichloroethene	U		0.153	0.500	1	01/20/2020 17:56	WG1413866
Trichlorofluoromethane	U		0.130	2.50	1	01/20/2020 17:56	WG1413866
1,2,3-Trichloropropane	U		0.247	2.50	1	01/20/2020 17:56	WG1413866
1,2,4-Trimethylbenzene	0.193	U ~~B J~~	0.123	0.500	1	01/20/2020 17:56	WG1413866
1,2,3-Trimethylbenzene	0.262	U ~~B J~~	0.0739	0.500	1	01/20/2020 17:56	WG1413866
1,3,5-Trimethylbenzene	U		0.124	0.500	1	01/20/2020 17:56	WG1413866
Vinyl acetate	U		0.645	5.00	1	01/20/2020 17:56	WG1413866
Vinyl chloride	U	UJ J0	0.118	0.500	1	01/20/2020 17:56	WG1413866
Xylenes, Total	U		0.316	1.50	1	01/20/2020 17:56	WG1413866
(S) Toluene-d8	*99.0*			*80.0-120*		*01/20/2020 17:56*	WG1413866
(S) Toluene-d8	*87.1*			*80.0-120*		*01/24/2020 16:32*	WG1416291
(S) 4-Bromofluorobenzene	*98.4*			*77.0-126*		*01/20/2020 17:56*	WG1413866
(S) 4-Bromofluorobenzene	*106*			*77.0-126*		*01/24/2020 16:32*	WG1416291
(S) 1,2-Dichloroethane-d4	*96.9*			*70.0-130*		*01/20/2020 17:56*	WG1413866
(S) 1,2-Dichloroethane-d4	*100*			*70.0-130*		*01/24/2020 16:32*	WG1416291

JC 2/5/2020

MW-312-012120

Collected date/time: 01/21/20 09:20

SAMPLE RESULTS - 01

L1181649

Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	941000		2710	20000	1	01/22/2020 20:41	WG1415297

Sample Narrative:

L1181649-01 WG1415297: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	6780		51.9	1000	1	01/22/2020 14:38	WG1415232
Nitrate	U		22.7	100	1	01/22/2020 14:38	WG1415232
Sulfate	U		77.4	5000	1	01/22/2020 14:38	WG1415232

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	10800		102	1000	1	01/28/2020 16:09	WG1417179

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	5930		15.0	100	1	01/26/2020 22:38	WG1416004
Manganese	860		0.250	5.00	1	01/26/2020 22:38	WG1416004

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	832		0.287	0.678	1	01/23/2020 15:39	WG1415760
Ethane	U		0.296	1.29	1	01/23/2020 15:39	WG1415760
Ethene	U		0.422	1.27	1	01/23/2020 15:39	WG1415760

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U		1.05	25.0	1	01/23/2020 01:23	WG1415610
Acrylonitrile	U		0.873	5.00	1	01/23/2020 01:23	WG1415610
Benzene	U		0.0896	0.500	1	01/23/2020 01:23	WG1415610
Bromobenzene	U		0.133	0.500	1	01/23/2020 01:23	WG1415610
Bromodichloromethane	U		0.0800	0.500	1	01/23/2020 01:23	WG1415610
Bromochloromethane	U		0.145	0.500	1	01/23/2020 01:23	WG1415610
Bromoform	U		0.186	0.500	1	01/23/2020 01:23	WG1415610
Bromomethane	U		0.157	2.50	1	01/23/2020 01:23	WG1415610
n-Butylbenzene	U		0.143	0.500	1	01/23/2020 01:23	WG1415610
sec-Butylbenzene	U		0.134	0.500	1	01/23/2020 01:23	WG1415610
tert-Butylbenzene	U		0.183	0.500	1	01/23/2020 01:23	WG1415610
Carbon disulfide	U		0.101	0.500	1	01/23/2020 01:23	WG1415610
Carbon tetrachloride	U		0.159	0.500	1	01/23/2020 01:23	WG1415610
Chlorobenzene	U		0.140	0.500	1	01/23/2020 01:23	WG1415610
Chlorodibromomethane	U		0.128	0.500	1	01/23/2020 01:23	WG1415610
Chloroethane	U UJ	J0	0.141	2.50	1	01/23/2020 01:23	WG1415610
Chloroform	U		0.0860	0.500	1	01/23/2020 01:23	WG1415610
Chloromethane	U	~~J4~~	0.153	1.25	1	01/23/2020 01:23	WG1415610
2-Chlorotoluene	U		0.111	0.500	1	01/23/2020 01:23	WG1415610
4-Chlorotoluene	U		0.0972	0.500	1	01/23/2020 01:23	WG1415610

JC 2/6/19

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

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	01/23/2020 01:23	WG1415610
1,2-Dibromoethane	U		0.193	0.500	1	01/23/2020 01:23	WG1415610
Dibromomethane	U		0.117	0.500	1	01/23/2020 01:23	WG1415610
1,2-Dichlorobenzene	U		0.101	0.500	1	01/23/2020 01:23	WG1415610
1,3-Dichlorobenzene	U		0.130	0.500	1	01/23/2020 01:23	WG1415610
1,4-Dichlorobenzene	U		0.121	0.500	1	01/23/2020 01:23	WG1415610
Dichlorodifluoromethane	U		0.127	2.50	1	01/23/2020 01:23	WG1415610
1,1-Dichloroethane	U		0.114	0.500	1	01/23/2020 01:23	WG1415610
1,2-Dichloroethane	U		0.108	0.500	1	01/23/2020 01:23	WG1415610
1,1-Dichloroethene	U		0.188	0.500	1	01/23/2020 01:23	WG1415610
cis-1,2-Dichloroethene	U		0.0933	0.500	1	01/23/2020 01:23	WG1415610
trans-1,2-Dichloroethene	U		0.152	0.500	1	01/23/2020 01:23	WG1415610
1,2-Dichloropropane	U		0.190	0.500	1	01/23/2020 01:23	WG1415610
1,1-Dichloropropene	U		0.128	0.500	1	01/23/2020 01:23	WG1415610
1,3-Dichloropropane	U		0.147	1.00	1	01/23/2020 01:23	WG1415610
cis-1,3-Dichloropropene	U		0.0976	0.500	1	01/23/2020 01:23	WG1415610
trans-1,3-Dichloropropene	U		0.222	0.500	1	01/23/2020 01:23	WG1415610
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	01/23/2020 01:23	WG1415610
2,2-Dichloropropane	U	~~J4~~	0.0929	0.500	1	01/23/2020 01:23	WG1415610
Di-isopropyl ether	U		0.0924	0.500	1	01/23/2020 01:23	WG1415610
Ethylbenzene	U		0.158	0.500	1	01/23/2020 01:23	WG1415610
Hexachloro-1,3-butadiene	U		0.157	1.00	1	01/23/2020 01:23	WG1415610
2-Hexanone	U		0.757	5.00	1	01/23/2020 01:23	WG1415610
n-Hexane	U		0.305	5.00	1	01/23/2020 01:23	WG1415610
Iodomethane	U		0.377	10.0	1	01/23/2020 01:23	WG1415610
Isopropylbenzene	U		0.126	0.500	1	01/23/2020 01:23	WG1415610
p-Isopropyltoluene	U		0.138	0.500	1	01/23/2020 01:23	WG1415610
2-Butanone (MEK)	U		1.28	5.00	1	01/23/2020 01:23	WG1415610
Methylene Chloride	U		1.07	2.50	1	01/23/2020 01:23	WG1415610
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	01/23/2020 01:23	WG1415610
Methyl tert-butyl ether	U		0.102	0.500	1	01/23/2020 01:23	WG1415610
Naphthalene	U		0.174	2.50	1	01/23/2020 01:23	WG1415610
n-Propylbenzene	U		0.162	0.500	1	01/23/2020 01:23	WG1415610
Styrene	U		0.117	0.500	1	01/23/2020 01:23	WG1415610
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	01/23/2020 01:23	WG1415610
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	01/23/2020 01:23	WG1415610
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	01/23/2020 01:23	WG1415610
Tetrachloroethene	U		0.199	0.500	1	01/23/2020 01:23	WG1415610
Toluene	1.22		0.412	0.500	1	01/23/2020 01:23	WG1415610
1,2,3-Trichlorobenzene	U		0.164	0.500	1	01/23/2020 01:23	WG1415610
1,2,4-Trichlorobenzene	U		0.355	0.500	1	01/23/2020 01:23	WG1415610
1,1,1-Trichloroethane	U		0.0940	0.500	1	01/23/2020 01:23	WG1415610
1,1,2-Trichloroethane	U		0.186	0.500	1	01/23/2020 01:23	WG1415610
Trichloroethene	U		0.153	0.500	1	01/23/2020 01:23	WG1415610
Trichlorofluoromethane	U		0.130	2.50	1	01/23/2020 01:23	WG1415610
1,2,3-Trichloropropane	U		0.247	2.50	1	01/23/2020 01:23	WG1415610
1,2,4-Trimethylbenzene	U		0.123	0.500	1	01/23/2020 01:23	WG1415610
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	01/23/2020 01:23	WG1415610
1,3,5-Trimethylbenzene	U		0.124	0.500	1	01/23/2020 01:23	WG1415610
Vinyl acetate	U		0.645	5.00	1	01/23/2020 01:23	WG1415610
Vinyl chloride	U		0.118	0.500	1	01/23/2020 01:23	WG1415610
Xylenes, Total	0.713	J	0.316	1.50	1	01/23/2020 01:23	WG1415610
(S) Toluene-d8	*103*			*80.0-120*		*01/23/2020 01:23*	WG1415610
(S) 4-Bromofluorobenzene	*107*			*77.0-126*		*01/23/2020 01:23*	WG1415610
(S) 1,2-Dichloroethane-d4	*122*			*70.0-130*		*01/23/2020 01:23*	WG1415610

JC 2/6/19

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

Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	143000		2710	20000	1	01/22/2020 20:49	WG1415297

Sample Narrative:

L1181649-02 WG1415297: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	3770		51.9	1000	1	01/22/2020 14:49	WG1415232
Nitrate	127		22.7	100	1	01/22/2020 14:49	WG1415232
Sulfate	1510 U	~~B J~~	77.4	5000	1	01/22/2020 14:49	WG1415232

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	2730	~~B~~	102	1000	1	01/28/2020 16:22	WG1417179

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	544		15.0	100	1	01/26/2020 22:25	WG1416004
Manganese	767	~~V~~	0.250	5.00	1	01/26/2020 22:25	WG1416004

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	886		0.287	0.678	1	01/23/2020 15:42	WG1415760
Ethane	U		0.296	1.29	1	01/23/2020 15:42	WG1415760
Ethene	U		0.422	1.27	1	01/23/2020 15:42	WG1415760

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U		1.05	25.0	1	01/23/2020 01:44	WG1415610
Acrylonitrile	U		0.873	5.00	1	01/23/2020 01:44	WG1415610
Benzene	U		0.0896	0.500	1	01/23/2020 01:44	WG1415610
Bromobenzene	U		0.133	0.500	1	01/23/2020 01:44	WG1415610
Bromodichloromethane	U		0.0800	0.500	1	01/23/2020 01:44	WG1415610
Bromochloromethane	U		0.145	0.500	1	01/23/2020 01:44	WG1415610
Bromoform	U		0.186	0.500	1	01/23/2020 01:44	WG1415610
Bromomethane	U		0.157	2.50	1	01/23/2020 01:44	WG1415610
n-Butylbenzene	U		0.143	0.500	1	01/23/2020 01:44	WG1415610
sec-Butylbenzene	U		0.134	0.500	1	01/23/2020 01:44	WG1415610
tert-Butylbenzene	U		0.183	0.500	1	01/23/2020 01:44	WG1415610
Carbon disulfide	U		0.101	0.500	1	01/23/2020 01:44	WG1415610
Carbon tetrachloride	U		0.159	0.500	1	01/23/2020 01:44	WG1415610
Chlorobenzene	U		0.140	0.500	1	01/23/2020 01:44	WG1415610
Chlorodibromomethane	U		0.128	0.500	1	01/23/2020 01:44	WG1415610
Chloroethane	U UJ	J0	0.141	2.50	1	01/23/2020 01:44	WG1415610
Chloroform	U		0.0860	0.500	1	01/23/2020 01:44	WG1415610
Chloromethane	U	~~J4~~	0.153	1.25	1	01/23/2020 01:44	WG1415610
2-Chlorotoluene	U		0.111	0.500	1	01/23/2020 01:44	WG1415610
4-Chlorotoluene	U		0.0972	0.500	1	01/23/2020 01:44	WG1415610

JC 2/6/19

MW109-012120
Collected date/time: 01/21/20 10:55

SAMPLE RESULTS - 02

L1181649

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	01/23/2020 01:44	WG1415610
1,2-Dibromoethane	U		0.193	0.500	1	01/23/2020 01:44	WG1415610
Dibromomethane	U		0.117	0.500	1	01/23/2020 01:44	WG1415610
1,2-Dichlorobenzene	U		0.101	0.500	1	01/23/2020 01:44	WG1415610
1,3-Dichlorobenzene	U		0.130	0.500	1	01/23/2020 01:44	WG1415610
1,4-Dichlorobenzene	U		0.121	0.500	1	01/23/2020 01:44	WG1415610
Dichlorodifluoromethane	U		0.127	2.50	1	01/23/2020 01:44	WG1415610
1,1-Dichloroethane	U		0.114	0.500	1	01/23/2020 01:44	WG1415610
1,2-Dichloroethane	U		0.108	0.500	1	01/23/2020 01:44	WG1415610
1,1-Dichloroethene	U		0.188	0.500	1	01/23/2020 01:44	WG1415610
cis-1,2-Dichloroethene	10.4		0.0933	0.500	1	01/23/2020 01:44	WG1415610
trans-1,2-Dichloroethene	U		0.152	0.500	1	01/23/2020 01:44	WG1415610
1,2-Dichloropropane	U		0.190	0.500	1	01/23/2020 01:44	WG1415610
1,1-Dichloropropene	U		0.128	0.500	1	01/23/2020 01:44	WG1415610
1,3-Dichloropropane	U		0.147	1.00	1	01/23/2020 01:44	WG1415610
cis-1,3-Dichloropropene	U		0.0976	0.500	1	01/23/2020 01:44	WG1415610
trans-1,3-Dichloropropene	U		0.222	0.500	1	01/23/2020 01:44	WG1415610
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	01/23/2020 01:44	WG1415610
2,2-Dichloropropane	U	~~J4~~	0.0929	0.500	1	01/23/2020 01:44	WG1415610
Di-isopropyl ether	U		0.0924	0.500	1	01/23/2020 01:44	WG1415610
Ethylbenzene	U		0.158	0.500	1	01/23/2020 01:44	WG1415610
Hexachloro-1,3-butadiene	U		0.157	1.00	1	01/23/2020 01:44	WG1415610
2-Hexanone	U		0.757	5.00	1	01/23/2020 01:44	WG1415610
n-Hexane	U		0.305	5.00	1	01/23/2020 01:44	WG1415610
Iodomethane	U		0.377	10.0	1	01/23/2020 01:44	WG1415610
Isopropylbenzene	U		0.126	0.500	1	01/23/2020 01:44	WG1415610
p-Isopropyltoluene	U		0.138	0.500	1	01/23/2020 01:44	WG1415610
2-Butanone (MEK)	U		1.28	5.00	1	01/23/2020 01:44	WG1415610
Methylene Chloride	U		1.07	2.50	1	01/23/2020 01:44	WG1415610
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	01/23/2020 01:44	WG1415610
Methyl tert-butyl ether	U		0.102	0.500	1	01/23/2020 01:44	WG1415610
Naphthalene	U		0.174	2.50	1	01/23/2020 01:44	WG1415610
n-Propylbenzene	U		0.162	0.500	1	01/23/2020 01:44	WG1415610
Styrene	U		0.117	0.500	1	01/23/2020 01:44	WG1415610
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	01/23/2020 01:44	WG1415610
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	01/23/2020 01:44	WG1415610
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	01/23/2020 01:44	WG1415610
Tetrachloroethene	U		0.199	0.500	1	01/23/2020 01:44	WG1415610
Toluene	0.782		0.412	0.500	1	01/23/2020 01:44	WG1415610
1,2,3-Trichlorobenzene	U		0.164	0.500	1	01/23/2020 01:44	WG1415610
1,2,4-Trichlorobenzene	U		0.355	0.500	1	01/23/2020 01:44	WG1415610
1,1,1-Trichloroethane	U		0.0940	0.500	1	01/23/2020 01:44	WG1415610
1,1,2-Trichloroethane	U		0.186	0.500	1	01/23/2020 01:44	WG1415610
Trichloroethene	0.372	J	0.153	0.500	1	01/23/2020 01:44	WG1415610
Trichlorofluoromethane	U		0.130	2.50	1	01/23/2020 01:44	WG1415610
1,2,3-Trichloropropane	U		0.247	2.50	1	01/23/2020 01:44	WG1415610
1,2,4-Trimethylbenzene	U		0.123	0.500	1	01/23/2020 01:44	WG1415610
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	01/23/2020 01:44	WG1415610
1,3,5-Trimethylbenzene	U		0.124	0.500	1	01/23/2020 01:44	WG1415610
Vinyl acetate	U		0.645	5.00	1	01/23/2020 01:44	WG1415610
Vinyl chloride	1.02		0.118	0.500	1	01/23/2020 01:44	WG1415610
Xylenes, Total	U		0.316	1.50	1	01/23/2020 01:44	WG1415610
(S) Toluene-d8	*105*			*80.0-120*		*01/23/2020 01:44*	WG1415610
(S) 4-Bromofluorobenzene	*106*			*77.0-126*		*01/23/2020 01:44*	WG1415610
(S) 1,2-Dichloroethane-d4	*123*			*70.0-130*		*01/23/2020 01:44*	WG1415610

JC 2/6/19

Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	350000		2710	20000	1	01/22/2020 20:57	WG1415297

Sample Narrative:

L1181649-03 WG1415297: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	24600		51.9	1000	1	01/22/2020 15:00	WG1415232
Nitrate	U		22.7	100	1	01/22/2020 15:00	WG1415232
Sulfate	U		77.4	5000	1	01/22/2020 15:00	WG1415232

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	6340		102	1000	1	01/28/2020 16:39	WG1417179

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	3900		15.0	100	1	01/26/2020 22:41	WG1416004
Manganese	744		0.250	5.00	1	01/26/2020 22:41	WG1416004

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	5540		0.287	0.678	1	01/23/2020 15:45	WG1415760
Ethane	U		0.296	1.29	1	01/23/2020 15:45	WG1415760
Ethene	U		0.422	1.27	1	01/23/2020 15:45	WG1415760

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U		1.05	25.0	1	01/23/2020 02:05	WG1415610
Acrylonitrile	U		0.873	5.00	1	01/23/2020 02:05	WG1415610
Benzene	U		0.0896	0.500	1	01/23/2020 02:05	WG1415610
Bromobenzene	U		0.133	0.500	1	01/23/2020 02:05	WG1415610
Bromodichloromethane	U		0.0800	0.500	1	01/23/2020 02:05	WG1415610
Bromochloromethane	U		0.145	0.500	1	01/23/2020 02:05	WG1415610
Bromoform	U		0.186	0.500	1	01/23/2020 02:05	WG1415610
Bromomethane	U		0.157	2.50	1	01/23/2020 02:05	WG1415610
n-Butylbenzene	U		0.143	0.500	1	01/23/2020 02:05	WG1415610
sec-Butylbenzene	U		0.134	0.500	1	01/23/2020 02:05	WG1415610
tert-Butylbenzene	U		0.183	0.500	1	01/23/2020 02:05	WG1415610
Carbon disulfide	U		0.101	0.500	1	01/23/2020 02:05	WG1415610
Carbon tetrachloride	U		0.159	0.500	1	01/23/2020 02:05	WG1415610
Chlorobenzene	U		0.140	0.500	1	01/23/2020 02:05	WG1415610
Chlorodibromomethane	U		0.128	0.500	1	01/23/2020 02:05	WG1415610
Chloroethane	U UJ	J0	0.141	2.50	1	01/23/2020 02:05	WG1415610
Chloroform	U		0.0860	0.500	1	01/23/2020 02:05	WG1415610
Chloromethane	U	~~J4~~	0.153	1.25	1	01/23/2020 02:05	WG1415610
2-Chlorotoluene	U		0.111	0.500	1	01/23/2020 02:05	WG1415610
4-Chlorotoluene	U		0.0972	0.500	1	01/23/2020 02:05	WG1415610

JC 2/6/19

SAMPLE RESULTS - 03

L1181649

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	01/23/2020 02:05	WG1415610
1,2-Dibromoethane	U		0.193	0.500	1	01/23/2020 02:05	WG1415610
Dibromomethane	U		0.117	0.500	1	01/23/2020 02:05	WG1415610
1,2-Dichlorobenzene	U		0.101	0.500	1	01/23/2020 02:05	WG1415610
1,3-Dichlorobenzene	U		0.130	0.500	1	01/23/2020 02:05	WG1415610
1,4-Dichlorobenzene	U		0.121	0.500	1	01/23/2020 02:05	WG1415610
Dichlorodifluoromethane	U		0.127	2.50	1	01/23/2020 02:05	WG1415610
1,1-Dichloroethane	U		0.114	0.500	1	01/23/2020 02:05	WG1415610
1,2-Dichloroethane	U		0.108	0.500	1	01/23/2020 02:05	WG1415610
1,1-Dichloroethene	U		0.188	0.500	1	01/23/2020 02:05	WG1415610
cis-1,2-Dichloroethene	U		0.0933	0.500	1	01/23/2020 02:05	WG1415610
trans-1,2-Dichloroethene	U		0.152	0.500	1	01/23/2020 02:05	WG1415610
1,2-Dichloropropane	U		0.190	0.500	1	01/23/2020 02:05	WG1415610
1,1-Dichloropropene	U		0.128	0.500	1	01/23/2020 02:05	WG1415610
1,3-Dichloropropane	U		0.147	1.00	1	01/23/2020 02:05	WG1415610
cis-1,3-Dichloropropene	U		0.0976	0.500	1	01/23/2020 02:05	WG1415610
trans-1,3-Dichloropropene	U		0.222	0.500	1	01/23/2020 02:05	WG1415610
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	01/23/2020 02:05	WG1415610
2,2-Dichloropropane	U	~~J4~~	0.0929	0.500	1	01/23/2020 02:05	WG1415610
Di-isopropyl ether	U		0.0924	0.500	1	01/23/2020 02:05	WG1415610
Ethylbenzene	U		0.158	0.500	1	01/23/2020 02:05	WG1415610
Hexachloro-1,3-butadiene	U		0.157	1.00	1	01/23/2020 02:05	WG1415610
2-Hexanone	U		0.757	5.00	1	01/23/2020 02:05	WG1415610
n-Hexane	U		0.305	5.00	1	01/23/2020 02:05	WG1415610
Iodomethane	U		0.377	10.0	1	01/23/2020 02:05	WG1415610
Isopropylbenzene	U		0.126	0.500	1	01/23/2020 02:05	WG1415610
p-Isopropyltoluene	U		0.138	0.500	1	01/23/2020 02:05	WG1415610
2-Butanone (MEK)	U		1.28	5.00	1	01/23/2020 02:05	WG1415610
Methylene Chloride	U		1.07	2.50	1	01/23/2020 02:05	WG1415610
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	01/23/2020 02:05	WG1415610
Methyl tert-butyl ether	U		0.102	0.500	1	01/23/2020 02:05	WG1415610
Naphthalene	U		0.174	2.50	1	01/23/2020 02:05	WG1415610
n-Propylbenzene	U		0.162	0.500	1	01/23/2020 02:05	WG1415610
Styrene	U		0.117	0.500	1	01/23/2020 02:05	WG1415610
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	01/23/2020 02:05	WG1415610
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	01/23/2020 02:05	WG1415610
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	01/23/2020 02:05	WG1415610
Tetrachloroethene	U		0.199	0.500	1	01/23/2020 02:05	WG1415610
Toluene	0.775		0.412	0.500	1	01/23/2020 02:05	WG1415610
1,2,3-Trichlorobenzene	U		0.164	0.500	1	01/23/2020 02:05	WG1415610
1,2,4-Trichlorobenzene	U		0.355	0.500	1	01/23/2020 02:05	WG1415610
1,1,1-Trichloroethane	U		0.0940	0.500	1	01/23/2020 02:05	WG1415610
1,1,2-Trichloroethane	U		0.186	0.500	1	01/23/2020 02:05	WG1415610
Trichloroethene	U		0.153	0.500	1	01/23/2020 02:05	WG1415610
Trichlorofluoromethane	U		0.130	2.50	1	01/23/2020 02:05	WG1415610
1,2,3-Trichloropropane	U		0.247	2.50	1	01/23/2020 02:05	WG1415610
1,2,4-Trimethylbenzene	U		0.123	0.500	1	01/23/2020 02:05	WG1415610
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	01/23/2020 02:05	WG1415610
1,3,5-Trimethylbenzene	U		0.124	0.500	1	01/23/2020 02:05	WG1415610
Vinyl acetate	U		0.645	5.00	1	01/23/2020 02:05	WG1415610
Vinyl chloride	U		0.118	0.500	1	01/23/2020 02:05	WG1415610
Xylenes, Total	0.351	J	0.316	1.50	1	01/23/2020 02:05	WG1415610
(S) Toluene-d8	*105*			*80.0-120*		*01/23/2020 02:05*	WG1415610
(S) 4-Bromofluorobenzene	*108*			*77.0-126*		*01/23/2020 02:05*	WG1415610
(S) 1,2-Dichloroethane-d4	*123*			*70.0-130*		*01/23/2020 02:05*	WG1415610

JC 2/6/19

MW-322-012120
Collected date/time: 01/21/20 13:55

SAMPLE RESULTS - 04

L1181649

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

Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	676000		2710	20000	1	01/22/2020 21:05	WG1415297

Sample Narrative:

L1181649-04 WG1415297: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	31100		51.9	1000	1	01/22/2020 15:11	WG1415232
Nitrate	U		22.7	100	1	01/22/2020 15:11	WG1415232
Sulfate	17800		77.4	5000	1	01/22/2020 15:11	WG1415232

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	17100		102	1000	1	01/28/2020 16:59	WG1417179

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	19500		15.0	100	1	01/26/2020 22:44	WG1416004
Manganese	1870		0.250	5.00	1	01/26/2020 22:44	WG1416004

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	3620		0.287	0.678	1	01/23/2020 15:47	WG1415760
Ethane	107		0.296	1.29	1	01/23/2020 15:47	WG1415760
Ethene	U		0.422	1.27	1	01/23/2020 15:47	WG1415760

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	1.19	J	1.05	25.0	1	01/23/2020 02:25	WG1415610
Acrylonitrile	U		0.873	5.00	1	01/23/2020 02:25	WG1415610
Benzene	7.41		0.0896	0.500	1	01/23/2020 02:25	WG1415610
Bromobenzene	U		0.133	0.500	1	01/23/2020 02:25	WG1415610
Bromodichloromethane	U		0.0800	0.500	1	01/23/2020 02:25	WG1415610
Bromochloromethane	U		0.145	0.500	1	01/23/2020 02:25	WG1415610
Bromoform	U		0.186	0.500	1	01/23/2020 02:25	WG1415610
Bromomethane	U		0.157	2.50	1	01/23/2020 02:25	WG1415610
n-Butylbenzene	U		0.143	0.500	1	01/23/2020 02:25	WG1415610
sec-Butylbenzene	U		0.134	0.500	1	01/23/2020 02:25	WG1415610
tert-Butylbenzene	U		0.183	0.500	1	01/23/2020 02:25	WG1415610
Carbon disulfide	0.295	J	0.101	0.500	1	01/23/2020 02:25	WG1415610
Carbon tetrachloride	U		0.159	0.500	1	01/23/2020 02:25	WG1415610
Chlorobenzene	U		0.140	0.500	1	01/23/2020 02:25	WG1415610
Chlorodibromomethane	U		0.128	0.500	1	01/23/2020 02:25	WG1415610
Chloroethane	U UJ	J0	0.141	2.50	1	01/23/2020 02:25	WG1415610
Chloroform	U		0.0860	0.500	1	01/23/2020 02:25	WG1415610
Chloromethane	U	~~J4~~	0.153	1.25	1	01/23/2020 02:25	WG1415610
2-Chlorotoluene	U		0.111	0.500	1	01/23/2020 02:25	WG1415610
4-Chlorotoluene	U		0.0972	0.500	1	01/23/2020 02:25	WG1415610

JC 2/6/19

MW-322-012120

Collected date/time: 01/21/20 13:55

SAMPLE RESULTS - 04

L1181649

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

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	01/23/2020 02:25	WG1415610
1,2-Dibromoethane	U		0.193	0.500	1	01/23/2020 02:25	WG1415610
Dibromomethane	U		0.117	0.500	1	01/23/2020 02:25	WG1415610
1,2-Dichlorobenzene	U		0.101	0.500	1	01/23/2020 02:25	WG1415610
1,3-Dichlorobenzene	U		0.130	0.500	1	01/23/2020 02:25	WG1415610
1,4-Dichlorobenzene	U		0.121	0.500	1	01/23/2020 02:25	WG1415610
Dichlorodifluoromethane	U		0.127	2.50	1	01/23/2020 02:25	WG1415610
1,1-Dichloroethane	U		0.114	0.500	1	01/23/2020 02:25	WG1415610
1,2-Dichloroethane	U		0.108	0.500	1	01/23/2020 02:25	WG1415610
1,1-Dichloroethene	7.05		0.188	0.500	1	01/23/2020 02:25	WG1415610
cis-1,2-Dichloroethene	2740		9.33	50.0	100	01/28/2020 01:16	WG1417929
trans-1,2-Dichloroethene	6.06		0.152	0.500	1	01/23/2020 02:25	WG1415610
1,2-Dichloropropane	U		0.190	0.500	1	01/23/2020 02:25	WG1415610
1,1-Dichloropropene	U		0.128	0.500	1	01/23/2020 02:25	WG1415610
1,3-Dichloropropane	U		0.147	1.00	1	01/23/2020 02:25	WG1415610
cis-1,3-Dichloropropene	U		0.0976	0.500	1	01/23/2020 02:25	WG1415610
trans-1,3-Dichloropropene	U		0.222	0.500	1	01/23/2020 02:25	WG1415610
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	01/23/2020 02:25	WG1415610
2,2-Dichloropropane	U	~~J4~~	0.0929	0.500	1	01/23/2020 02:25	WG1415610
Di-isopropyl ether	U		0.0924	0.500	1	01/23/2020 02:25	WG1415610
Ethylbenzene	U		0.158	0.500	1	01/23/2020 02:25	WG1415610
Hexachloro-1,3-butadiene	U		0.157	1.00	1	01/23/2020 02:25	WG1415610
2-Hexanone	U		0.757	5.00	1	01/23/2020 02:25	WG1415610
n-Hexane	U		0.305	5.00	1	01/23/2020 02:25	WG1415610
Iodomethane	U		0.377	10.0	1	01/23/2020 02:25	WG1415610
Isopropylbenzene	U		0.126	0.500	1	01/23/2020 02:25	WG1415610
p-Isopropyltoluene	U		0.138	0.500	1	01/23/2020 02:25	WG1415610
2-Butanone (MEK)	U		1.28	5.00	1	01/23/2020 02:25	WG1415610
Methylene Chloride	U		1.07	2.50	1	01/23/2020 02:25	WG1415610
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	01/23/2020 02:25	WG1415610
Methyl tert-butyl ether	U		0.102	0.500	1	01/23/2020 02:25	WG1415610
Naphthalene	U		0.174	2.50	1	01/23/2020 02:25	WG1415610
n-Propylbenzene	U		0.162	0.500	1	01/23/2020 02:25	WG1415610
Styrene	U		0.117	0.500	1	01/23/2020 02:25	WG1415610
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	01/23/2020 02:25	WG1415610
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	01/23/2020 02:25	WG1415610
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	01/23/2020 02:25	WG1415610
Tetrachloroethene	0.218	J	0.199	0.500	1	01/23/2020 02:25	WG1415610
Toluene	0.955		0.412	0.500	1	01/23/2020 02:25	WG1415610
1,2,3-Trichlorobenzene	U		0.164	0.500	1	01/23/2020 02:25	WG1415610
1,2,4-Trichlorobenzene	U		0.355	0.500	1	01/23/2020 02:25	WG1415610
1,1,1-Trichloroethane	U		0.0940	0.500	1	01/23/2020 02:25	WG1415610
1,1,2-Trichloroethane	U		0.186	0.500	1	01/23/2020 02:25	WG1415610
Trichloroethene	8.62		0.153	0.500	1	01/23/2020 02:25	WG1415610
Trichlorofluoromethane	U		0.130	2.50	1	01/23/2020 02:25	WG1415610
1,2,3-Trichloropropane	U		0.247	2.50	1	01/23/2020 02:25	WG1415610
1,2,4-Trimethylbenzene	U		0.123	0.500	1	01/23/2020 02:25	WG1415610
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	01/23/2020 02:25	WG1415610
1,3,5-Trimethylbenzene	U		0.124	0.500	1	01/23/2020 02:25	WG1415610
Vinyl acetate	U		0.645	5.00	1	01/23/2020 02:25	WG1415610
Vinyl chloride	221		11.8	50.0	100	01/28/2020 01:16	WG1417929
Xylenes, Total	U		0.316	1.50	1	01/23/2020 02:25	WG1415610
(S) Toluene-d8	*104*			*80.0-120*		*01/23/2020 02:25*	WG1415610
(S) Toluene-d8	*100*			*80.0-120*		*01/28/2020 01:16*	WG1417929
(S) 4-Bromofluorobenzene	*105*			*77.0-126*		*01/23/2020 02:25*	WG1415610
(S) 4-Bromofluorobenzene	*107*			*77.0-126*		*01/28/2020 01:16*	WG1417929

JC 2/6/19

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
(S) 1,2-Dichloroethane-d4	*121*			*70.0-130*		*01/23/2020 02:25*	WG1415610
(S) 1,2-Dichloroethane-d4	*117*			*70.0-130*		*01/28/2020 01:16*	WG1417929

JC 2/6/19

MW-142-012220

Collected date/time: 01/22/20 10:05

SAMPLE RESULTS - 01

L1182058

Wet Chemistry by Method 2320 B-2011

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Alkalinity	831000		2710	20000	1	01/23/2020 14:21	WG1415814

Sample Narrative:

L1182058-01 WG1415814: Endpoint pH 4.5

Wet Chemistry by Method 9056A

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Chloride	18600		51.9	1000	1	01/23/2020 17:51	WG1415788
Nitrate	23.0	U ~~BJ~~	22.7	100	1	01/23/2020 17:51	WG1415788
Sulfate	19000		77.4	5000	1	01/23/2020 17:51	WG1415788

Wet Chemistry by Method 9060A

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
TOC (Total Organic Carbon)	18500		102	1000	1	01/28/2020 23:25	WG1417179

Metals (ICPMS) by Method 6020B

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Iron	5300		15.0	100	1	01/26/2020 23:07	WG1416004
Manganese	3420		0.250	5.00	1	01/26/2020 23:07	WG1416004

Volatile Organic Compounds (GC) by Method NWTPHGX

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Gasoline Range Organics-NWTPH	U		31.6	100	1	01/26/2020 19:07	WG1417147
(S) a,a,a-Trifluorotoluene(FID)	*99.8*			*78.0-120*		*01/26/2020 19:07*	WG1417147

Volatile Organic Compounds (GC) by Method RSK175

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Methane	493		0.287	0.678	1	01/24/2020 13:03	WG1415985
Ethane	31.3		0.296	1.29	1	01/24/2020 13:03	WG1415985
Ethene	U		0.422	1.27	1	01/24/2020 13:03	WG1415985

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

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Acetone	U		1.05	25.0	1	01/25/2020 13:59	WG1417070
Acrylonitrile	U		0.873	5.00	1	01/25/2020 13:59	WG1417070
Benzene	0.438	J	0.0896	0.500	1	01/25/2020 13:59	WG1417070
Bromobenzene	U		0.133	0.500	1	01/25/2020 13:59	WG1417070
Bromodichloromethane	U		0.0800	0.500	1	01/25/2020 13:59	WG1417070
Bromochloromethane	U		0.145	0.500	1	01/25/2020 13:59	WG1417070
Bromoform	U		0.186	0.500	1	01/25/2020 13:59	WG1417070
Bromomethane	U		0.157	2.50	1	01/25/2020 13:59	WG1417070
n-Butylbenzene	U		0.143	0.500	1	01/25/2020 13:59	WG1417070
sec-Butylbenzene	U		0.134	0.500	1	01/25/2020 13:59	WG1417070
tert-Butylbenzene	U		0.183	0.500	1	01/25/2020 13:59	WG1417070
Carbon disulfide	U		0.101	0.500	1	01/25/2020 13:59	WG1417070
Carbon tetrachloride	U		0.159	0.500	1	01/25/2020 13:59	WG1417070

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chlorobenzene	U		0.140	0.500	1	01/25/2020 13:59	WG1417070
Chlorodibromomethane	U		0.128	0.500	1	01/25/2020 13:59	WG1417070
Chloroethane	U		0.141	2.50	1	01/25/2020 13:59	WG1417070
Chloroform	U		0.0860	0.500	1	01/25/2020 13:59	WG1417070
Chloromethane	U		0.153	1.25	1	01/25/2020 13:59	WG1417070
2-Chlorotoluene	U		0.111	0.500	1	01/25/2020 13:59	WG1417070
4-Chlorotoluene	U		0.0972	0.500	1	01/25/2020 13:59	WG1417070
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	01/25/2020 13:59	WG1417070
1,2-Dibromoethane	U		0.193	0.500	1	01/25/2020 13:59	WG1417070
Dibromomethane	U		0.117	0.500	1	01/25/2020 13:59	WG1417070
1,2-Dichlorobenzene	U		0.101	0.500	1	01/25/2020 13:59	WG1417070
1,3-Dichlorobenzene	U		0.130	0.500	1	01/25/2020 13:59	WG1417070
1,4-Dichlorobenzene	U		0.121	0.500	1	01/25/2020 13:59	WG1417070
Dichlorodifluoromethane	U		0.127	2.50	1	01/25/2020 13:59	WG1417070
1,1-Dichloroethane	U		0.114	0.500	1	01/25/2020 13:59	WG1417070
1,2-Dichloroethane	U		0.108	0.500	1	01/25/2020 13:59	WG1417070
1,1-Dichloroethene	0.235	J	0.188	0.500	1	01/25/2020 13:59	WG1417070
cis-1,2-Dichloroethene	45.6		0.0933	0.500	1	01/25/2020 13:59	WG1417070
trans-1,2-Dichloroethene	0.379	J	0.152	0.500	1	01/25/2020 13:59	WG1417070
1,2-Dichloropropane	U		0.190	0.500	1	01/25/2020 13:59	WG1417070
1,1-Dichloropropene	U		0.128	0.500	1	01/25/2020 13:59	WG1417070
1,3-Dichloropropane	U		0.147	1.00	1	01/25/2020 13:59	WG1417070
cis-1,3-Dichloropropene	U		0.0976	0.500	1	01/25/2020 13:59	WG1417070
trans-1,3-Dichloropropene	U		0.222	0.500	1	01/25/2020 13:59	WG1417070
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	01/25/2020 13:59	WG1417070
2,2-Dichloropropane	U		0.0929	0.500	1	01/25/2020 13:59	WG1417070
Di-isopropyl ether	U		0.0924	0.500	1	01/25/2020 13:59	WG1417070
Ethylbenzene	U		0.158	0.500	1	01/25/2020 13:59	WG1417070
Hexachloro-1,3-butadiene	U		0.157	1.00	1	01/25/2020 13:59	WG1417070
2-Hexanone	U		0.757	5.00	1	01/25/2020 13:59	WG1417070
n-Hexane	U		0.305	5.00	1	01/25/2020 13:59	WG1417070
Iodomethane	U		0.377	10.0	1	01/25/2020 13:59	WG1417070
Isopropylbenzene	U		0.126	0.500	1	01/25/2020 13:59	WG1417070
p-Isopropyltoluene	U		0.138	0.500	1	01/25/2020 13:59	WG1417070
2-Butanone (MEK)	U		1.28	5.00	1	01/25/2020 13:59	WG1417070
Methylene Chloride	U		1.07	2.50	1	01/25/2020 13:59	WG1417070
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	01/25/2020 13:59	WG1417070
Methyl tert-butyl ether	U		0.102	0.500	1	01/25/2020 13:59	WG1417070
Naphthalene	U UJ	J0	0.174	2.50	1	01/25/2020 13:59	WG1417070
n-Propylbenzene	U		0.162	0.500	1	01/25/2020 13:59	WG1417070
Styrene	U		0.117	0.500	1	01/25/2020 13:59	WG1417070
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	01/25/2020 13:59	WG1417070
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	01/25/2020 13:59	WG1417070
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	01/25/2020 13:59	WG1417070
Tetrachloroethene	U		0.199	0.500	1	01/25/2020 13:59	WG1417070
Toluene	U		0.412	0.500	1	01/25/2020 13:59	WG1417070
1,2,3-Trichlorobenzene	U UJ	J0	0.164	0.500	1	01/25/2020 13:59	WG1417070
1,2,4-Trichlorobenzene	U		0.355	0.500	1	01/25/2020 13:59	WG1417070
1,1,1-Trichloroethane	U		0.0940	0.500	1	01/25/2020 13:59	WG1417070
1,1,2-Trichloroethane	U		0.186	0.500	1	01/25/2020 13:59	WG1417070
Trichloroethene	0.311	J	0.153	0.500	1	01/25/2020 13:59	WG1417070
Trichlorofluoromethane	U		0.130	2.50	1	01/25/2020 13:59	WG1417070
1,2,3-Trichloropropane	U		0.247	2.50	1	01/25/2020 13:59	WG1417070
1,2,4-Trimethylbenzene	U		0.123	0.500	1	01/25/2020 13:59	WG1417070
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	01/25/2020 13:59	WG1417070
1,3,5-Trimethylbenzene	U		0.124	0.500	1	01/25/2020 13:59	WG1417070

JC 2/6/20

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Vinyl acetate	U		0.645	5.00	1	01/25/2020 13:59	WG1417070
Vinyl chloride	8.19		0.118	0.500	1	01/25/2020 13:59	WG1417070
Xylenes, Total	U		0.316	1.50	1	01/25/2020 13:59	WG1417070
(S) Toluene-d8	*88.1*			*80.0-120*		*01/25/2020 13:59*	WG1417070
(S) 4-Bromofluorobenzene	*96.3*			*77.0-126*		*01/25/2020 13:59*	WG1417070
(S) 1,2-Dichloroethane-d4	*101*			*70.0-130*		*01/25/2020 13:59*	WG1417070

JC 2/6/20

Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	394000		2710	20000	1	01/23/2020 14:29	WG1415814

Sample Narrative:

L1182058-02 WG1415814: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	58100		51.9	1000	1	01/23/2020 18:04	WG1415788
Nitrate	22.9	U ~~B J~~	22.7	100	1	01/23/2020 18:04	WG1415788
Sulfate	2340	J	77.4	5000	1	01/23/2020 18:04	WG1415788

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	7530		102	1000	1	01/28/2020 23:47	WG1417179

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	2020		15.0	100	1	01/26/2020 23:10	WG1416004
Manganese	410		0.250	5.00	1	01/26/2020 23:10	WG1416004

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	U		31.6	100	1	01/26/2020 19:56	WG1417147
(S) a,a,a-Trifluorotoluene(FID)	*98.4*			*78.0-120*		*01/26/2020 19:56*	WG1417147

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	5090		0.287	0.678	1	01/24/2020 13:05	WG1415985
Ethane	83.6		0.296	1.29	1	01/24/2020 13:05	WG1415985
Ethene	U		0.422	1.27	1	01/24/2020 13:05	WG1415985

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U		1.05	25.0	1	01/27/2020 17:06	WG1417735
Acrylonitrile	U		0.873	5.00	1	01/27/2020 17:06	WG1417735
Benzene	U		0.0896	0.500	1	01/27/2020 17:06	WG1417735
Bromobenzene	U		0.133	0.500	1	01/27/2020 17:06	WG1417735
Bromodichloromethane	U		0.0800	0.500	1	01/27/2020 17:06	WG1417735
Bromochloromethane	U		0.145	0.500	1	01/27/2020 17:06	WG1417735
Bromoform	U		0.186	0.500	1	01/27/2020 17:06	WG1417735
Bromomethane	U		0.157	2.50	1	01/27/2020 17:06	WG1417735
n-Butylbenzene	U		0.143	0.500	1	01/27/2020 17:06	WG1417735
sec-Butylbenzene	U		0.134	0.500	1	01/27/2020 17:06	WG1417735
tert-Butylbenzene	U		0.183	0.500	1	01/27/2020 17:06	WG1417735
Carbon disulfide	U		0.101	0.500	1	01/27/2020 17:06	WG1417735
Carbon tetrachloride	U		0.159	0.500	1	01/27/2020 17:06	WG1417735

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MW-143-012220

Collected date/time: 01/22/20 11:55

SAMPLE RESULTS - 02

L1182058

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

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chlorobenzene	U		0.140	0.500	1	01/27/2020 17:06	WG1417735
Chlorodibromomethane	U		0.128	0.500	1	01/27/2020 17:06	WG1417735
Chloroethane	U		0.141	2.50	1	01/27/2020 17:06	WG1417735
Chloroform	U		0.0860	0.500	1	01/27/2020 17:06	WG1417735
Chloromethane	U		0.153	1.25	1	01/27/2020 17:06	WG1417735
2-Chlorotoluene	U		0.111	0.500	1	01/27/2020 17:06	WG1417735
4-Chlorotoluene	U		0.0972	0.500	1	01/27/2020 17:06	WG1417735
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	01/27/2020 17:06	WG1417735
1,2-Dibromoethane	U		0.193	0.500	1	01/27/2020 17:06	WG1417735
Dibromomethane	U		0.117	0.500	1	01/27/2020 17:06	WG1417735
1,2-Dichlorobenzene	U		0.101	0.500	1	01/27/2020 17:06	WG1417735
1,3-Dichlorobenzene	U		0.130	0.500	1	01/27/2020 17:06	WG1417735
1,4-Dichlorobenzene	U		0.121	0.500	1	01/27/2020 17:06	WG1417735
Dichlorodifluoromethane	U		0.127	2.50	1	01/27/2020 17:06	WG1417735
1,1-Dichloroethane	U		0.114	0.500	1	01/27/2020 17:06	WG1417735
1,2-Dichloroethane	U		0.108	0.500	1	01/27/2020 17:06	WG1417735
1,1-Dichloroethene	U		0.188	0.500	1	01/27/2020 17:06	WG1417735
cis-1,2-Dichloroethene	0.171	J	0.0933	0.500	1	01/27/2020 17:06	WG1417735
trans-1,2-Dichloroethene	U		0.152	0.500	1	01/27/2020 17:06	WG1417735
1,2-Dichloropropane	U		0.190	0.500	1	01/27/2020 17:06	WG1417735
1,1-Dichloropropene	U		0.128	0.500	1	01/27/2020 17:06	WG1417735
1,3-Dichloropropane	U		0.147	1.00	1	01/27/2020 17:06	WG1417735
cis-1,3-Dichloropropene	U		0.0976	0.500	1	01/27/2020 17:06	WG1417735
trans-1,3-Dichloropropene	U		0.222	0.500	1	01/27/2020 17:06	WG1417735
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	01/27/2020 17:06	WG1417735
2,2-Dichloropropane	U		0.0929	0.500	1	01/27/2020 17:06	WG1417735
Di-isopropyl ether	U		0.0924	0.500	1	01/27/2020 17:06	WG1417735
Ethylbenzene	U		0.158	0.500	1	01/27/2020 17:06	WG1417735
Hexachloro-1,3-butadiene	U		0.157	1.00	1	01/27/2020 17:06	WG1417735
2-Hexanone	U		0.757	5.00	1	01/27/2020 17:06	WG1417735
n-Hexane	U		0.305	5.00	1	01/27/2020 17:06	WG1417735
Iodomethane	U	UJ J0	0.377	10.0	1	01/27/2020 17:06	WG1417735
Isopropylbenzene	U		0.126	0.500	1	01/27/2020 17:06	WG1417735
p-Isopropyltoluene	U		0.138	0.500	1	01/27/2020 17:06	WG1417735
2-Butanone (MEK)	U		1.28	5.00	1	01/27/2020 17:06	WG1417735
Methylene Chloride	U		1.07	2.50	1	01/27/2020 17:06	WG1417735
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	01/27/2020 17:06	WG1417735
Methyl tert-butyl ether	U		0.102	0.500	1	01/27/2020 17:06	WG1417735
Naphthalene	U		0.174	2.50	1	01/27/2020 17:06	WG1417735
n-Propylbenzene	U		0.162	0.500	1	01/27/2020 17:06	WG1417735
Styrene	U		0.117	0.500	1	01/27/2020 17:06	WG1417735
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	01/27/2020 17:06	WG1417735
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	01/27/2020 17:06	WG1417735
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	01/27/2020 17:06	WG1417735
Tetrachloroethene	U		0.199	0.500	1	01/27/2020 17:06	WG1417735
Toluene	U		0.412	0.500	1	01/27/2020 17:06	WG1417735
1,2,3-Trichlorobenzene	U		0.164	0.500	1	01/27/2020 17:06	WG1417735
1,2,4-Trichlorobenzene	U		0.355	0.500	1	01/27/2020 17:06	WG1417735
1,1,1-Trichloroethane	U		0.0940	0.500	1	01/27/2020 17:06	WG1417735
1,1,2-Trichloroethane	U		0.186	0.500	1	01/27/2020 17:06	WG1417735
Trichloroethene	U		0.153	0.500	1	01/27/2020 17:06	WG1417735
Trichlorofluoromethane	U		0.130	2.50	1	01/27/2020 17:06	WG1417735
1,2,3-Trichloropropane	U		0.247	2.50	1	01/27/2020 17:06	WG1417735
1,2,4-Trimethylbenzene	U		0.123	0.500	1	01/27/2020 17:06	WG1417735
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	01/27/2020 17:06	WG1417735
1,3,5-Trimethylbenzene	U		0.124	0.500	1	01/27/2020 17:06	WG1417735

JC 2/6/20

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Vinyl acetate	U		0.645	5.00	1	01/27/2020 17:06	WG1417735
Vinyl chloride	0.254	J	0.118	0.500	1	01/27/2020 17:06	WG1417735
Xylenes, Total	U		0.316	1.50	1	01/27/2020 17:06	WG1417735
(S) Toluene-d8	*95.2*			*80.0-120*		*01/27/2020 17:06*	WG1417735
(S) 4-Bromofluorobenzene	*95.6*			*77.0-126*		*01/27/2020 17:06*	WG1417735
(S) 1,2-Dichloroethane-d4	*94.8*			*70.0-130*		*01/27/2020 17:06*	WG1417735

JC 2/6/20

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

Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	405000		2710	20000	1	01/23/2020 14:36	WG1415814

Sample Narrative:

L1182058-03 WG1415814: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	11400		51.9	1000	1	01/23/2020 18:17	WG1415788
Nitrate	23.6 U	~~B J~~	22.7	100	1	01/23/2020 18:17	WG1415788
Sulfate	9330		77.4	5000	1	01/23/2020 18:17	WG1415788

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	6770		102	1000	1	01/29/2020 00:05	WG1417179

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	11300		15.0	100	1	01/26/2020 23:13	WG1416004
Manganese	1880		0.250	5.00	1	01/26/2020 23:13	WG1416004

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	13900		2.87	6.78	10	01/24/2020 14:25	WG1416399
Ethane	2.14		0.296	1.29	1	01/24/2020 13:08	WG1415985
Ethene	U		0.422	1.27	1	01/24/2020 13:08	WG1415985

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U		1.05	25.0	1	01/25/2020 14:38	WG1417070
Acrylonitrile	U		0.873	5.00	1	01/25/2020 14:38	WG1417070
Benzene	U		0.0896	0.500	1	01/25/2020 14:38	WG1417070
Bromobenzene	U		0.133	0.500	1	01/25/2020 14:38	WG1417070
Bromodichloromethane	U		0.0800	0.500	1	01/25/2020 14:38	WG1417070
Bromochloromethane	U		0.145	0.500	1	01/25/2020 14:38	WG1417070
Bromoform	U		0.186	0.500	1	01/25/2020 14:38	WG1417070
Bromomethane	U		0.157	2.50	1	01/25/2020 14:38	WG1417070
n-Butylbenzene	U		0.143	0.500	1	01/25/2020 14:38	WG1417070
sec-Butylbenzene	U		0.134	0.500	1	01/25/2020 14:38	WG1417070
tert-Butylbenzene	U		0.183	0.500	1	01/25/2020 14:38	WG1417070
Carbon disulfide	U		0.101	0.500	1	01/25/2020 14:38	WG1417070
Carbon tetrachloride	U		0.159	0.500	1	01/25/2020 14:38	WG1417070
Chlorobenzene	U		0.140	0.500	1	01/25/2020 14:38	WG1417070
Chlorodibromomethane	U		0.128	0.500	1	01/25/2020 14:38	WG1417070
Chloroethane	U		0.141	2.50	1	01/25/2020 14:38	WG1417070
Chloroform	U		0.0860	0.500	1	01/25/2020 14:38	WG1417070
Chloromethane	U		0.153	1.25	1	01/25/2020 14:38	WG1417070
2-Chlorotoluene	U		0.111	0.500	1	01/25/2020 14:38	WG1417070
4-Chlorotoluene	U		0.0972	0.500	1	01/25/2020 14:38	WG1417070

JC 2/6/20

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

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	01/25/2020 14:38	WG1417070
1,2-Dibromoethane	U		0.193	0.500	1	01/25/2020 14:38	WG1417070
Dibromomethane	U		0.117	0.500	1	01/25/2020 14:38	WG1417070
1,2-Dichlorobenzene	U		0.101	0.500	1	01/25/2020 14:38	WG1417070
1,3-Dichlorobenzene	U		0.130	0.500	1	01/25/2020 14:38	WG1417070
1,4-Dichlorobenzene	U		0.121	0.500	1	01/25/2020 14:38	WG1417070
Dichlorodifluoromethane	U		0.127	2.50	1	01/25/2020 14:38	WG1417070
1,1-Dichloroethane	U		0.114	0.500	1	01/25/2020 14:38	WG1417070
1,2-Dichloroethane	U		0.108	0.500	1	01/25/2020 14:38	WG1417070
1,1-Dichloroethene	U		0.188	0.500	1	01/25/2020 14:38	WG1417070
cis-1,2-Dichloroethene	U		0.0933	0.500	1	01/25/2020 14:38	WG1417070
trans-1,2-Dichloroethene	U		0.152	0.500	1	01/25/2020 14:38	WG1417070
1,2-Dichloropropane	U		0.190	0.500	1	01/25/2020 14:38	WG1417070
1,1-Dichloropropene	U		0.128	0.500	1	01/25/2020 14:38	WG1417070
1,3-Dichloropropane	U		0.147	1.00	1	01/25/2020 14:38	WG1417070
cis-1,3-Dichloropropene	U		0.0976	0.500	1	01/25/2020 14:38	WG1417070
trans-1,3-Dichloropropene	U		0.222	0.500	1	01/25/2020 14:38	WG1417070
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	01/25/2020 14:38	WG1417070
2,2-Dichloropropane	U		0.0929	0.500	1	01/25/2020 14:38	WG1417070
Di-isopropyl ether	U		0.0924	0.500	1	01/25/2020 14:38	WG1417070
Ethylbenzene	U		0.158	0.500	1	01/25/2020 14:38	WG1417070
Hexachloro-1,3-butadiene	U		0.157	1.00	1	01/25/2020 14:38	WG1417070
2-Hexanone	U		0.757	5.00	1	01/25/2020 14:38	WG1417070
n-Hexane	U		0.305	5.00	1	01/25/2020 14:38	WG1417070
Iodomethane	U		0.377	10.0	1	01/25/2020 14:38	WG1417070
Isopropylbenzene	U		0.126	0.500	1	01/25/2020 14:38	WG1417070
p-Isopropyltoluene	U		0.138	0.500	1	01/25/2020 14:38	WG1417070
2-Butanone (MEK)	U		1.28	5.00	1	01/25/2020 14:38	WG1417070
Methylene Chloride	U		1.07	2.50	1	01/25/2020 14:38	WG1417070
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	01/25/2020 14:38	WG1417070
Methyl tert-butyl ether	U		0.102	0.500	1	01/25/2020 14:38	WG1417070
Naphthalene	U	UJ J0	0.174	2.50	1	01/25/2020 14:38	WG1417070
n-Propylbenzene	U		0.162	0.500	1	01/25/2020 14:38	WG1417070
Styrene	U		0.117	0.500	1	01/25/2020 14:38	WG1417070
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	01/25/2020 14:38	WG1417070
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	01/25/2020 14:38	WG1417070
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	01/25/2020 14:38	WG1417070
Tetrachloroethene	U		0.199	0.500	1	01/25/2020 14:38	WG1417070
Toluene	U		0.412	0.500	1	01/25/2020 14:38	WG1417070
1,2,3-Trichlorobenzene	U	UJ J0	0.164	0.500	1	01/25/2020 14:38	WG1417070
1,2,4-Trichlorobenzene	U		0.355	0.500	1	01/25/2020 14:38	WG1417070
1,1,1-Trichloroethane	U		0.0940	0.500	1	01/25/2020 14:38	WG1417070
1,1,2-Trichloroethane	U		0.186	0.500	1	01/25/2020 14:38	WG1417070
Trichloroethene	U		0.153	0.500	1	01/25/2020 14:38	WG1417070
Trichlorofluoromethane	U		0.130	2.50	1	01/25/2020 14:38	WG1417070
1,2,3-Trichloropropane	U		0.247	2.50	1	01/25/2020 14:38	WG1417070
1,2,4-Trimethylbenzene	U		0.123	0.500	1	01/25/2020 14:38	WG1417070
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	01/25/2020 14:38	WG1417070
1,3,5-Trimethylbenzene	U		0.124	0.500	1	01/25/2020 14:38	WG1417070
Vinyl acetate	U		0.645	5.00	1	01/25/2020 14:38	WG1417070
Vinyl chloride	U		0.118	0.500	1	01/25/2020 14:38	WG1417070
Xylenes, Total	U		0.316	1.50	1	01/25/2020 14:38	WG1417070
(S) Toluene-d8	*99.2*			*80.0-120*		*01/25/2020 14:38*	WG1417070
(S) 4-Bromofluorobenzene	*104*			*77.0-126*		*01/25/2020 14:38*	WG1417070
(S) 1,2-Dichloroethane-d4	*99.7*			*70.0-130*		*01/25/2020 14:38*	WG1417070

JC 2/6/20

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

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

Wet Chemistry by Method 2320 B-2011

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Alkalinity	382000		2710	20000	1	01/23/2020 14:44	WG1415814

Sample Narrative:

L1182058-04 WG1415814: Endpoint pH 4.5

Wet Chemistry by Method 9056A

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Chloride	24300		51.9	1000	1	01/23/2020 18:42	WG1415788
Nitrate	23.8	U ~~B J~~	22.7	100	1	01/23/2020 18:42	WG1415788
Sulfate	33500		77.4	5000	1	01/23/2020 18:42	WG1415788

Wet Chemistry by Method 9060A

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
TOC (Total Organic Carbon)	5430		102	1000	1	01/29/2020 00:22	WG1417179

Metals (ICPMS) by Method 6020B

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Iron	4580		15.0	100	1	01/26/2020 23:16	WG1416004
Manganese	1820		0.250	5.00	1	01/26/2020 23:16	WG1416004

Volatile Organic Compounds (GC) by Method RSK175

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Methane	2360		0.287	0.678	1	01/24/2020 13:11	WG1415985
Ethane	4.18		0.296	1.29	1	01/24/2020 13:11	WG1415985
Ethene	U		0.422	1.27	1	01/24/2020 13:11	WG1415985

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

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Acetone	U		1.05	25.0	1	01/25/2020 14:58	WG1417070
Acrylonitrile	U		0.873	5.00	1	01/25/2020 14:58	WG1417070
Benzene	U		0.0896	0.500	1	01/25/2020 14:58	WG1417070
Bromobenzene	U		0.133	0.500	1	01/25/2020 14:58	WG1417070
Bromodichloromethane	U		0.0800	0.500	1	01/25/2020 14:58	WG1417070
Bromochloromethane	U		0.145	0.500	1	01/25/2020 14:58	WG1417070
Bromoform	U		0.186	0.500	1	01/25/2020 14:58	WG1417070
Bromomethane	U		0.157	2.50	1	01/25/2020 14:58	WG1417070
n-Butylbenzene	U		0.143	0.500	1	01/25/2020 14:58	WG1417070
sec-Butylbenzene	U		0.134	0.500	1	01/25/2020 14:58	WG1417070
tert-Butylbenzene	U		0.183	0.500	1	01/25/2020 14:58	WG1417070
Carbon disulfide	U		0.101	0.500	1	01/25/2020 14:58	WG1417070
Carbon tetrachloride	U		0.159	0.500	1	01/25/2020 14:58	WG1417070
Chlorobenzene	U		0.140	0.500	1	01/25/2020 14:58	WG1417070
Chlorodibromomethane	U		0.128	0.500	1	01/25/2020 14:58	WG1417070
Chloroethane	U		0.141	2.50	1	01/25/2020 14:58	WG1417070
Chloroform	U		0.0860	0.500	1	01/25/2020 14:58	WG1417070
Chloromethane	U		0.153	1.25	1	01/25/2020 14:58	WG1417070
2-Chlorotoluene	U		0.111	0.500	1	01/25/2020 14:58	WG1417070
4-Chlorotoluene	U		0.0972	0.500	1	01/25/2020 14:58	WG1417070

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MW123-012220

Collected date/time: 01/22/20 16:05

SAMPLE RESULTS - 04

L1182058

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	01/25/2020 14:58	WG1417070
1,2-Dibromoethane	U		0.193	0.500	1	01/25/2020 14:58	WG1417070
Dibromomethane	U		0.117	0.500	1	01/25/2020 14:58	WG1417070
1,2-Dichlorobenzene	U		0.101	0.500	1	01/25/2020 14:58	WG1417070
1,3-Dichlorobenzene	U		0.130	0.500	1	01/25/2020 14:58	WG1417070
1,4-Dichlorobenzene	U		0.121	0.500	1	01/25/2020 14:58	WG1417070
Dichlorodifluoromethane	U		0.127	2.50	1	01/25/2020 14:58	WG1417070
1,1-Dichloroethane	U		0.114	0.500	1	01/25/2020 14:58	WG1417070
1,2-Dichloroethane	U		0.108	0.500	1	01/25/2020 14:58	WG1417070
1,1-Dichloroethene	U		0.188	0.500	1	01/25/2020 14:58	WG1417070
cis-1,2-Dichloroethene	U		0.0933	0.500	1	01/25/2020 14:58	WG1417070
trans-1,2-Dichloroethene	U		0.152	0.500	1	01/25/2020 14:58	WG1417070
1,2-Dichloropropane	U		0.190	0.500	1	01/25/2020 14:58	WG1417070
1,1-Dichloropropene	U		0.128	0.500	1	01/25/2020 14:58	WG1417070
1,3-Dichloropropane	U		0.147	1.00	1	01/25/2020 14:58	WG1417070
cis-1,3-Dichloropropene	U		0.0976	0.500	1	01/25/2020 14:58	WG1417070
trans-1,3-Dichloropropene	U		0.222	0.500	1	01/25/2020 14:58	WG1417070
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	01/25/2020 14:58	WG1417070
2,2-Dichloropropane	U		0.0929	0.500	1	01/25/2020 14:58	WG1417070
Di-isopropyl ether	0.144	J	0.0924	0.500	1	01/25/2020 14:58	WG1417070
Ethylbenzene	U		0.158	0.500	1	01/25/2020 14:58	WG1417070
Hexachloro-1,3-butadiene	U		0.157	1.00	1	01/25/2020 14:58	WG1417070
2-Hexanone	U		0.757	5.00	1	01/25/2020 14:58	WG1417070
n-Hexane	U		0.305	5.00	1	01/25/2020 14:58	WG1417070
Iodomethane	U		0.377	10.0	1	01/25/2020 14:58	WG1417070
Isopropylbenzene	U		0.126	0.500	1	01/25/2020 14:58	WG1417070
p-Isopropyltoluene	U		0.138	0.500	1	01/25/2020 14:58	WG1417070
2-Butanone (MEK)	U		1.28	5.00	1	01/25/2020 14:58	WG1417070
Methylene Chloride	U		1.07	2.50	1	01/25/2020 14:58	WG1417070
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	01/25/2020 14:58	WG1417070
Methyl tert-butyl ether	U		0.102	0.500	1	01/25/2020 14:58	WG1417070
Naphthalene	U UJ	J0	0.174	2.50	1	01/25/2020 14:58	WG1417070
n-Propylbenzene	U		0.162	0.500	1	01/25/2020 14:58	WG1417070
Styrene	U		0.117	0.500	1	01/25/2020 14:58	WG1417070
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	01/25/2020 14:58	WG1417070
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	01/25/2020 14:58	WG1417070
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	01/25/2020 14:58	WG1417070
Tetrachloroethene	U		0.199	0.500	1	01/25/2020 14:58	WG1417070
Toluene	U		0.412	0.500	1	01/25/2020 14:58	WG1417070
1,2,3-Trichlorobenzene	U UJ	J0	0.164	0.500	1	01/25/2020 14:58	WG1417070
1,2,4-Trichlorobenzene	U		0.355	0.500	1	01/25/2020 14:58	WG1417070
1,1,1-Trichloroethane	U		0.0940	0.500	1	01/25/2020 14:58	WG1417070
1,1,2-Trichloroethane	U		0.186	0.500	1	01/25/2020 14:58	WG1417070
Trichloroethene	U		0.153	0.500	1	01/25/2020 14:58	WG1417070
Trichlorofluoromethane	U		0.130	2.50	1	01/25/2020 14:58	WG1417070
1,2,3-Trichloropropane	U		0.247	2.50	1	01/25/2020 14:58	WG1417070
1,2,4-Trimethylbenzene	U		0.123	0.500	1	01/25/2020 14:58	WG1417070
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	01/25/2020 14:58	WG1417070
1,3,5-Trimethylbenzene	U		0.124	0.500	1	01/25/2020 14:58	WG1417070
Vinyl acetate	U		0.645	5.00	1	01/25/2020 14:58	WG1417070
Vinyl chloride	U		0.118	0.500	1	01/25/2020 14:58	WG1417070
Xylenes, Total	U		0.316	1.50	1	01/25/2020 14:58	WG1417070
(S) Toluene-d8	*108*			*80.0-120*		*01/25/2020 14:58*	WG1417070
(S) 4-Bromofluorobenzene	*100*			*77.0-126*		*01/25/2020 14:58*	WG1417070
(S) 1,2-Dichloroethane-d4	*100*			*70.0-130*		*01/25/2020 14:58*	WG1417070

JC 2/6/20

Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	302000		2710	20000	1	01/23/2020 15:17	WG1415814

Sample Narrative:

L1182069-01 WG1415814: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	20700		51.9	1000	1	01/23/2020 19:08	WG1415788
Nitrate	452		22.7	100	1	01/23/2020 19:08	WG1415788
Sulfate	36900		77.4	5000	1	01/23/2020 19:08	WG1415788

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	2210		102	1000	1	01/29/2020 12:12	WG1417710

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	269		15.0	100	1	01/26/2020 23:36	WG1416004
Manganese	1730		0.250	5.00	1	01/26/2020 23:36	WG1416004

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	7.37		0.287	0.678	1	01/24/2020 14:28	WG1416399
Ethane	U		0.296	1.29	1	01/24/2020 14:28	WG1416399
Ethene	U		0.422	1.27	1	01/24/2020 14:28	WG1416399

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U		1.05	25.0	1	01/25/2020 15:18	WG1417070
Acrylonitrile	U		0.873	5.00	1	01/25/2020 15:18	WG1417070
Benzene	U		0.0896	0.500	1	01/25/2020 15:18	WG1417070
Bromobenzene	U		0.133	0.500	1	01/25/2020 15:18	WG1417070
Bromodichloromethane	U		0.0800	0.500	1	01/25/2020 15:18	WG1417070
Bromochloromethane	U		0.145	0.500	1	01/25/2020 15:18	WG1417070
Bromoform	U		0.186	0.500	1	01/25/2020 15:18	WG1417070
Bromomethane	U		0.157	2.50	1	01/25/2020 15:18	WG1417070
n-Butylbenzene	U		0.143	0.500	1	01/25/2020 15:18	WG1417070
sec-Butylbenzene	U		0.134	0.500	1	01/25/2020 15:18	WG1417070
tert-Butylbenzene	U		0.183	0.500	1	01/25/2020 15:18	WG1417070
Carbon disulfide	U		0.101	0.500	1	01/25/2020 15:18	WG1417070
Carbon tetrachloride	U		0.159	0.500	1	01/25/2020 15:18	WG1417070
Chlorobenzene	U		0.140	0.500	1	01/25/2020 15:18	WG1417070
Chlorodibromomethane	U		0.128	0.500	1	01/25/2020 15:18	WG1417070
Chloroethane	U		0.141	2.50	1	01/25/2020 15:18	WG1417070
Chloroform	U		0.0860	0.500	1	01/25/2020 15:18	WG1417070
Chloromethane	U		0.153	1.25	1	01/25/2020 15:18	WG1417070
2-Chlorotoluene	U		0.111	0.500	1	01/25/2020 15:18	WG1417070
4-Chlorotoluene	U		0.0972	0.500	1	01/25/2020 15:18	WG1417070

JC 2/6/2020

FMW-137-012220

Collected date/time: 01/22/20 06:05

SAMPLE RESULTS - 01

L1182069

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	01/25/2020 15:18	WG1417070
1,2-Dibromoethane	U		0.193	0.500	1	01/25/2020 15:18	WG1417070
Dibromomethane	U		0.117	0.500	1	01/25/2020 15:18	WG1417070
1,2-Dichlorobenzene	U		0.101	0.500	1	01/25/2020 15:18	WG1417070
1,3-Dichlorobenzene	U		0.130	0.500	1	01/25/2020 15:18	WG1417070
1,4-Dichlorobenzene	U		0.121	0.500	1	01/25/2020 15:18	WG1417070
Dichlorodifluoromethane	U		0.127	2.50	1	01/25/2020 15:18	WG1417070
1,1-Dichloroethane	U		0.114	0.500	1	01/25/2020 15:18	WG1417070
1,2-Dichloroethane	U		0.108	0.500	1	01/25/2020 15:18	WG1417070
1,1-Dichloroethene	U		0.188	0.500	1	01/25/2020 15:18	WG1417070
cis-1,2-Dichloroethene	1.99		0.0933	0.500	1	01/25/2020 15:18	WG1417070
trans-1,2-Dichloroethene	U		0.152	0.500	1	01/25/2020 15:18	WG1417070
1,2-Dichloropropane	U		0.190	0.500	1	01/25/2020 15:18	WG1417070
1,1-Dichloropropene	U		0.128	0.500	1	01/25/2020 15:18	WG1417070
1,3-Dichloropropane	U		0.147	1.00	1	01/25/2020 15:18	WG1417070
cis-1,3-Dichloropropene	U		0.0976	0.500	1	01/25/2020 15:18	WG1417070
trans-1,3-Dichloropropene	U		0.222	0.500	1	01/25/2020 15:18	WG1417070
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	01/25/2020 15:18	WG1417070
2,2-Dichloropropane	U		0.0929	0.500	1	01/25/2020 15:18	WG1417070
Di-isopropyl ether	U		0.0924	0.500	1	01/25/2020 15:18	WG1417070
Ethylbenzene	U		0.158	0.500	1	01/25/2020 15:18	WG1417070
Hexachloro-1,3-butadiene	U		0.157	1.00	1	01/25/2020 15:18	WG1417070
2-Hexanone	U		0.757	5.00	1	01/25/2020 15:18	WG1417070
n-Hexane	U		0.305	5.00	1	01/25/2020 15:18	WG1417070
Iodomethane	U		0.377	10.0	1	01/25/2020 15:18	WG1417070
Isopropylbenzene	U		0.126	0.500	1	01/25/2020 15:18	WG1417070
p-Isopropyltoluene	U		0.138	0.500	1	01/25/2020 15:18	WG1417070
2-Butanone (MEK)	U		1.28	5.00	1	01/25/2020 15:18	WG1417070
Methylene Chloride	U		1.07	2.50	1	01/25/2020 15:18	WG1417070
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	01/25/2020 15:18	WG1417070
Methyl tert-butyl ether	U		0.102	0.500	1	01/25/2020 15:18	WG1417070
Naphthalene	U UJ	J0	0.174	2.50	1	01/25/2020 15:18	WG1417070
n-Propylbenzene	U		0.162	0.500	1	01/25/2020 15:18	WG1417070
Styrene	U		0.117	0.500	1	01/25/2020 15:18	WG1417070
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	01/25/2020 15:18	WG1417070
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	01/25/2020 15:18	WG1417070
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	01/25/2020 15:18	WG1417070
Tetrachloroethene	U		0.199	0.500	1	01/25/2020 15:18	WG1417070
Toluene	0.506		0.412	0.500	1	01/25/2020 15:18	WG1417070
1,2,3-Trichlorobenzene	U UJ	J0	0.164	0.500	1	01/25/2020 15:18	WG1417070
1,2,4-Trichlorobenzene	U		0.355	0.500	1	01/25/2020 15:18	WG1417070
1,1,1-Trichloroethane	U		0.0940	0.500	1	01/25/2020 15:18	WG1417070
1,1,2-Trichloroethane	U		0.186	0.500	1	01/25/2020 15:18	WG1417070
Trichloroethene	U		0.153	0.500	1	01/25/2020 15:18	WG1417070
Trichlorofluoromethane	U		0.130	2.50	1	01/25/2020 15:18	WG1417070
1,2,3-Trichloropropane	U		0.247	2.50	1	01/25/2020 15:18	WG1417070
1,2,4-Trimethylbenzene	U		0.123	0.500	1	01/25/2020 15:18	WG1417070
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	01/25/2020 15:18	WG1417070
1,3,5-Trimethylbenzene	U		0.124	0.500	1	01/25/2020 15:18	WG1417070
Vinyl acetate	U		0.645	5.00	1	01/25/2020 15:18	WG1417070
Vinyl chloride	U		0.118	0.500	1	01/25/2020 15:18	WG1417070
Xylenes, Total	U		0.316	1.50	1	01/25/2020 15:18	WG1417070
(S) Toluene-d8	*92.9*			*80.0-120*		*01/25/2020 15:18*	WG1417070
(S) 4-Bromofluorobenzene	*96.6*			*77.0-126*		*01/25/2020 15:18*	WG1417070
(S) 1,2-Dichloroethane-d4	*99.9*			*70.0-130*		*01/25/2020 15:18*	WG1417070

JC 2/6/2020

Wet Chemistry by Method 2320 B-2011

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Alkalinity	375000		2710	20000	1	01/23/2020 23:28	WG1416132

Sample Narrative:

L1182069-02 WG1416132: Endpoint pH 4.5 headspace

Wet Chemistry by Method 9056A

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Chloride	66100		51.9	1000	1	01/23/2020 19:21	WG1415788
Nitrate	U		22.7	100	1	01/23/2020 19:21	WG1415788
Sulfate	51800		77.4	5000	1	01/23/2020 19:21	WG1415788

Wet Chemistry by Method 9060A

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
TOC (Total Organic Carbon)	4400		102	1000	1	01/29/2020 12:29	WG1417710

Metals (ICPMS) by Method 6020B

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Iron	4920		15.0	100	1	01/26/2020 23:39	WG1416004
Manganese	7700		0.250	5.00	1	01/26/2020 23:39	WG1416004

Volatile Organic Compounds (GC) by Method RSK175

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Methane	1320		0.287	0.678	1	01/24/2020 14:37	WG1416399
Ethane	U		0.296	1.29	1	01/24/2020 14:37	WG1416399
Ethene	U		0.422	1.27	1	01/24/2020 14:37	WG1416399

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

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Acetone	U		1.05	25.0	1	01/25/2020 15:37	WG1417070
Acrylonitrile	U		0.873	5.00	1	01/25/2020 15:37	WG1417070
Benzene	U		0.0896	0.500	1	01/25/2020 15:37	WG1417070
Bromobenzene	U		0.133	0.500	1	01/25/2020 15:37	WG1417070
Bromodichloromethane	U		0.0800	0.500	1	01/25/2020 15:37	WG1417070
Bromochloromethane	U		0.145	0.500	1	01/25/2020 15:37	WG1417070
Bromoform	U		0.186	0.500	1	01/25/2020 15:37	WG1417070
Bromomethane	U		0.157	2.50	1	01/25/2020 15:37	WG1417070
n-Butylbenzene	U		0.143	0.500	1	01/25/2020 15:37	WG1417070
sec-Butylbenzene	U		0.134	0.500	1	01/25/2020 15:37	WG1417070
tert-Butylbenzene	U		0.183	0.500	1	01/25/2020 15:37	WG1417070
Carbon disulfide	U		0.101	0.500	1	01/25/2020 15:37	WG1417070
Carbon tetrachloride	U		0.159	0.500	1	01/25/2020 15:37	WG1417070
Chlorobenzene	U		0.140	0.500	1	01/25/2020 15:37	WG1417070
Chlorodibromomethane	U		0.128	0.500	1	01/25/2020 15:37	WG1417070
Chloroethane	U		0.141	2.50	1	01/25/2020 15:37	WG1417070
Chloroform	U		0.0860	0.500	1	01/25/2020 15:37	WG1417070
Chloromethane	U		0.153	1.25	1	01/25/2020 15:37	WG1417070
2-Chlorotoluene	U		0.111	0.500	1	01/25/2020 15:37	WG1417070
4-Chlorotoluene	U		0.0972	0.500	1	01/25/2020 15:37	WG1417070

JC 2/6/2020

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

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch	
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	01/25/2020 15:37	WG1417070	
1,2-Dibromoethane	U		0.193	0.500	1	01/25/2020 15:37	WG1417070	
Dibromomethane	U		0.117	0.500	1	01/25/2020 15:37	WG1417070	
1,2-Dichlorobenzene	U		0.101	0.500	1	01/25/2020 15:37	WG1417070	
1,3-Dichlorobenzene	U		0.130	0.500	1	01/25/2020 15:37	WG1417070	
1,4-Dichlorobenzene	U		0.121	0.500	1	01/25/2020 15:37	WG1417070	
Dichlorodifluoromethane	U		0.127	2.50	1	01/25/2020 15:37	WG1417070	
1,1-Dichloroethane	U		0.114	0.500	1	01/25/2020 15:37	WG1417070	
1,2-Dichloroethane	U		0.108	0.500	1	01/25/2020 15:37	WG1417070	
1,1-Dichloroethene	U		0.188	0.500	1	01/25/2020 15:37	WG1417070	
cis-1,2-Dichloroethene	U		0.0933	0.500	1	01/25/2020 15:37	WG1417070	
trans-1,2-Dichloroethene	U		0.152	0.500	1	01/25/2020 15:37	WG1417070	
1,2-Dichloropropane	U		0.190	0.500	1	01/25/2020 15:37	WG1417070	
1,1-Dichloropropene	U		0.128	0.500	1	01/25/2020 15:37	WG1417070	
1,3-Dichloropropane	U		0.147	1.00	1	01/25/2020 15:37	WG1417070	
cis-1,3-Dichloropropene	U		0.0976	0.500	1	01/25/2020 15:37	WG1417070	
trans-1,3-Dichloropropene	U		0.222	0.500	1	01/25/2020 15:37	WG1417070	
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	01/25/2020 15:37	WG1417070	
2,2-Dichloropropane	U		0.0929	0.500	1	01/25/2020 15:37	WG1417070	
Di-isopropyl ether	U		0.0924	0.500	1	01/25/2020 15:37	WG1417070	
Ethylbenzene	U		0.158	0.500	1	01/25/2020 15:37	WG1417070	
Hexachloro-1,3-butadiene	U		0.157	1.00	1	01/25/2020 15:37	WG1417070	
2-Hexanone	U		0.757	5.00	1	01/25/2020 15:37	WG1417070	
n-Hexane	U		0.305	5.00	1	01/25/2020 15:37	WG1417070	
Iodomethane	U		0.377	10.0	1	01/25/2020 15:37	WG1417070	
Isopropylbenzene	U		0.126	0.500	1	01/25/2020 15:37	WG1417070	
p-Isopropyltoluene	U		0.138	0.500	1	01/25/2020 15:37	WG1417070	
2-Butanone (MEK)	U		1.28	5.00	1	01/25/2020 15:37	WG1417070	
Methylene Chloride	U		1.07	2.50	1	01/25/2020 15:37	WG1417070	
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	01/25/2020 15:37	WG1417070	
Methyl tert-butyl ether	U		0.102	0.500	1	01/25/2020 15:37	WG1417070	
Naphthalene	U UJ	J0	0.174	2.50	1	01/25/2020 15:37	WG1417070	
n-Propylbenzene	U		0.162	0.500	1	01/25/2020 15:37	WG1417070	
Styrene	U		0.117	0.500	1	01/25/2020 15:37	WG1417070	
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	01/25/2020 15:37	WG1417070	
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	01/25/2020 15:37	WG1417070	
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	01/25/2020 15:37	WG1417070	
Tetrachloroethene	U		0.199	0.500	1	01/25/2020 15:37	WG1417070	
Toluene	U		0.412	0.500	1	01/25/2020 15:37	WG1417070	
1,2,3-Trichlorobenzene	U UJ	J0	0.164	0.500	1	01/25/2020 15:37	WG1417070	
1,2,4-Trichlorobenzene	U		0.355	0.500	1	01/25/2020 15:37	WG1417070	
1,1,1-Trichloroethane	U		0.0940	0.500	1	01/25/2020 15:37	WG1417070	
1,1,2-Trichloroethane	U		0.186	0.500	1	01/25/2020 15:37	WG1417070	
Trichloroethene	U		0.153	0.500	1	01/25/2020 15:37	WG1417070	
Trichlorofluoromethane	U		0.130	2.50	1	01/25/2020 15:37	WG1417070	
1,2,3-Trichloropropane	U		0.247	2.50	1	01/25/2020 15:37	WG1417070	
1,2,4-Trimethylbenzene	U		0.123	0.500	1	01/25/2020 15:37	WG1417070	
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	01/25/2020 15:37	WG1417070	
1,3,5-Trimethylbenzene	U		0.124	0.500	1	01/25/2020 15:37	WG1417070	
Vinyl acetate	U		0.645	5.00	1	01/25/2020 15:37	WG1417070	
Vinyl chloride	U		0.118	0.500	1	01/25/2020 15:37	WG1417070	JC 2/6/2020
Xylenes, Total	U		0.316	1.50	1	01/25/2020 15:37	WG1417070	
(S) Toluene-d8	*98.9*			*80.0-120*		*01/25/2020 15:37*	WG1417070	
(S) 4-Bromofluorobenzene	*97.7*			*77.0-126*		*01/25/2020 15:37*	WG1417070	
(S) 1,2-Dichloroethane-d4	*96.9*			*70.0-130*		*01/25/2020 15:37*	WG1417070	

FMW-142-012220
Collected date/time: 01/22/20 09:10

SAMPLE RESULTS - 03

L1182069

Wet Chemistry by Method 2320 B-2011

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Alkalinity	358000		2710	20000	1	01/23/2020 23:35	WG1416132

Sample Narrative:

L1182069-03 WG1416132: Endpoint pH 4.5 headspace

Wet Chemistry by Method 9056A

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Chloride	24500		51.9	1000	1	01/23/2020 20:00	WG1415788
Nitrate	25.1	U ~~B J~~	22.7	100	1	01/23/2020 20:00	WG1415788
Sulfate	3630	J	77.4	5000	1	01/23/2020 20:00	WG1415788

Wet Chemistry by Method 9060A

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
TOC (Total Organic Carbon)	6010		102	1000	1	01/29/2020 12:46	WG1417710

Metals (ICPMS) by Method 6020B

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Iron	5860		15.0	100	1	01/26/2020 23:43	WG1416004
Manganese	299		0.250	5.00	1	01/26/2020 23:43	WG1416004

Volatile Organic Compounds (GC) by Method RSK175

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Methane	6980		2.87	6.78	10	01/25/2020 16:33	WG1416793
Ethane	3.67		0.296	1.29	1	01/24/2020 14:41	WG1416399
Ethene	U		0.422	1.27	1	01/24/2020 14:41	WG1416399

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

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Acetone	1.20	J	1.05	25.0	1	01/25/2020 15:57	WG1417070
Acrylonitrile	U		0.873	5.00	1	01/25/2020 15:57	WG1417070
Benzene	U		0.0896	0.500	1	01/25/2020 15:57	WG1417070
Bromobenzene	U		0.133	0.500	1	01/25/2020 15:57	WG1417070
Bromodichloromethane	U		0.0800	0.500	1	01/25/2020 15:57	WG1417070
Bromochloromethane	U		0.145	0.500	1	01/25/2020 15:57	WG1417070
Bromoform	U		0.186	0.500	1	01/25/2020 15:57	WG1417070
Bromomethane	U		0.157	2.50	1	01/25/2020 15:57	WG1417070
n-Butylbenzene	U		0.143	0.500	1	01/25/2020 15:57	WG1417070
sec-Butylbenzene	U		0.134	0.500	1	01/25/2020 15:57	WG1417070
tert-Butylbenzene	U		0.183	0.500	1	01/25/2020 15:57	WG1417070
Carbon disulfide	U		0.101	0.500	1	01/25/2020 15:57	WG1417070
Carbon tetrachloride	U		0.159	0.500	1	01/25/2020 15:57	WG1417070
Chlorobenzene	U		0.140	0.500	1	01/25/2020 15:57	WG1417070
Chlorodibromomethane	U		0.128	0.500	1	01/25/2020 15:57	WG1417070
Chloroethane	U		0.141	2.50	1	01/25/2020 15:57	WG1417070
Chloroform	U		0.0860	0.500	1	01/25/2020 15:57	WG1417070
Chloromethane	U		0.153	1.25	1	01/25/2020 15:57	WG1417070
2-Chlorotoluene	U		0.111	0.500	1	01/25/2020 15:57	WG1417070
4-Chlorotoluene	U		0.0972	0.500	1	01/25/2020 15:57	WG1417070

JC 2/6/2020

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	01/25/2020 15:57	WG1417070
1,2-Dibromoethane	U		0.193	0.500	1	01/25/2020 15:57	WG1417070
Dibromomethane	U		0.117	0.500	1	01/25/2020 15:57	WG1417070
1,2-Dichlorobenzene	U		0.101	0.500	1	01/25/2020 15:57	WG1417070
1,3-Dichlorobenzene	U		0.130	0.500	1	01/25/2020 15:57	WG1417070
1,4-Dichlorobenzene	U		0.121	0.500	1	01/25/2020 15:57	WG1417070
Dichlorodifluoromethane	U		0.127	2.50	1	01/25/2020 15:57	WG1417070
1,1-Dichloroethane	U		0.114	0.500	1	01/25/2020 15:57	WG1417070
1,2-Dichloroethane	U		0.108	0.500	1	01/25/2020 15:57	WG1417070
1,1-Dichloroethene	U		0.188	0.500	1	01/25/2020 15:57	WG1417070
cis-1,2-Dichloroethene	U		0.0933	0.500	1	01/25/2020 15:57	WG1417070
trans-1,2-Dichloroethene	U		0.152	0.500	1	01/25/2020 15:57	WG1417070
1,2-Dichloropropane	U		0.190	0.500	1	01/25/2020 15:57	WG1417070
1,1-Dichloropropene	U		0.128	0.500	1	01/25/2020 15:57	WG1417070
1,3-Dichloropropane	U		0.147	1.00	1	01/25/2020 15:57	WG1417070
cis-1,3-Dichloropropene	U		0.0976	0.500	1	01/25/2020 15:57	WG1417070
trans-1,3-Dichloropropene	U		0.222	0.500	1	01/25/2020 15:57	WG1417070
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	01/25/2020 15:57	WG1417070
2,2-Dichloropropane	U		0.0929	0.500	1	01/25/2020 15:57	WG1417070
Di-isopropyl ether	U		0.0924	0.500	1	01/25/2020 15:57	WG1417070
Ethylbenzene	U		0.158	0.500	1	01/25/2020 15:57	WG1417070
Hexachloro-1,3-butadiene	U		0.157	1.00	1	01/25/2020 15:57	WG1417070
2-Hexanone	U		0.757	5.00	1	01/25/2020 15:57	WG1417070
n-Hexane	U		0.305	5.00	1	01/25/2020 15:57	WG1417070
Iodomethane	U		0.377	10.0	1	01/25/2020 15:57	WG1417070
Isopropylbenzene	U		0.126	0.500	1	01/25/2020 15:57	WG1417070
p-Isopropyltoluene	U		0.138	0.500	1	01/25/2020 15:57	WG1417070
2-Butanone (MEK)	U		1.28	5.00	1	01/25/2020 15:57	WG1417070
Methylene Chloride	U		1.07	2.50	1	01/25/2020 15:57	WG1417070
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	01/25/2020 15:57	WG1417070
Methyl tert-butyl ether	U		0.102	0.500	1	01/25/2020 15:57	WG1417070
Naphthalene	U	UJ J0	0.174	2.50	1	01/25/2020 15:57	WG1417070
n-Propylbenzene	U		0.162	0.500	1	01/25/2020 15:57	WG1417070
Styrene	U		0.117	0.500	1	01/25/2020 15:57	WG1417070
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	01/25/2020 15:57	WG1417070
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	01/25/2020 15:57	WG1417070
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	01/25/2020 15:57	WG1417070
Tetrachloroethene	U		0.199	0.500	1	01/25/2020 15:57	WG1417070
Toluene	U		0.412	0.500	1	01/25/2020 15:57	WG1417070
1,2,3-Trichlorobenzene	U	UJ J0	0.164	0.500	1	01/25/2020 15:57	WG1417070
1,2,4-Trichlorobenzene	U		0.355	0.500	1	01/25/2020 15:57	WG1417070
1,1,1-Trichloroethane	U		0.0940	0.500	1	01/25/2020 15:57	WG1417070
1,1,2-Trichloroethane	U		0.186	0.500	1	01/25/2020 15:57	WG1417070
Trichloroethene	U		0.153	0.500	1	01/25/2020 15:57	WG1417070
Trichlorofluoromethane	U		0.130	2.50	1	01/25/2020 15:57	WG1417070
1,2,3-Trichloropropane	U		0.247	2.50	1	01/25/2020 15:57	WG1417070
1,2,4-Trimethylbenzene	U		0.123	0.500	1	01/25/2020 15:57	WG1417070
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	01/25/2020 15:57	WG1417070
1,3,5-Trimethylbenzene	U		0.124	0.500	1	01/25/2020 15:57	WG1417070
Vinyl acetate	U		0.645	5.00	1	01/25/2020 15:57	WG1417070
Vinyl chloride	U		0.118	0.500	1	01/25/2020 15:57	WG1417070
Xylenes, Total	U		0.316	1.50	1	01/25/2020 15:57	WG1417070
(S) Toluene-d8	*90.4*			*80.0-120*		*01/25/2020 15:57*	WG1417070
(S) 4-Bromofluorobenzene	*102*			*77.0-126*		*01/25/2020 15:57*	WG1417070
(S) 1,2-Dichloroethane-d4	*104*			*70.0-130*		*01/25/2020 15:57*	WG1417070

JC 2/6/2020

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

Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	518000		2710	20000	1	01/23/2020 23:43	WG1416132

Sample Narrative:

L1182069-04 WG1416132: Endpoint pH 4.5 headspace

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	28300		51.9	1000	1	01/23/2020 20:12	WG1415788
Nitrate	22.8	U ~~B J~~	22.7	100	1	01/23/2020 20:12	WG1415788
Sulfate	76300		77.4	5000	1	01/23/2020 20:12	WG1415788

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	6090		102	1000	1	01/29/2020 13:02	WG1417710

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	20600		15.0	100	1	01/26/2020 23:46	WG1416004
Manganese	2090		0.250	5.00	1	01/26/2020 23:46	WG1416004

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	5080		0.287	0.678	1	01/24/2020 14:44	WG1416399
Ethane	105		0.296	1.29	1	01/24/2020 14:44	WG1416399
Ethene	39.3		0.422	1.27	1	01/24/2020 14:44	WG1416399

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	9.51	J	1.05	25.0	1	01/25/2020 16:17	WG1417070
Acrylonitrile	U		0.873	5.00	1	01/25/2020 16:17	WG1417070
Benzene	39.6		0.0896	0.500	1	01/25/2020 16:17	WG1417070
Bromobenzene	U		0.133	0.500	1	01/25/2020 16:17	WG1417070
Bromodichloromethane	U		0.0800	0.500	1	01/25/2020 16:17	WG1417070
Bromochloromethane	U		0.145	0.500	1	01/25/2020 16:17	WG1417070
Bromoform	U		0.186	0.500	1	01/25/2020 16:17	WG1417070
Bromomethane	U		0.157	2.50	1	01/25/2020 16:17	WG1417070
n-Butylbenzene	U		0.143	0.500	1	01/25/2020 16:17	WG1417070
sec-Butylbenzene	U		0.134	0.500	1	01/25/2020 16:17	WG1417070
tert-Butylbenzene	U		0.183	0.500	1	01/25/2020 16:17	WG1417070
Carbon disulfide	U		0.101	0.500	1	01/25/2020 16:17	WG1417070
Carbon tetrachloride	U		0.159	0.500	1	01/25/2020 16:17	WG1417070
Chlorobenzene	U		0.140	0.500	1	01/25/2020 16:17	WG1417070
Chlorodibromomethane	U		0.128	0.500	1	01/25/2020 16:17	WG1417070
Chloroethane	U		0.141	2.50	1	01/25/2020 16:17	WG1417070
Chloroform	U		0.0860	0.500	1	01/25/2020 16:17	WG1417070
Chloromethane	U		0.153	1.25	1	01/25/2020 16:17	WG1417070
2-Chlorotoluene	U		0.111	0.500	1	01/25/2020 16:17	WG1417070
4-Chlorotoluene	U		0.0972	0.500	1	01/25/2020 16:17	WG1417070

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

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	01/25/2020 16:17	WG1417070
1,2-Dibromoethane	U		0.193	0.500	1	01/25/2020 16:17	WG1417070
Dibromomethane	U		0.117	0.500	1	01/25/2020 16:17	WG1417070
1,2-Dichlorobenzene	U		0.101	0.500	1	01/25/2020 16:17	WG1417070
1,3-Dichlorobenzene	U		0.130	0.500	1	01/25/2020 16:17	WG1417070
1,4-Dichlorobenzene	U		0.121	0.500	1	01/25/2020 16:17	WG1417070
Dichlorodifluoromethane	U		0.127	2.50	1	01/25/2020 16:17	WG1417070
1,1-Dichloroethane	0.510		0.114	0.500	1	01/25/2020 16:17	WG1417070
1,2-Dichloroethane	U		0.108	0.500	1	01/25/2020 16:17	WG1417070
1,1-Dichloroethene	1.19		0.188	0.500	1	01/25/2020 16:17	WG1417070
cis-1,2-Dichloroethene	406		1.87	10.0	20	01/27/2020 17:25	WG1417735
trans-1,2-Dichloroethene	0.729		0.152	0.500	1	01/25/2020 16:17	WG1417070
1,2-Dichloropropane	U		0.190	0.500	1	01/25/2020 16:17	WG1417070
1,1-Dichloropropene	U		0.128	0.500	1	01/25/2020 16:17	WG1417070
1,3-Dichloropropane	U		0.147	1.00	1	01/25/2020 16:17	WG1417070
cis-1,3-Dichloropropene	U		0.0976	0.500	1	01/25/2020 16:17	WG1417070
trans-1,3-Dichloropropene	U		0.222	0.500	1	01/25/2020 16:17	WG1417070
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	01/25/2020 16:17	WG1417070
2,2-Dichloropropane	U		0.0929	0.500	1	01/25/2020 16:17	WG1417070
Di-isopropyl ether	0.492	J	0.0924	0.500	1	01/25/2020 16:17	WG1417070
Ethylbenzene	U		0.158	0.500	1	01/25/2020 16:17	WG1417070
Hexachloro-1,3-butadiene	U		0.157	1.00	1	01/25/2020 16:17	WG1417070
2-Hexanone	U		0.757	5.00	1	01/25/2020 16:17	WG1417070
n-Hexane	U		0.305	5.00	1	01/25/2020 16:17	WG1417070
Iodomethane	U		0.377	10.0	1	01/25/2020 16:17	WG1417070
Isopropylbenzene	U		0.126	0.500	1	01/25/2020 16:17	WG1417070
p-Isopropyltoluene	U		0.138	0.500	1	01/25/2020 16:17	WG1417070
2-Butanone (MEK)	U		1.28	5.00	1	01/25/2020 16:17	WG1417070
Methylene Chloride	U		1.07	2.50	1	01/25/2020 16:17	WG1417070
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	01/25/2020 16:17	WG1417070
Methyl tert-butyl ether	0.453	J	0.102	0.500	1	01/25/2020 16:17	WG1417070
Naphthalene	U UJ	J0	0.174	2.50	1	01/25/2020 16:17	WG1417070
n-Propylbenzene	U		0.162	0.500	1	01/25/2020 16:17	WG1417070
Styrene	U		0.117	0.500	1	01/25/2020 16:17	WG1417070
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	01/25/2020 16:17	WG1417070
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	01/25/2020 16:17	WG1417070
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	01/25/2020 16:17	WG1417070
Tetrachloroethene	U		0.199	0.500	1	01/25/2020 16:17	WG1417070
Toluene	U		0.412	0.500	1	01/25/2020 16:17	WG1417070
1,2,3-Trichlorobenzene	U UJ	J0	0.164	0.500	1	01/25/2020 16:17	WG1417070
1,2,4-Trichlorobenzene	U		0.355	0.500	1	01/25/2020 16:17	WG1417070
1,1,1-Trichloroethane	U		0.0940	0.500	1	01/25/2020 16:17	WG1417070
1,1,2-Trichloroethane	U		0.186	0.500	1	01/25/2020 16:17	WG1417070
Trichloroethene	U		0.153	0.500	1	01/25/2020 16:17	WG1417070
Trichlorofluoromethane	U		0.130	2.50	1	01/25/2020 16:17	WG1417070
1,2,3-Trichloropropane	U		0.247	2.50	1	01/25/2020 16:17	WG1417070
1,2,4-Trimethylbenzene	U		0.123	0.500	1	01/25/2020 16:17	WG1417070
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	01/25/2020 16:17	WG1417070
1,3,5-Trimethylbenzene	U		0.124	0.500	1	01/25/2020 16:17	WG1417070
Vinyl acetate	U		0.645	5.00	1	01/25/2020 16:17	WG1417070
Vinyl chloride	527		2.36	10.0	20	01/27/2020 17:25	WG1417735
Xylenes, Total	U		0.316	1.50	1	01/25/2020 16:17	WG1417070
(S) Toluene-d8	*100*			*80.0-120*		*01/25/2020 16:17*	WG1417070
(S) Toluene-d8	*92.1*			*80.0-120*		*01/27/2020 17:25*	WG1417735
(S) 4-Bromofluorobenzene	*97.7*			*77.0-126*		*01/25/2020 16:17*	WG1417070
(S) 4-Bromofluorobenzene	*92.9*			*77.0-126*		*01/27/2020 17:25*	WG1417735

JC 2/6/2020

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

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
(S) 1,2-Dichloroethane-d4	*92.0*			*70.0-130*		*01/25/2020 16:17*	WG1417070
(S) 1,2-Dichloroethane-d4	*94.1*			*70.0-130*		*01/27/2020 17:25*	WG1417735

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Wet Chemistry by Method 2320 B-2011

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Alkalinity	414000		2710	20000	1	01/23/2020 23:50	WG1416132

Sample Narrative:

L1182069-05 WG1416132: Endpoint pH 4.5 headspace

Wet Chemistry by Method 9056A

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Chloride	281000		519	10000	10	01/23/2020 20:38	WG1415788
Nitrate	22.8 U	~~B J~~	22.7	100	1	01/23/2020 20:25	WG1415788
Sulfate	64700		77.4	5000	1	01/23/2020 20:25	WG1415788

Wet Chemistry by Method 9060A

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
TOC (Total Organic Carbon)	3790		102	1000	1	01/29/2020 14:44	WG1417710

Metals (ICPMS) by Method 6020B

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Iron	7980		15.0	100	1	01/26/2020 23:49	WG1416004
Manganese	4300		0.250	5.00	1	01/26/2020 23:49	WG1416004

Volatile Organic Compounds (GC) by Method RSK175

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Methane	5080		2.87	6.78	10	01/25/2020 16:36	WG1416793
Ethane	3.88		0.296	1.29	1	01/24/2020 14:47	WG1416399
Ethene	U		0.422	1.27	1	01/24/2020 14:47	WG1416399

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

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Acetone	U		1.05	25.0	1	01/25/2020 16:37	WG1417070
Acrylonitrile	U		0.873	5.00	1	01/25/2020 16:37	WG1417070
Benzene	U		0.0896	0.500	1	01/25/2020 16:37	WG1417070
Bromobenzene	U		0.133	0.500	1	01/25/2020 16:37	WG1417070
Bromodichloromethane	U		0.0800	0.500	1	01/25/2020 16:37	WG1417070
Bromochloromethane	U		0.145	0.500	1	01/25/2020 16:37	WG1417070
Bromoform	U		0.186	0.500	1	01/25/2020 16:37	WG1417070
Bromomethane	U		0.157	2.50	1	01/25/2020 16:37	WG1417070
n-Butylbenzene	U		0.143	0.500	1	01/25/2020 16:37	WG1417070
sec-Butylbenzene	U		0.134	0.500	1	01/25/2020 16:37	WG1417070
tert-Butylbenzene	U		0.183	0.500	1	01/25/2020 16:37	WG1417070
Carbon disulfide	U		0.101	0.500	1	01/25/2020 16:37	WG1417070
Carbon tetrachloride	U		0.159	0.500	1	01/25/2020 16:37	WG1417070
Chlorobenzene	U		0.140	0.500	1	01/25/2020 16:37	WG1417070
Chlorodibromomethane	U		0.128	0.500	1	01/25/2020 16:37	WG1417070
Chloroethane	U		0.141	2.50	1	01/25/2020 16:37	WG1417070
Chloroform	U		0.0860	0.500	1	01/25/2020 16:37	WG1417070
Chloromethane	U		0.153	1.25	1	01/25/2020 16:37	WG1417070
2-Chlorotoluene	U		0.111	0.500	1	01/25/2020 16:37	WG1417070
4-Chlorotoluene	U		0.0972	0.500	1	01/25/2020 16:37	WG1417070

JC 2/6/2020

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

Analyte	Result ug/l		Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,2-Dibromo-3-Chloropropane	U			0.325	2.50	1	01/25/2020 16:37	WG1417070
1,2-Dibromoethane	U			0.193	0.500	1	01/25/2020 16:37	WG1417070
Dibromomethane	U			0.117	0.500	1	01/25/2020 16:37	WG1417070
1,2-Dichlorobenzene	U			0.101	0.500	1	01/25/2020 16:37	WG1417070
1,3-Dichlorobenzene	U			0.130	0.500	1	01/25/2020 16:37	WG1417070
1,4-Dichlorobenzene	U			0.121	0.500	1	01/25/2020 16:37	WG1417070
Dichlorodifluoromethane	U			0.127	2.50	1	01/25/2020 16:37	WG1417070
1,1-Dichloroethane	U			0.114	0.500	1	01/25/2020 16:37	WG1417070
1,2-Dichloroethane	U			0.108	0.500	1	01/25/2020 16:37	WG1417070
1,1-Dichloroethene	U			0.188	0.500	1	01/25/2020 16:37	WG1417070
cis-1,2-Dichloroethene	0.308		J	0.0933	0.500	1	01/27/2020 17:45	WG1417735
trans-1,2-Dichloroethene	U			0.152	0.500	1	01/25/2020 16:37	WG1417070
1,2-Dichloropropane	U			0.190	0.500	1	01/25/2020 16:37	WG1417070
1,1-Dichloropropene	U			0.128	0.500	1	01/25/2020 16:37	WG1417070
1,3-Dichloropropane	U			0.147	1.00	1	01/25/2020 16:37	WG1417070
cis-1,3-Dichloropropene	U			0.0976	0.500	1	01/25/2020 16:37	WG1417070
trans-1,3-Dichloropropene	U			0.222	0.500	1	01/25/2020 16:37	WG1417070
trans-1,4-Dichloro-2-butene	U			0.257	5.00	1	01/25/2020 16:37	WG1417070
2,2-Dichloropropane	U			0.0929	0.500	1	01/25/2020 16:37	WG1417070
Di-isopropyl ether	U			0.0924	0.500	1	01/25/2020 16:37	WG1417070
Ethylbenzene	U			0.158	0.500	1	01/25/2020 16:37	WG1417070
Hexachloro-1,3-butadiene	U			0.157	1.00	1	01/25/2020 16:37	WG1417070
2-Hexanone	U			0.757	5.00	1	01/25/2020 16:37	WG1417070
n-Hexane	U			0.305	5.00	1	01/25/2020 16:37	WG1417070
Iodomethane	U			0.377	10.0	1	01/25/2020 16:37	WG1417070
Isopropylbenzene	U			0.126	0.500	1	01/25/2020 16:37	WG1417070
p-Isopropyltoluene	U			0.138	0.500	1	01/25/2020 16:37	WG1417070
2-Butanone (MEK)	U			1.28	5.00	1	01/25/2020 16:37	WG1417070
Methylene Chloride	U			1.07	2.50	1	01/25/2020 16:37	WG1417070
4-Methyl-2-pentanone (MIBK)	U			0.823	5.00	1	01/25/2020 16:37	WG1417070
Methyl tert-butyl ether	U			0.102	0.500	1	01/25/2020 16:37	WG1417070
Naphthalene	U	UJ	J0	0.174	2.50	1	01/25/2020 16:37	WG1417070
n-Propylbenzene	U			0.162	0.500	1	01/25/2020 16:37	WG1417070
Styrene	U			0.117	0.500	1	01/25/2020 16:37	WG1417070
1,1,1,2-Tetrachloroethane	U			0.120	0.500	1	01/25/2020 16:37	WG1417070
1,1,2,2-Tetrachloroethane	U			0.130	0.500	1	01/25/2020 16:37	WG1417070
1,1,2-Trichlorotrifluoroethane	U			0.164	0.500	1	01/25/2020 16:37	WG1417070
Tetrachloroethene	U			0.199	0.500	1	01/25/2020 16:37	WG1417070
Toluene	U			0.412	0.500	1	01/25/2020 16:37	WG1417070
1,2,3-Trichlorobenzene	U	UJ	J0	0.164	0.500	1	01/25/2020 16:37	WG1417070
1,2,4-Trichlorobenzene	U			0.355	0.500	1	01/25/2020 16:37	WG1417070
1,1,1-Trichloroethane	U			0.0940	0.500	1	01/25/2020 16:37	WG1417070
1,1,2-Trichloroethane	U			0.186	0.500	1	01/25/2020 16:37	WG1417070
Trichloroethene	0.192		J	0.153	0.500	1	01/25/2020 16:37	WG1417070
Trichlorofluoromethane	U			0.130	2.50	1	01/25/2020 16:37	WG1417070
1,2,3-Trichloropropane	U			0.247	2.50	1	01/25/2020 16:37	WG1417070
1,2,4-Trimethylbenzene	U			0.123	0.500	1	01/25/2020 16:37	WG1417070
1,2,3-Trimethylbenzene	U			0.0739	0.500	1	01/25/2020 16:37	WG1417070
1,3,5-Trimethylbenzene	U			0.124	0.500	1	01/25/2020 16:37	WG1417070
Vinyl acetate	U			0.645	5.00	1	01/25/2020 16:37	WG1417070
Vinyl chloride	U			0.118	0.500	1	01/27/2020 17:45	WG1417735
Xylenes, Total	U			0.316	1.50	1	01/25/2020 16:37	WG1417070
(S) Toluene-d8	*96.8*				*80.0-120*		*01/25/2020 16:37*	WG1417070
(S) Toluene-d8	*94.7*				*80.0-120*		*01/27/2020 17:45*	WG1417735
(S) 4-Bromofluorobenzene	*102*				*77.0-126*		*01/25/2020 16:37*	WG1417070
(S) 4-Bromofluorobenzene	*93.6*				*77.0-126*		*01/27/2020 17:45*	WG1417735

JC 2/6/2020

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
(S) 1,2-Dichloroethane-d4	*103*			*70.0-130*		*01/25/2020 16:37*	WG1417070
(S) 1,2-Dichloroethane-d4	*91.7*			*70.0-130*		*01/27/2020 17:45*	WG1417735

JC 2/6/2020

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

Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	160000		2710	20000	1	01/23/2020 23:57	WG1416132

Sample Narrative:

L1182069-06 WG1416132: Endpoint pH 4.5 headspace

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	7020		51.9	1000	1	01/23/2020 23:13	WG1415787
Nitrate	U		22.7	100	1	01/23/2020 23:13	WG1415787
Sulfate	695	J	77.4	5000	1	01/23/2020 23:13	WG1415787

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	2350		102	1000	1	01/29/2020 14:57	WG1417710

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	422		15.0	100	1	01/26/2020 23:52	WG1416004
Manganese	967		0.250	5.00	1	01/26/2020 23:52	WG1416004

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	1270		0.287	0.678	1	01/24/2020 14:50	WG1416399
Ethane	U		0.296	1.29	1	01/24/2020 14:50	WG1416399
Ethene	U		0.422	1.27	1	01/24/2020 14:50	WG1416399

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U		1.05	25.0	1	01/25/2020 16:56	WG1417070
Acrylonitrile	U		0.873	5.00	1	01/25/2020 16:56	WG1417070
Benzene	U		0.0896	0.500	1	01/25/2020 16:56	WG1417070
Bromobenzene	U		0.133	0.500	1	01/25/2020 16:56	WG1417070
Bromodichloromethane	U		0.0800	0.500	1	01/25/2020 16:56	WG1417070
Bromochloromethane	U		0.145	0.500	1	01/25/2020 16:56	WG1417070
Bromoform	U		0.186	0.500	1	01/25/2020 16:56	WG1417070
Bromomethane	U		0.157	2.50	1	01/25/2020 16:56	WG1417070
n-Butylbenzene	U		0.143	0.500	1	01/25/2020 16:56	WG1417070
sec-Butylbenzene	U		0.134	0.500	1	01/25/2020 16:56	WG1417070
tert-Butylbenzene	U		0.183	0.500	1	01/25/2020 16:56	WG1417070
Carbon disulfide	U		0.101	0.500	1	01/25/2020 16:56	WG1417070
Carbon tetrachloride	U		0.159	0.500	1	01/25/2020 16:56	WG1417070
Chlorobenzene	U		0.140	0.500	1	01/25/2020 16:56	WG1417070
Chlorodibromomethane	U		0.128	0.500	1	01/25/2020 16:56	WG1417070
Chloroethane	U		0.141	2.50	1	01/25/2020 16:56	WG1417070
Chloroform	U		0.0860	0.500	1	01/25/2020 16:56	WG1417070
Chloromethane	U		0.153	1.25	1	01/25/2020 16:56	WG1417070
2-Chlorotoluene	U		0.111	0.500	1	01/25/2020 16:56	WG1417070
4-Chlorotoluene	U		0.0972	0.500	1	01/25/2020 16:56	WG1417070

JC 2/6/2020

FMW-131-012220
Collected date/time: 01/22/20 13:45

SAMPLE RESULTS - 06

L1182069

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch	
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	01/25/2020 16:56	WG1417070	
1,2-Dibromoethane	U		0.193	0.500	1	01/25/2020 16:56	WG1417070	
Dibromomethane	U		0.117	0.500	1	01/25/2020 16:56	WG1417070	
1,2-Dichlorobenzene	U		0.101	0.500	1	01/25/2020 16:56	WG1417070	
1,3-Dichlorobenzene	U		0.130	0.500	1	01/25/2020 16:56	WG1417070	
1,4-Dichlorobenzene	U		0.121	0.500	1	01/25/2020 16:56	WG1417070	
Dichlorodifluoromethane	U		0.127	2.50	1	01/25/2020 16:56	WG1417070	
1,1-Dichloroethane	U		0.114	0.500	1	01/25/2020 16:56	WG1417070	
1,2-Dichloroethane	U		0.108	0.500	1	01/25/2020 16:56	WG1417070	
1,1-Dichloroethene	U		0.188	0.500	1	01/25/2020 16:56	WG1417070	
cis-1,2-Dichloroethene	15.1		0.0933	0.500	1	01/25/2020 16:56	WG1417070	
trans-1,2-Dichloroethene	U		0.152	0.500	1	01/25/2020 16:56	WG1417070	
1,2-Dichloropropane	U		0.190	0.500	1	01/25/2020 16:56	WG1417070	
1,1-Dichloropropene	U		0.128	0.500	1	01/25/2020 16:56	WG1417070	
1,3-Dichloropropane	U		0.147	1.00	1	01/25/2020 16:56	WG1417070	
cis-1,3-Dichloropropene	U		0.0976	0.500	1	01/25/2020 16:56	WG1417070	
trans-1,3-Dichloropropene	U		0.222	0.500	1	01/25/2020 16:56	WG1417070	
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	01/25/2020 16:56	WG1417070	
2,2-Dichloropropane	U		0.0929	0.500	1	01/25/2020 16:56	WG1417070	
Di-isopropyl ether	U		0.0924	0.500	1	01/25/2020 16:56	WG1417070	
Ethylbenzene	U		0.158	0.500	1	01/25/2020 16:56	WG1417070	
Hexachloro-1,3-butadiene	U		0.157	1.00	1	01/25/2020 16:56	WG1417070	
2-Hexanone	U		0.757	5.00	1	01/25/2020 16:56	WG1417070	
n-Hexane	U		0.305	5.00	1	01/25/2020 16:56	WG1417070	
Iodomethane	U		0.377	10.0	1	01/25/2020 16:56	WG1417070	
Isopropylbenzene	U		0.126	0.500	1	01/25/2020 16:56	WG1417070	
p-Isopropyltoluene	U		0.138	0.500	1	01/25/2020 16:56	WG1417070	
2-Butanone (MEK)	U		1.28	5.00	1	01/25/2020 16:56	WG1417070	
Methylene Chloride	U		1.07	2.50	1	01/25/2020 16:56	WG1417070	
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	01/25/2020 16:56	WG1417070	
Methyl tert-butyl ether	U		0.102	0.500	1	01/25/2020 16:56	WG1417070	
Naphthalene	U UJ	J0	0.174	2.50	1	01/25/2020 16:56	WG1417070	
n-Propylbenzene	U		0.162	0.500	1	01/25/2020 16:56	WG1417070	
Styrene	U		0.117	0.500	1	01/25/2020 16:56	WG1417070	
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	01/25/2020 16:56	WG1417070	
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	01/25/2020 16:56	WG1417070	
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	01/25/2020 16:56	WG1417070	
Tetrachloroethene	U		0.199	0.500	1	01/25/2020 16:56	WG1417070	
Toluene	U		0.412	0.500	1	01/25/2020 16:56	WG1417070	
1,2,3-Trichlorobenzene	U UJ	J0	0.164	0.500	1	01/25/2020 16:56	WG1417070	
1,2,4-Trichlorobenzene	U		0.355	0.500	1	01/25/2020 16:56	WG1417070	
1,1,1-Trichloroethane	U		0.0940	0.500	1	01/25/2020 16:56	WG1417070	
1,1,2-Trichloroethane	U		0.186	0.500	1	01/25/2020 16:56	WG1417070	
Trichloroethene	U		0.153	0.500	1	01/25/2020 16:56	WG1417070	
Trichlorofluoromethane	U		0.130	2.50	1	01/25/2020 16:56	WG1417070	
1,2,3-Trichloropropane	U		0.247	2.50	1	01/25/2020 16:56	WG1417070	
1,2,4-Trimethylbenzene	U		0.123	0.500	1	01/25/2020 16:56	WG1417070	
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	01/25/2020 16:56	WG1417070	
1,3,5-Trimethylbenzene	U		0.124	0.500	1	01/25/2020 16:56	WG1417070	
Vinyl acetate	U		0.645	5.00	1	01/25/2020 16:56	WG1417070	
Vinyl chloride	0.162	J	0.118	0.500	1	01/25/2020 16:56	WG1417070	JC 2/6/2020
Xylenes, Total	U		0.316	1.50	1	01/25/2020 16:56	WG1417070	
(S) Toluene-d8	*96.1*			*80.0-120*		*01/25/2020 16:56*	WG1417070	
(S) 4-Bromofluorobenzene	*102*			*77.0-126*		*01/25/2020 16:56*	WG1417070	
(S) 1,2-Dichloroethane-d4	*100*			*70.0-130*		*01/25/2020 16:56*	WG1417070	

Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	161000		2710	20000	1	01/24/2020 16:45	WG1416495

Sample Narrative:

L1182482-02 WG1416495: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	5620		51.9	1000	1	01/24/2020 17:57	WG1416463
Nitrate	U		22.7	100	1	01/24/2020 17:57	WG1416463
Sulfate	2930	J	77.4	5000	1	01/24/2020 17:57	WG1416463

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	2340		102	1000	1	01/29/2020 18:39	WG1417710

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	1310		15.0	100	1	01/27/2020 01:55	WG1416647
Manganese	259		0.250	5.00	1	01/27/2020 01:55	WG1416647

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	U		31.6	100	1	01/26/2020 03:58	WG1416895
(S) a,a,a-Trifluorotoluene(FID)	*106*			*78.0-120*		*01/26/2020 03:58*	WG1416895

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	154		0.287	0.678	1	01/25/2020 14:26	WG1416794
Ethane	U		0.296	1.29	1	01/25/2020 14:26	WG1416794
Ethene	U		0.422	1.27	1	01/25/2020 14:26	WG1416794

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U	UJ J0	1.05	25.0	1	01/26/2020 11:22	WG1417330
Acrylonitrile	U		0.873	5.00	1	01/26/2020 11:22	WG1417330
Benzene	U		0.0896	0.500	1	01/26/2020 11:22	WG1417330
Bromobenzene	U		0.133	0.500	1	01/26/2020 11:22	WG1417330
Bromodichloromethane	U		0.0800	0.500	1	01/26/2020 11:22	WG1417330
Bromochloromethane	U		0.145	0.500	1	01/26/2020 11:22	WG1417330
Bromoform	U		0.186	0.500	1	01/26/2020 11:22	WG1417330
Bromomethane	U		0.157	2.50	1	01/26/2020 11:22	WG1417330
n-Butylbenzene	U		0.143	0.500	1	01/26/2020 11:22	WG1417330
sec-Butylbenzene	U		0.134	0.500	1	01/26/2020 11:22	WG1417330
tert-Butylbenzene	U		0.183	0.500	1	01/26/2020 11:22	WG1417330
Carbon disulfide	U		0.101	0.500	1	01/26/2020 11:22	WG1417330
Carbon tetrachloride	U		0.159	0.500	1	01/26/2020 11:22	WG1417330

JC 2/6/20

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chlorobenzene	U		0.140	0.500	1	01/26/2020 11:22	WG1417330
Chlorodibromomethane	U		0.128	0.500	1	01/26/2020 11:22	WG1417330
Chloroethane	U		0.141	2.50	1	01/26/2020 11:22	WG1417330
Chloroform	U		0.0860	0.500	1	01/26/2020 11:22	WG1417330
Chloromethane	U		0.153	1.25	1	01/26/2020 11:22	WG1417330
2-Chlorotoluene	U		0.111	0.500	1	01/26/2020 11:22	WG1417330
4-Chlorotoluene	U		0.0972	0.500	1	01/26/2020 11:22	WG1417330
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	01/26/2020 11:22	WG1417330
1,2-Dibromoethane	U		0.193	0.500	1	01/26/2020 11:22	WG1417330
Dibromomethane	U		0.117	0.500	1	01/26/2020 11:22	WG1417330
1,2-Dichlorobenzene	U		0.101	0.500	1	01/26/2020 11:22	WG1417330
1,3-Dichlorobenzene	U		0.130	0.500	1	01/26/2020 11:22	WG1417330
1,4-Dichlorobenzene	U		0.121	0.500	1	01/26/2020 11:22	WG1417330
Dichlorodifluoromethane	U UJ	J0	0.127	2.50	1	01/26/2020 11:22	WG1417330
1,1-Dichloroethane	U		0.114	0.500	1	01/26/2020 11:22	WG1417330
1,2-Dichloroethane	U		0.108	0.500	1	01/26/2020 11:22	WG1417330
1,1-Dichloroethene	U		0.188	0.500	1	01/26/2020 11:22	WG1417330
cis-1,2-Dichloroethene	U		0.0933	0.500	1	01/26/2020 11:22	WG1417330
trans-1,2-Dichloroethene	U		0.152	0.500	1	01/26/2020 11:22	WG1417330
1,2-Dichloropropane	U		0.190	0.500	1	01/26/2020 11:22	WG1417330
1,1-Dichloropropene	U		0.128	0.500	1	01/26/2020 11:22	WG1417330
1,3-Dichloropropane	U		0.147	1.00	1	01/26/2020 11:22	WG1417330
cis-1,3-Dichloropropene	U		0.0976	0.500	1	01/26/2020 11:22	WG1417330
trans-1,3-Dichloropropene	U		0.222	0.500	1	01/26/2020 11:22	WG1417330
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	01/26/2020 11:22	WG1417330
2,2-Dichloropropane	U		0.0929	0.500	1	01/26/2020 11:22	WG1417330
Di-isopropyl ether	U		0.0924	0.500	1	01/26/2020 11:22	WG1417330
Ethylbenzene	U		0.158	0.500	1	01/26/2020 11:22	WG1417330
Hexachloro-1,3-butadiene	U		0.157	1.00	1	01/26/2020 11:22	WG1417330
2-Hexanone	U		0.757	5.00	1	01/26/2020 11:22	WG1417330
n-Hexane	U		0.305	5.00	1	01/26/2020 11:22	WG1417330
Iodomethane	U		0.377	10.0	1	01/26/2020 11:22	WG1417330
Isopropylbenzene	U		0.126	0.500	1	01/26/2020 11:22	WG1417330
p-Isopropyltoluene	U		0.138	0.500	1	01/26/2020 11:22	WG1417330
2-Butanone (MEK)	U		1.28	5.00	1	01/26/2020 11:22	WG1417330
Methylene Chloride	U		1.07	2.50	1	01/26/2020 11:22	WG1417330
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	01/26/2020 11:22	WG1417330
Methyl tert-butyl ether	U		0.102	0.500	1	01/26/2020 11:22	WG1417330
Naphthalene	U		0.174	2.50	1	01/26/2020 11:22	WG1417330
n-Propylbenzene	U		0.162	0.500	1	01/26/2020 11:22	WG1417330
Styrene	U		0.117	0.500	1	01/26/2020 11:22	WG1417330
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	01/26/2020 11:22	WG1417330
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	01/26/2020 11:22	WG1417330
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	01/26/2020 11:22	WG1417330
Tetrachloroethene	U		0.199	0.500	1	01/26/2020 11:22	WG1417330
Toluene	U		0.412	0.500	1	01/26/2020 11:22	WG1417330
1,2,3-Trichlorobenzene	U		0.164	0.500	1	01/26/2020 11:22	WG1417330
1,2,4-Trichlorobenzene	U		0.355	0.500	1	01/26/2020 11:22	WG1417330
1,1,1-Trichloroethane	U		0.0940	0.500	1	01/26/2020 11:22	WG1417330
1,1,2-Trichloroethane	U		0.186	0.500	1	01/26/2020 11:22	WG1417330
Trichloroethene	U		0.153	0.500	1	01/26/2020 11:22	WG1417330
Trichlorofluoromethane	U		0.130	2.50	1	01/26/2020 11:22	WG1417330
1,2,3-Trichloropropane	U		0.247	2.50	1	01/26/2020 11:22	WG1417330
1,2,4-Trimethylbenzene	U		0.123	0.500	1	01/26/2020 11:22	WG1417330
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	01/26/2020 11:22	WG1417330
1,3,5-Trimethylbenzene	U		0.124	0.500	1	01/26/2020 11:22	WG1417330

JC 2/6/20

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

Analyte	Result ug/l		Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Vinyl acetate	U	UJ	J0	0.645	5.00	1	01/26/2020 11:22	WG1417330
Vinyl chloride	U			0.118	0.500	1	01/26/2020 11:22	WG1417330
Xylenes, Total	U			0.316	1.50	1	01/26/2020 11:22	WG1417330
(S) Toluene-d8	*103*				*80.0-120*		*01/26/2020 11:22*	WG1417330
(S) 4-Bromofluorobenzene	*102*				*77.0-126*		*01/26/2020 11:22*	WG1417330
(S) 1,2-Dichloroethane-d4	*104*				*70.0-130*		*01/26/2020 11:22*	WG1417330

JC 2/6/20

MW102-012320
Collected date/time: 01/23/20 10:10

SAMPLE RESULTS - 03

L1182482

Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	162000		2710	20000	1	01/24/2020 16:54	WG1416495

Sample Narrative:

L1182482-03 WG1416495: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	5730		51.9	1000	1	01/24/2020 18:10	WG1416463
Nitrate	U		22.7	100	1	01/24/2020 18:10	WG1416463
Sulfate	3070	J	77.4	5000	1	01/24/2020 18:10	WG1416463

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	2310		102	1000	1	01/29/2020 18:53	WG1417710

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	1760		15.0	100	1	01/27/2020 01:58	WG1416647
Manganese	268		0.250	5.00	1	01/27/2020 01:58	WG1416647

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	U		31.6	100	1	01/26/2020 04:22	WG1416895
(S) a,a,a-Trifluorotoluene(FID)	*106*			*78.0-120*		*01/26/2020 04:22*	WG1416895

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	117		0.287	0.678	1	01/25/2020 14:28	WG1416794
Ethane	U		0.296	1.29	1	01/25/2020 14:28	WG1416794
Ethene	U		0.422	1.27	1	01/25/2020 14:28	WG1416794

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U UJ	J0	1.05	25.0	1	01/26/2020 11:42	WG1417330
Acrylonitrile	U		0.873	5.00	1	01/26/2020 11:42	WG1417330
Benzene	U		0.0896	0.500	1	01/26/2020 11:42	WG1417330
Bromobenzene	U		0.133	0.500	1	01/26/2020 11:42	WG1417330
Bromodichloromethane	U		0.0800	0.500	1	01/26/2020 11:42	WG1417330
Bromochloromethane	U		0.145	0.500	1	01/26/2020 11:42	WG1417330
Bromoform	U		0.186	0.500	1	01/26/2020 11:42	WG1417330
Bromomethane	U		0.157	2.50	1	01/26/2020 11:42	WG1417330
n-Butylbenzene	U		0.143	0.500	1	01/26/2020 11:42	WG1417330
sec-Butylbenzene	U		0.134	0.500	1	01/26/2020 11:42	WG1417330
tert-Butylbenzene	U		0.183	0.500	1	01/26/2020 11:42	WG1417330
Carbon disulfide	U		0.101	0.500	1	01/26/2020 11:42	WG1417330
Carbon tetrachloride	U		0.159	0.500	1	01/26/2020 11:42	WG1417330

JC 2/6/20

MW102-012320

Collected date/time: 01/23/20 10:10

SAMPLE RESULTS - 03

L1182482

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chlorobenzene	U		0.140	0.500	1	01/26/2020 11:42	WG1417330
Chlorodibromomethane	U		0.128	0.500	1	01/26/2020 11:42	WG1417330
Chloroethane	U		0.141	2.50	1	01/26/2020 11:42	WG1417330
Chloroform	U		0.0860	0.500	1	01/26/2020 11:42	WG1417330
Chloromethane	U		0.153	1.25	1	01/26/2020 11:42	WG1417330
2-Chlorotoluene	U		0.111	0.500	1	01/26/2020 11:42	WG1417330
4-Chlorotoluene	U		0.0972	0.500	1	01/26/2020 11:42	WG1417330
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	01/26/2020 11:42	WG1417330
1,2-Dibromoethane	U		0.193	0.500	1	01/26/2020 11:42	WG1417330
Dibromomethane	U		0.117	0.500	1	01/26/2020 11:42	WG1417330
1,2-Dichlorobenzene	U		0.101	0.500	1	01/26/2020 11:42	WG1417330
1,3-Dichlorobenzene	U		0.130	0.500	1	01/26/2020 11:42	WG1417330
1,4-Dichlorobenzene	U		0.121	0.500	1	01/26/2020 11:42	WG1417330
Dichlorodifluoromethane	U UJ	J0	0.127	2.50	1	01/26/2020 11:42	WG1417330
1,1-Dichloroethane	U		0.114	0.500	1	01/26/2020 11:42	WG1417330
1,2-Dichloroethane	U		0.108	0.500	1	01/26/2020 11:42	WG1417330
1,1-Dichloroethene	U		0.188	0.500	1	01/26/2020 11:42	WG1417330
cis-1,2-Dichloroethene	U		0.0933	0.500	1	01/26/2020 11:42	WG1417330
trans-1,2-Dichloroethene	U		0.152	0.500	1	01/26/2020 11:42	WG1417330
1,2-Dichloropropane	U		0.190	0.500	1	01/26/2020 11:42	WG1417330
1,1-Dichloropropene	U		0.128	0.500	1	01/26/2020 11:42	WG1417330
1,3-Dichloropropane	U		0.147	1.00	1	01/26/2020 11:42	WG1417330
cis-1,3-Dichloropropene	U		0.0976	0.500	1	01/26/2020 11:42	WG1417330
trans-1,3-Dichloropropene	U		0.222	0.500	1	01/26/2020 11:42	WG1417330
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	01/26/2020 11:42	WG1417330
2,2-Dichloropropane	U		0.0929	0.500	1	01/26/2020 11:42	WG1417330
Di-isopropyl ether	U		0.0924	0.500	1	01/26/2020 11:42	WG1417330
Ethylbenzene	U		0.158	0.500	1	01/26/2020 11:42	WG1417330
Hexachloro-1,3-butadiene	U		0.157	1.00	1	01/26/2020 11:42	WG1417330
2-Hexanone	U		0.757	5.00	1	01/26/2020 11:42	WG1417330
n-Hexane	U		0.305	5.00	1	01/26/2020 11:42	WG1417330
Iodomethane	U		0.377	10.0	1	01/26/2020 11:42	WG1417330
Isopropylbenzene	U		0.126	0.500	1	01/26/2020 11:42	WG1417330
p-Isopropyltoluene	U		0.138	0.500	1	01/26/2020 11:42	WG1417330
2-Butanone (MEK)	U		1.28	5.00	1	01/26/2020 11:42	WG1417330
Methylene Chloride	U		1.07	2.50	1	01/26/2020 11:42	WG1417330
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	01/26/2020 11:42	WG1417330
Methyl tert-butyl ether	U		0.102	0.500	1	01/26/2020 11:42	WG1417330
Naphthalene	U		0.174	2.50	1	01/26/2020 11:42	WG1417330
n-Propylbenzene	U		0.162	0.500	1	01/26/2020 11:42	WG1417330
Styrene	U		0.117	0.500	1	01/26/2020 11:42	WG1417330
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	01/26/2020 11:42	WG1417330
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	01/26/2020 11:42	WG1417330
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	01/26/2020 11:42	WG1417330
Tetrachloroethene	U		0.199	0.500	1	01/26/2020 11:42	WG1417330
Toluene	U		0.412	0.500	1	01/26/2020 11:42	WG1417330
1,2,3-Trichlorobenzene	U		0.164	0.500	1	01/26/2020 11:42	WG1417330
1,2,4-Trichlorobenzene	U		0.355	0.500	1	01/26/2020 11:42	WG1417330
1,1,1-Trichloroethane	U		0.0940	0.500	1	01/26/2020 11:42	WG1417330
1,1,2-Trichloroethane	U		0.186	0.500	1	01/26/2020 11:42	WG1417330
Trichloroethene	U		0.153	0.500	1	01/26/2020 11:42	WG1417330
Trichlorofluoromethane	U		0.130	2.50	1	01/26/2020 11:42	WG1417330
1,2,3-Trichloropropane	U		0.247	2.50	1	01/26/2020 11:42	WG1417330
1,2,4-Trimethylbenzene	U		0.123	0.500	1	01/26/2020 11:42	WG1417330
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	01/26/2020 11:42	WG1417330
1,3,5-Trimethylbenzene	U		0.124	0.500	1	01/26/2020 11:42	WG1417330

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MW102-012320
Collected date/time: 01/23/20 10:10

SAMPLE RESULTS - 03

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Vinyl acetate	U UJ	J0	0.645	5.00	1	01/26/2020 11:42	WG1417330
Vinyl chloride	U		0.118	0.500	1	01/26/2020 11:42	WG1417330
Xylenes, Total	U		0.316	1.50	1	01/26/2020 11:42	WG1417330
(S) Toluene-d8	*99.8*			*80.0-120*		*01/26/2020 11:42*	WG1417330
(S) 4-Bromofluorobenzene	*101*			*77.0-126*		*01/26/2020 11:42*	WG1417330
(S) 1,2-Dichloroethane-d4	*104*			*70.0-130*		*01/26/2020 11:42*	WG1417330

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Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	484000		2710	20000	1	01/24/2020 17:02	WG1416495

Sample Narrative:

L1182482-04 WG1416495: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	162000		260	5000	5	01/24/2020 18:36	WG1416463
Nitrate	U		22.7	100	1	01/24/2020 18:23	WG1416463
Sulfate	60900		77.4	5000	1	01/24/2020 18:23	WG1416463

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	19600		102	1000	1	01/29/2020 19:19	WG1417710

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	8240		15.0	100	1	01/27/2020 02:02	WG1416647
Manganese	1030		0.250	5.00	1	01/27/2020 02:02	WG1416647

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	20000	Z, J+	790	2500	25	01/26/2020 04:45	WG1416895
(S) a,a,a-Trifluorotoluene(FID)	*107*			*78.0-120*		*01/26/2020 04:45*	WG1416895

Sample Narrative:

L1182482-04 WG1416895: No discernable petroleum pattern.

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	7530		2.87	6.78	10	01/25/2020 16:54	WG1416793
Ethane	42.7		0.296	1.29	1	01/25/2020 14:37	WG1416794
Ethene	868		0.422	1.27	1	01/25/2020 14:37	WG1416794

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U	UJ J0	26.3	625	25	01/26/2020 12:02	WG1417330
Acrylonitrile	U		21.8	125	25	01/26/2020 12:02	WG1417330
Benzene	U		2.24	12.5	25	01/26/2020 12:02	WG1417330
Bromobenzene	U		3.33	12.5	25	01/26/2020 12:02	WG1417330
Bromodichloromethane	U		2.00	12.5	25	01/26/2020 12:02	WG1417330
Bromochloromethane	U		3.63	12.5	25	01/26/2020 12:02	WG1417330
Bromoform	U		4.65	12.5	25	01/26/2020 12:02	WG1417330
Bromomethane	U		3.93	62.5	25	01/26/2020 12:02	WG1417330
n-Butylbenzene	U		3.58	12.5	25	01/26/2020 12:02	WG1417330
sec-Butylbenzene	U		3.35	12.5	25	01/26/2020 12:02	WG1417330

JC 2/12/2020

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
tert-Butylbenzene	U		4.58	12.5	25	01/26/2020 12:02	WG1417330
Carbon disulfide	U		2.53	12.5	25	01/26/2020 12:02	WG1417330
Carbon tetrachloride	U		3.97	12.5	25	01/26/2020 12:02	WG1417330
Chlorobenzene	U		3.50	12.5	25	01/26/2020 12:02	WG1417330
Chlorodibromomethane	U		3.20	12.5	25	01/26/2020 12:02	WG1417330
Chloroethane	U		3.53	62.5	25	01/26/2020 12:02	WG1417330
Chloroform	U		2.15	12.5	25	01/26/2020 12:02	WG1417330
Chloromethane	U		3.83	31.3	25	01/26/2020 12:02	WG1417330
2-Chlorotoluene	U		2.78	12.5	25	01/26/2020 12:02	WG1417330
4-Chlorotoluene	U		2.43	12.5	25	01/26/2020 12:02	WG1417330
1,2-Dibromo-3-Chloropropane	U		8.13	62.5	25	01/26/2020 12:02	WG1417330
1,2-Dibromoethane	U		4.83	12.5	25	01/26/2020 12:02	WG1417330
Dibromomethane	U		2.93	12.5	25	01/26/2020 12:02	WG1417330
1,2-Dichlorobenzene	U		2.53	12.5	25	01/26/2020 12:02	WG1417330
1,3-Dichlorobenzene	U		3.25	12.5	25	01/26/2020 12:02	WG1417330
1,4-Dichlorobenzene	U		3.03	12.5	25	01/26/2020 12:02	WG1417330
Dichlorodifluoromethane	U UJ	J0	3.18	62.5	25	01/26/2020 12:02	WG1417330
1,1-Dichloroethane	U		2.85	12.5	25	01/26/2020 12:02	WG1417330
1,2-Dichloroethane	U		2.70	12.5	25	01/26/2020 12:02	WG1417330
1,1-Dichloroethene	63.6		4.70	12.5	25	01/26/2020 12:02	WG1417330
cis-1,2-Dichloroethene	21900		46.7	250	500	01/28/2020 20:27	WG1418320
trans-1,2-Dichloroethene	136		3.80	12.5	25	01/26/2020 12:02	WG1417330
1,2-Dichloropropane	U		4.75	12.5	25	01/26/2020 12:02	WG1417330
1,1-Dichloropropene	U		3.20	12.5	25	01/26/2020 12:02	WG1417330
1,3-Dichloropropane	U		3.68	25.0	25	01/26/2020 12:02	WG1417330
cis-1,3-Dichloropropene	U		2.44	12.5	25	01/26/2020 12:02	WG1417330
trans-1,3-Dichloropropene	U		5.55	12.5	25	01/26/2020 12:02	WG1417330
trans-1,4-Dichloro-2-butene	U		6.43	125	25	01/26/2020 12:02	WG1417330
2,2-Dichloropropane	U		2.32	12.5	25	01/26/2020 12:02	WG1417330
Di-isopropyl ether	U		2.31	12.5	25	01/26/2020 12:02	WG1417330
Ethylbenzene	U		3.95	12.5	25	01/26/2020 12:02	WG1417330
Hexachloro-1,3-butadiene	U		3.93	25.0	25	01/26/2020 12:02	WG1417330
2-Hexanone	U		18.9	125	25	01/26/2020 12:02	WG1417330
n-Hexane	U		7.63	125	25	01/26/2020 12:02	WG1417330
Iodomethane	U		9.43	250	25	01/26/2020 12:02	WG1417330
Isopropylbenzene	U		3.15	12.5	25	01/26/2020 12:02	WG1417330
p-Isopropyltoluene	U		3.45	12.5	25	01/26/2020 12:02	WG1417330
2-Butanone (MEK)	U		32.0	125	25	01/26/2020 12:02	WG1417330
Methylene Chloride	U		26.8	62.5	25	01/26/2020 12:02	WG1417330
4-Methyl-2-pentanone (MIBK)	U		20.6	125	25	01/26/2020 12:02	WG1417330
Methyl tert-butyl ether	U		2.55	12.5	25	01/26/2020 12:02	WG1417330
Naphthalene	U		4.35	62.5	25	01/26/2020 12:02	WG1417330
n-Propylbenzene	U		4.05	12.5	25	01/26/2020 12:02	WG1417330
Styrene	U		2.93	12.5	25	01/26/2020 12:02	WG1417330
1,1,1,2-Tetrachloroethane	U		3.00	12.5	25	01/26/2020 12:02	WG1417330
1,1,2,2-Tetrachloroethane	U		3.25	12.5	25	01/26/2020 12:02	WG1417330
1,1,2-Trichlorotrifluoroethane	U		4.10	12.5	25	01/26/2020 12:02	WG1417330
Tetrachloroethene	7070		99.5	250	500	01/28/2020 20:27	WG1418320
Toluene	U		10.3	12.5	25	01/26/2020 12:02	WG1417330
1,2,3-Trichlorobenzene	U		4.10	12.5	25	01/26/2020 12:02	WG1417330
1,2,4-Trichlorobenzene	U		8.88	12.5	25	01/26/2020 12:02	WG1417330
1,1,1-Trichloroethane	U		2.35	12.5	25	01/26/2020 12:02	WG1417330
1,1,2-Trichloroethane	U		4.65	12.5	25	01/26/2020 12:02	WG1417330
Trichloroethene	5780		76.5	250	500	01/28/2020 20:27	WG1418320
Trichlorofluoromethane	U		3.25	62.5	25	01/26/2020 12:02	WG1417330
1,2,3-Trichloropropane	U		6.17	62.5	25	01/26/2020 12:02	WG1417330

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,2,4-Trimethylbenzene	U		3.08	12.5	25	01/26/2020 12:02	WG1417330
1,2,3-Trimethylbenzene	U		1.85	12.5	25	01/26/2020 12:02	WG1417330
1,3,5-Trimethylbenzene	U		3.10	12.5	25	01/26/2020 12:02	WG1417330
Vinyl acetate	U UJ	J0	16.1	125	25	01/26/2020 12:02	WG1417330
Vinyl chloride	5920		59.0	250	500	01/28/2020 20:27	WG1418320
Xylenes, Total	U		7.90	37.5	25	01/26/2020 12:02	WG1417330
(S) Toluene-d8	*102*			*80.0-120*		*01/26/2020 12:02*	WG1417330
(S) Toluene-d8	*97.9*			*80.0-120*		*01/28/2020 20:27*	WG1418320
(S) 4-Bromofluorobenzene	*103*			*77.0-126*		*01/26/2020 12:02*	WG1417330
(S) 4-Bromofluorobenzene	*94.9*			*77.0-126*		*01/28/2020 20:27*	WG1418320
(S) 1,2-Dichloroethane-d4	*102*			*70.0-130*		*01/26/2020 12:02*	WG1417330
(S) 1,2-Dichloroethane-d4	*114*			*70.0-130*		*01/28/2020 20:27*	WG1418320

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

JC 2/12/2020

Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	584000		2710	20000	1	01/24/2020 17:10	WG1416495

Sample Narrative:

L1182482-05 WG1416495: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	145000		260	5000	5	01/24/2020 19:02	WG1416463
Nitrate	U		22.7	100	1	01/24/2020 18:49	WG1416463
Sulfate	1850	J	77.4	5000	1	01/24/2020 18:49	WG1416463

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	17200		204	2000	2	01/29/2020 20:21	WG1417710

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	9290		15.0	100	1	01/27/2020 02:05	WG1416647
Manganese	978		0.250	5.00	1	01/27/2020 02:05	WG1416647

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	U		158	500	5	01/26/2020 05:09	WG1416895
(S) a,a,a-Trifluorotoluene(FID)	*106*			*78.0-120*		*01/26/2020 05:09*	WG1416895

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	25600		2.87	6.78	10	01/25/2020 16:57	WG1416793
Ethane	396		0.296	1.29	1	01/25/2020 15:02	WG1416794
Ethene	1110		0.422	1.27	1	01/25/2020 15:02	WG1416794

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	2.10 J	J J0	1.05	25.0	1	01/26/2020 12:22	WG1417330
Acrylonitrile	U		0.873	5.00	1	01/26/2020 12:22	WG1417330
Benzene	U		0.0896	0.500	1	01/26/2020 12:22	WG1417330
Bromobenzene	U		0.133	0.500	1	01/26/2020 12:22	WG1417330
Bromodichloromethane	U		0.0800	0.500	1	01/26/2020 12:22	WG1417330
Bromochloromethane	U		0.145	0.500	1	01/26/2020 12:22	WG1417330
Bromoform	U		0.186	0.500	1	01/26/2020 12:22	WG1417330
Bromomethane	U		0.157	2.50	1	01/26/2020 12:22	WG1417330
n-Butylbenzene	U		0.143	0.500	1	01/26/2020 12:22	WG1417330
sec-Butylbenzene	U		0.134	0.500	1	01/26/2020 12:22	WG1417330
tert-Butylbenzene	U		0.183	0.500	1	01/26/2020 12:22	WG1417330
Carbon disulfide	0.508		0.101	0.500	1	01/26/2020 12:22	WG1417330
Carbon tetrachloride	U		0.159	0.500	1	01/26/2020 12:22	WG1417330

JC 2/6/20

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch	
Chlorobenzene	U		0.140	0.500	1	01/26/2020 12:22	WG1417330	
Chlorodibromomethane	U		0.128	0.500	1	01/26/2020 12:22	WG1417330	
Chloroethane	U		0.141	2.50	1	01/26/2020 12:22	WG1417330	
Chloroform	U		0.0860	0.500	1	01/26/2020 12:22	WG1417330	
Chloromethane	U		0.153	1.25	1	01/26/2020 12:22	WG1417330	
2-Chlorotoluene	U		0.111	0.500	1	01/26/2020 12:22	WG1417330	
4-Chlorotoluene	U		0.0972	0.500	1	01/26/2020 12:22	WG1417330	
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	01/26/2020 12:22	WG1417330	
1,2-Dibromoethane	U		0.193	0.500	1	01/26/2020 12:22	WG1417330	
Dibromomethane	U		0.117	0.500	1	01/26/2020 12:22	WG1417330	
1,2-Dichlorobenzene	U		0.101	0.500	1	01/26/2020 12:22	WG1417330	
1,3-Dichlorobenzene	U		0.130	0.500	1	01/26/2020 12:22	WG1417330	
1,4-Dichlorobenzene	U		0.121	0.500	1	01/26/2020 12:22	WG1417330	
Dichlorodifluoromethane	U UJ	J0	0.127	2.50	1	01/26/2020 12:22	WG1417330	
1,1-Dichloroethane	U		0.114	0.500	1	01/26/2020 12:22	WG1417330	
1,2-Dichloroethane	U		0.108	0.500	1	01/26/2020 12:22	WG1417330	
1,1-Dichloroethene	U		0.188	0.500	1	01/26/2020 12:22	WG1417330	
cis-1,2-Dichloroethene	0.665	J	0.467	2.50	5	01/28/2020 20:47	WG1418320	
trans-1,2-Dichloroethene	6.97		0.152	0.500	1	01/26/2020 12:22	WG1417330	
1,2-Dichloropropane	U		0.190	0.500	1	01/26/2020 12:22	WG1417330	
1,1-Dichloropropene	U		0.128	0.500	1	01/26/2020 12:22	WG1417330	
1,3-Dichloropropane	U		0.147	1.00	1	01/26/2020 12:22	WG1417330	
cis-1,3-Dichloropropene	U		0.0976	0.500	1	01/26/2020 12:22	WG1417330	
trans-1,3-Dichloropropene	U		0.222	0.500	1	01/26/2020 12:22	WG1417330	
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	01/26/2020 12:22	WG1417330	
2,2-Dichloropropane	U		0.0929	0.500	1	01/26/2020 12:22	WG1417330	
Di-isopropyl ether	U		0.0924	0.500	1	01/26/2020 12:22	WG1417330	
Ethylbenzene	U		0.158	0.500	1	01/26/2020 12:22	WG1417330	
Hexachloro-1,3-butadiene	U		0.157	1.00	1	01/26/2020 12:22	WG1417330	
2-Hexanone	U		0.757	5.00	1	01/26/2020 12:22	WG1417330	
n-Hexane	U		0.305	5.00	1	01/26/2020 12:22	WG1417330	
Iodomethane	U		0.377	10.0	1	01/26/2020 12:22	WG1417330	
Isopropylbenzene	U		0.126	0.500	1	01/26/2020 12:22	WG1417330	
p-Isopropyltoluene	U		0.138	0.500	1	01/26/2020 12:22	WG1417330	
2-Butanone (MEK)	U		1.28	5.00	1	01/26/2020 12:22	WG1417330	
Methylene Chloride	U		1.07	2.50	1	01/26/2020 12:22	WG1417330	
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	01/26/2020 12:22	WG1417330	
Methyl tert-butyl ether	U		0.102	0.500	1	01/26/2020 12:22	WG1417330	
Naphthalene	U		0.174	2.50	1	01/26/2020 12:22	WG1417330	
n-Propylbenzene	U		0.162	0.500	1	01/26/2020 12:22	WG1417330	
Styrene	U		0.117	0.500	1	01/26/2020 12:22	WG1417330	
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	01/26/2020 12:22	WG1417330	
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	01/26/2020 12:22	WG1417330	
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	01/26/2020 12:22	WG1417330	
Tetrachloroethene	U		0.995	2.50	5	01/28/2020 20:47	WG1418320	
Toluene	U		0.412	0.500	1	01/26/2020 12:22	WG1417330	
1,2,3-Trichlorobenzene	U		0.164	0.500	1	01/26/2020 12:22	WG1417330	
1,2,4-Trichlorobenzene	U		0.355	0.500	1	01/26/2020 12:22	WG1417330	
1,1,1-Trichloroethane	U		0.0940	0.500	1	01/26/2020 12:22	WG1417330	
1,1,2-Trichloroethane	U		0.186	0.500	1	01/26/2020 12:22	WG1417330	
Trichloroethene	1.51	J	0.765	2.50	5	01/28/2020 20:47	WG1418320	JC 2/6/20
Trichlorofluoromethane	U		0.130	2.50	1	01/26/2020 12:22	WG1417330	
1,2,3-Trichloropropane	U		0.247	2.50	1	01/26/2020 12:22	WG1417330	
1,2,4-Trimethylbenzene	U		0.123	0.500	1	01/26/2020 12:22	WG1417330	
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	01/26/2020 12:22	WG1417330	
1,3,5-Trimethylbenzene	U		0.124	0.500	1	01/26/2020 12:22	WG1417330	

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

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

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Vinyl acetate	U UJ	J0	0.645	5.00	1	01/26/2020 12:22	WG1417330
Vinyl chloride	275		0.590	2.50	5	01/28/2020 20:47	WG1418320
Xylenes, Total	U		0.316	1.50	1	01/26/2020 12:22	WG1417330
(S) Toluene-d8	*103*			*80.0-120*		*01/26/2020 12:22*	WG1417330
(S) Toluene-d8	*100*			*80.0-120*		*01/28/2020 20:47*	WG1418320
(S) 4-Bromofluorobenzene	*102*			*77.0-126*		*01/26/2020 12:22*	WG1417330
(S) 4-Bromofluorobenzene	*97.5*			*77.0-126*		*01/28/2020 20:47*	WG1418320
(S) 1,2-Dichloroethane-d4	*103*			*70.0-130*		*01/26/2020 12:22*	WG1417330
(S) 1,2-Dichloroethane-d4	*112*			*70.0-130*		*01/28/2020 20:47*	WG1418320

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

JC 2/6/20

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

Wet Chemistry by Method 2320 B-2011

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Alkalinity	198000		2710	20000	1	01/24/2020 17:18	WG1416495

Sample Narrative:

L1182482-06 WG1416495: Endpoint pH 4.5

Wet Chemistry by Method 9056A

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Chloride	26200		51.9	1000	1	01/24/2020 19:15	WG1416463
Nitrate	U		22.7	100	1	01/24/2020 19:15	WG1416463
Sulfate	26800		77.4	5000	1	01/24/2020 19:15	WG1416463

Wet Chemistry by Method 9060A

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
TOC (Total Organic Carbon)	4930		102	1000	1	01/29/2020 20:36	WG1417710

Metals (ICPMS) by Method 6020B

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Iron	355		15.0	100	1	01/27/2020 02:08	WG1416647
Manganese	1030		0.250	5.00	1	01/27/2020 02:08	WG1416647

Volatile Organic Compounds (GC) by Method NWTPHGX

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Gasoline Range Organics-NWTPH	10700	Z, J+	31.6	100	1	01/26/2020 05:34	WG1416895
(S) a,a,a-Trifluorotoluene(FID)	*113*			*78.0-120*		*01/26/2020 05:34*	WG1416895

Sample Narrative:

L1182482-06 WG1416895: No discernable petroleum pattern.

Volatile Organic Compounds (GC) by Method RSK175

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Methane	301		0.287	0.678	1	01/25/2020 15:09	WG1416794
Ethane	7.66		0.296	1.29	1	01/25/2020 15:09	WG1416794
Ethene	19.4		0.422	1.27	1	01/25/2020 15:09	WG1416794

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

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Acetone	U UJ	J0	1.05	25.0	1	01/26/2020 12:42	WG1417330
Acrylonitrile	U		0.873	5.00	1	01/26/2020 12:42	WG1417330
Benzene	U		0.0896	0.500	1	01/26/2020 12:42	WG1417330
Bromobenzene	U		0.133	0.500	1	01/26/2020 12:42	WG1417330
Bromodichloromethane	U		0.0800	0.500	1	01/26/2020 12:42	WG1417330
Bromochloromethane	U		0.145	0.500	1	01/26/2020 12:42	WG1417330
Bromoform	U		0.186	0.500	1	01/26/2020 12:42	WG1417330
Bromomethane	U		0.157	2.50	1	01/26/2020 12:42	WG1417330
n-Butylbenzene	U		0.143	0.500	1	01/26/2020 12:42	WG1417330
sec-Butylbenzene	U		0.134	0.500	1	01/26/2020 12:42	WG1417330

JC 2/12/2020

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

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
tert-Butylbenzene	U		0.183	0.500	1	01/26/2020 12:42	WG1417330
Carbon disulfide	U		0.101	0.500	1	01/26/2020 12:42	WG1417330
Carbon tetrachloride	U		0.159	0.500	1	01/26/2020 12:42	WG1417330
Chlorobenzene	U		0.140	0.500	1	01/26/2020 12:42	WG1417330
Chlorodibromomethane	U		0.128	0.500	1	01/26/2020 12:42	WG1417330
Chloroethane	U		0.141	2.50	1	01/26/2020 12:42	WG1417330
Chloroform	0.155	J	0.0860	0.500	1	01/26/2020 12:42	WG1417330
Chloromethane	U		0.153	1.25	1	01/26/2020 12:42	WG1417330
2-Chlorotoluene	U		0.111	0.500	1	01/26/2020 12:42	WG1417330
4-Chlorotoluene	U		0.0972	0.500	1	01/26/2020 12:42	WG1417330
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	01/26/2020 12:42	WG1417330
1,2-Dibromoethane	U		0.193	0.500	1	01/26/2020 12:42	WG1417330
Dibromomethane	U		0.117	0.500	1	01/26/2020 12:42	WG1417330
1,2-Dichlorobenzene	U		0.101	0.500	1	01/26/2020 12:42	WG1417330
1,3-Dichlorobenzene	U		0.130	0.500	1	01/26/2020 12:42	WG1417330
1,4-Dichlorobenzene	U		0.121	0.500	1	01/26/2020 12:42	WG1417330
Dichlorodifluoromethane	U UJ	J0	0.127	2.50	1	01/26/2020 12:42	WG1417330
1,1-Dichloroethane	0.330	J	0.114	0.500	1	01/26/2020 12:42	WG1417330
1,2-Dichloroethane	U		0.108	0.500	1	01/26/2020 12:42	WG1417330
1,1-Dichloroethene	50.6		0.188	0.500	1	01/26/2020 12:42	WG1417330
cis-1,2-Dichloroethene	623		46.7	250	500	01/28/2020 21:08	WG1418320
trans-1,2-Dichloroethene	38.1		0.152	0.500	1	01/26/2020 12:42	WG1417330
1,2-Dichloropropane	U		0.190	0.500	1	01/26/2020 12:42	WG1417330
1,1-Dichloropropene	U		0.128	0.500	1	01/26/2020 12:42	WG1417330
1,3-Dichloropropane	U		0.147	1.00	1	01/26/2020 12:42	WG1417330
cis-1,3-Dichloropropene	U		0.0976	0.500	1	01/26/2020 12:42	WG1417330
trans-1,3-Dichloropropene	U		0.222	0.500	1	01/26/2020 12:42	WG1417330
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	01/26/2020 12:42	WG1417330
2,2-Dichloropropane	U		0.0929	0.500	1	01/26/2020 12:42	WG1417330
Di-isopropyl ether	U		0.0924	0.500	1	01/26/2020 12:42	WG1417330
Ethylbenzene	U		0.158	0.500	1	01/26/2020 12:42	WG1417330
Hexachloro-1,3-butadiene	U		0.157	1.00	1	01/26/2020 12:42	WG1417330
2-Hexanone	U		0.757	5.00	1	01/26/2020 12:42	WG1417330
n-Hexane	U		0.305	5.00	1	01/26/2020 12:42	WG1417330
Iodomethane	U		0.377	10.0	1	01/26/2020 12:42	WG1417330
Isopropylbenzene	U		0.126	0.500	1	01/26/2020 12:42	WG1417330
p-Isopropyltoluene	U		0.138	0.500	1	01/26/2020 12:42	WG1417330
2-Butanone (MEK)	U		1.28	5.00	1	01/26/2020 12:42	WG1417330
Methylene Chloride	U		1.07	2.50	1	01/26/2020 12:42	WG1417330
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	01/26/2020 12:42	WG1417330
Methyl tert-butyl ether	U		0.102	0.500	1	01/26/2020 12:42	WG1417330
Naphthalene	U		0.174	2.50	1	01/26/2020 12:42	WG1417330
n-Propylbenzene	U		0.162	0.500	1	01/26/2020 12:42	WG1417330
Styrene	U		0.117	0.500	1	01/26/2020 12:42	WG1417330
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	01/26/2020 12:42	WG1417330
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	01/26/2020 12:42	WG1417330
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	01/26/2020 12:42	WG1417330
Tetrachloroethene	31100		99.5	250	500	01/28/2020 21:08	WG1418320
Toluene	1.02		0.412	0.500	1	01/26/2020 12:42	WG1417330
1,2,3-Trichlorobenzene	U		0.164	0.500	1	01/26/2020 12:42	WG1417330
1,2,4-Trichlorobenzene	U		0.355	0.500	1	01/26/2020 12:42	WG1417330
1,1,1-Trichloroethane	U		0.0940	0.500	1	01/26/2020 12:42	WG1417330
1,1,2-Trichloroethane	U		0.186	0.500	1	01/26/2020 12:42	WG1417330
Trichloroethene	10100		76.5	250	500	01/28/2020 21:08	WG1418320
Trichlorofluoromethane	U		0.130	2.50	1	01/26/2020 12:42	WG1417330
1,2,3-Trichloropropane	U		0.247	2.50	1	01/26/2020 12:42	WG1417330

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,2,4-Trimethylbenzene	U		0.123	0.500	1	01/26/2020 12:42	WG1417330
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	01/26/2020 12:42	WG1417330
1,3,5-Trimethylbenzene	U		0.124	0.500	1	01/26/2020 12:42	WG1417330
Vinyl acetate	U	UJ J0	0.645	5.00	1	01/26/2020 12:42	WG1417330
Vinyl chloride	U		59.0	250	500	01/28/2020 21:08	WG1418320
Xylenes, Total	0.550	J	0.316	1.50	1	01/26/2020 12:42	WG1417330
(S) Toluene-d8	*108*			*80.0-120*		*01/26/2020 12:42*	WG1417330
(S) Toluene-d8	*101*			*80.0-120*		*01/28/2020 21:08*	WG1418320
(S) 4-Bromofluorobenzene	*102*			*77.0-126*		*01/26/2020 12:42*	WG1417330
(S) 4-Bromofluorobenzene	*101*			*77.0-126*		*01/28/2020 21:08*	WG1418320
(S) 1,2-Dichloroethane-d4	*101*			*70.0-130*		*01/26/2020 12:42*	WG1417330
(S) 1,2-Dichloroethane-d4	*113*			*70.0-130*		*01/28/2020 21:08*	WG1418320

JC 2/12/2020

Wet Chemistry by Method 2320 B-2011

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Alkalinity	343000		2710	20000	1	01/24/2020 17:25	WG1416495

Sample Narrative:

L1182486-01 WG1416495: Endpoint pH 4.5

Wet Chemistry by Method 9056A

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Chloride	23100		51.9	1000	1	01/24/2020 19:28	WG1416463
Nitrate	U		22.7	100	1	01/24/2020 19:28	WG1416463
Sulfate	11700		77.4	5000	1	01/24/2020 19:28	WG1416463

Wet Chemistry by Method 9060A

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
TOC (Total Organic Carbon)	4870		102	1000	1	01/29/2020 20:53	WG1417710

Metals (ICPMS) by Method 6020B

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Iron	4960		15.0	100	1	01/27/2020 02:11	WG1416647
Manganese	2230		0.250	5.00	1	01/27/2020 02:11	WG1416647

Volatile Organic Compounds (GC) by Method RSK175

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Methane	773		0.287	0.678	1	01/25/2020 15:13	WG1416794
Ethane	3.11		0.296	1.29	1	01/25/2020 15:13	WG1416794
Ethene	U		0.422	1.27	1	01/25/2020 15:13	WG1416794

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

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Acetone	U UJ	J0	1.05	25.0	1	01/26/2020 13:02	WG1417330
Acrylonitrile	U		0.873	5.00	1	01/26/2020 13:02	WG1417330
Benzene	U		0.0896	0.500	1	01/26/2020 13:02	WG1417330
Bromobenzene	U		0.133	0.500	1	01/26/2020 13:02	WG1417330
Bromodichloromethane	U		0.0800	0.500	1	01/26/2020 13:02	WG1417330
Bromochloromethane	U		0.145	0.500	1	01/26/2020 13:02	WG1417330
Bromoform	U		0.186	0.500	1	01/26/2020 13:02	WG1417330
Bromomethane	U		0.157	2.50	1	01/26/2020 13:02	WG1417330
n-Butylbenzene	U		0.143	0.500	1	01/26/2020 13:02	WG1417330
sec-Butylbenzene	U		0.134	0.500	1	01/26/2020 13:02	WG1417330
tert-Butylbenzene	U		0.183	0.500	1	01/26/2020 13:02	WG1417330
Carbon disulfide	U		0.101	0.500	1	01/26/2020 13:02	WG1417330
Carbon tetrachloride	U		0.159	0.500	1	01/26/2020 13:02	WG1417330
Chlorobenzene	U		0.140	0.500	1	01/26/2020 13:02	WG1417330
Chlorodibromomethane	U		0.128	0.500	1	01/26/2020 13:02	WG1417330
Chloroethane	U		0.141	2.50	1	01/26/2020 13:02	WG1417330
Chloroform	U		0.0860	0.500	1	01/26/2020 13:02	WG1417330
Chloromethane	U		0.153	1.25	1	01/26/2020 13:02	WG1417330
2-Chlorotoluene	U		0.111	0.500	1	01/26/2020 13:02	WG1417330
4-Chlorotoluene	U		0.0972	0.500	1	01/26/2020 13:02	WG1417330

JC 2/6/2020

GEI-MW-1-012320

Collected date/time: 01/23/20 10:00

SAMPLE RESULTS - 01

L1182486

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	01/26/2020 13:02	WG1417330
1,2-Dibromoethane	U		0.193	0.500	1	01/26/2020 13:02	WG1417330
Dibromomethane	U		0.117	0.500	1	01/26/2020 13:02	WG1417330
1,2-Dichlorobenzene	U		0.101	0.500	1	01/26/2020 13:02	WG1417330
1,3-Dichlorobenzene	U		0.130	0.500	1	01/26/2020 13:02	WG1417330
1,4-Dichlorobenzene	U		0.121	0.500	1	01/26/2020 13:02	WG1417330
Dichlorodifluoromethane	U UJ	J0	0.127	2.50	1	01/26/2020 13:02	WG1417330
1,1-Dichloroethane	U		0.114	0.500	1	01/26/2020 13:02	WG1417330
1,2-Dichloroethane	U		0.108	0.500	1	01/26/2020 13:02	WG1417330
1,1-Dichloroethene	U		0.188	0.500	1	01/26/2020 13:02	WG1417330
cis-1,2-Dichloroethene	U		0.0933	0.500	1	01/28/2020 21:29	WG1418320
trans-1,2-Dichloroethene	U		0.152	0.500	1	01/26/2020 13:02	WG1417330
1,2-Dichloropropane	U		0.190	0.500	1	01/26/2020 13:02	WG1417330
1,1-Dichloropropene	U		0.128	0.500	1	01/26/2020 13:02	WG1417330
1,3-Dichloropropane	U		0.147	1.00	1	01/26/2020 13:02	WG1417330
cis-1,3-Dichloropropene	U		0.0976	0.500	1	01/26/2020 13:02	WG1417330
trans-1,3-Dichloropropene	U		0.222	0.500	1	01/26/2020 13:02	WG1417330
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	01/26/2020 13:02	WG1417330
2,2-Dichloropropane	U		0.0929	0.500	1	01/26/2020 13:02	WG1417330
Di-isopropyl ether	U		0.0924	0.500	1	01/26/2020 13:02	WG1417330
Ethylbenzene	U		0.158	0.500	1	01/26/2020 13:02	WG1417330
Hexachloro-1,3-butadiene	U		0.157	1.00	1	01/26/2020 13:02	WG1417330
2-Hexanone	U		0.757	5.00	1	01/26/2020 13:02	WG1417330
n-Hexane	U		0.305	5.00	1	01/26/2020 13:02	WG1417330
Iodomethane	U		0.377	10.0	1	01/26/2020 13:02	WG1417330
Isopropylbenzene	U		0.126	0.500	1	01/26/2020 13:02	WG1417330
p-Isopropyltoluene	U		0.138	0.500	1	01/26/2020 13:02	WG1417330
2-Butanone (MEK)	U		1.28	5.00	1	01/26/2020 13:02	WG1417330
Methylene Chloride	U		1.07	2.50	1	01/26/2020 13:02	WG1417330
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	01/26/2020 13:02	WG1417330
Methyl tert-butyl ether	U		0.102	0.500	1	01/26/2020 13:02	WG1417330
Naphthalene	U		0.174	2.50	1	01/26/2020 13:02	WG1417330
n-Propylbenzene	U		0.162	0.500	1	01/26/2020 13:02	WG1417330
Styrene	U		0.117	0.500	1	01/26/2020 13:02	WG1417330
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	01/26/2020 13:02	WG1417330
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	01/26/2020 13:02	WG1417330
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	01/26/2020 13:02	WG1417330
Tetrachloroethene	U		0.199	0.500	1	01/28/2020 21:29	WG1418320
Toluene	U		0.412	0.500	1	01/26/2020 13:02	WG1417330
1,2,3-Trichlorobenzene	U		0.164	0.500	1	01/26/2020 13:02	WG1417330
1,2,4-Trichlorobenzene	U		0.355	0.500	1	01/26/2020 13:02	WG1417330
1,1,1-Trichloroethane	U		0.0940	0.500	1	01/26/2020 13:02	WG1417330
1,1,2-Trichloroethane	U		0.186	0.500	1	01/26/2020 13:02	WG1417330
Trichloroethene	0.230	J	0.153	0.500	1	01/28/2020 21:29	WG1418320
Trichlorofluoromethane	U		0.130	2.50	1	01/26/2020 13:02	WG1417330
1,2,3-Trichloropropane	U		0.247	2.50	1	01/26/2020 13:02	WG1417330
1,2,4-Trimethylbenzene	U		0.123	0.500	1	01/26/2020 13:02	WG1417330
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	01/26/2020 13:02	WG1417330
1,3,5-Trimethylbenzene	U		0.124	0.500	1	01/26/2020 13:02	WG1417330
Vinyl acetate	U UJ	J0	0.645	5.00	1	01/26/2020 13:02	WG1417330
Vinyl chloride	U		0.118	0.500	1	01/26/2020 13:02	WG1417330
Xylenes, Total	U		0.316	1.50	1	01/26/2020 13:02	WG1417330
(S) Toluene-d8	*102*			*80.0-120*		*01/26/2020 13:02*	WG1417330
(S) Toluene-d8	*103*			*80.0-120*		*01/28/2020 21:29*	WG1418320
(S) 4-Bromofluorobenzene	*102*			*77.0-126*		*01/26/2020 13:02*	WG1417330
(S) 4-Bromofluorobenzene	*95.6*			*77.0-126*		*01/28/2020 21:29*	WG1418320

JC 2/6/2020

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

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
(S) 1,2-Dichloroethane-d4	*106*			*70.0-130*		*01/26/2020 13:02*	WG1417330
(S) 1,2-Dichloroethane-d4	*114*			*70.0-130*		*01/28/2020 21:29*	WG1418320

JC 2/6/2020

Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	171000		2710	20000	1	01/24/2020 17:33	WG1416495

Sample Narrative:

L1182486-02 WG1416495: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	13300		51.9	1000	1	01/24/2020 20:21	WG1416463
Nitrate	U		22.7	100	1	01/24/2020 20:21	WG1416463
Sulfate	37500		77.4	5000	1	01/24/2020 20:21	WG1416463

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	1800	~~B~~	102	1000	1	01/29/2020 23:36	WG1418866

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	2060		15.0	100	1	01/27/2020 02:14	WG1416647
Manganese	700		0.250	5.00	1	01/27/2020 02:14	WG1416647

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	U		31.6	100	1	01/26/2020 05:58	WG1416895
(S) a,a,a-Trifluorotoluene(FID)	*106*			*78.0-120*		*01/26/2020 05:58*	WG1416895

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	119		0.287	0.678	1	01/25/2020 15:16	WG1416794
Ethane	U		0.296	1.29	1	01/25/2020 15:16	WG1416794
Ethene	25.3		0.422	1.27	1	01/25/2020 15:16	WG1416794

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U UJ	J0	1.05	25.0	1	01/26/2020 13:23	WG1417330
Acrylonitrile	U		0.873	5.00	1	01/26/2020 13:23	WG1417330
Benzene	U		0.0896	0.500	1	01/26/2020 13:23	WG1417330
Bromobenzene	U		0.133	0.500	1	01/26/2020 13:23	WG1417330
Bromodichloromethane	U		0.0800	0.500	1	01/26/2020 13:23	WG1417330
Bromochloromethane	U		0.145	0.500	1	01/26/2020 13:23	WG1417330
Bromoform	U		0.186	0.500	1	01/26/2020 13:23	WG1417330
Bromomethane	U		0.157	2.50	1	01/26/2020 13:23	WG1417330
n-Butylbenzene	U		0.143	0.500	1	01/26/2020 13:23	WG1417330
sec-Butylbenzene	U		0.134	0.500	1	01/26/2020 13:23	WG1417330
tert-Butylbenzene	U		0.183	0.500	1	01/26/2020 13:23	WG1417330
Carbon disulfide	U		0.101	0.500	1	01/26/2020 13:23	WG1417330
Carbon tetrachloride	U		0.159	0.500	1	01/26/2020 13:23	WG1417330

JC 2/6/2020

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

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chlorobenzene	U		0.140	0.500	1	01/26/2020 13:23	WG1417330
Chlorodibromomethane	U		0.128	0.500	1	01/26/2020 13:23	WG1417330
Chloroethane	U		0.141	2.50	1	01/26/2020 13:23	WG1417330
Chloroform	U		0.0860	0.500	1	01/26/2020 13:23	WG1417330
Chloromethane	U		0.153	1.25	1	01/26/2020 13:23	WG1417330
2-Chlorotoluene	U		0.111	0.500	1	01/26/2020 13:23	WG1417330
4-Chlorotoluene	U		0.0972	0.500	1	01/26/2020 13:23	WG1417330
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	01/26/2020 13:23	WG1417330
1,2-Dibromoethane	U		0.193	0.500	1	01/26/2020 13:23	WG1417330
Dibromomethane	U		0.117	0.500	1	01/26/2020 13:23	WG1417330
1,2-Dichlorobenzene	U		0.101	0.500	1	01/26/2020 13:23	WG1417330
1,3-Dichlorobenzene	U		0.130	0.500	1	01/26/2020 13:23	WG1417330
1,4-Dichlorobenzene	U		0.121	0.500	1	01/26/2020 13:23	WG1417330
Dichlorodifluoromethane	U UJ	J0	0.127	2.50	1	01/26/2020 13:23	WG1417330
1,1-Dichloroethane	U		0.114	0.500	1	01/26/2020 13:23	WG1417330
1,2-Dichloroethane	U		0.108	0.500	1	01/26/2020 13:23	WG1417330
1,1-Dichloroethene	U		0.188	0.500	1	01/26/2020 13:23	WG1417330
cis-1,2-Dichloroethene	0.514		0.0933	0.500	1	01/28/2020 21:49	WG1418320
trans-1,2-Dichloroethene	U		0.152	0.500	1	01/26/2020 13:23	WG1417330
1,2-Dichloropropane	U		0.190	0.500	1	01/26/2020 13:23	WG1417330
1,1-Dichloropropene	U		0.128	0.500	1	01/26/2020 13:23	WG1417330
1,3-Dichloropropane	U		0.147	1.00	1	01/26/2020 13:23	WG1417330
cis-1,3-Dichloropropene	U		0.0976	0.500	1	01/26/2020 13:23	WG1417330
trans-1,3-Dichloropropene	U		0.222	0.500	1	01/26/2020 13:23	WG1417330
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	01/26/2020 13:23	WG1417330
2,2-Dichloropropane	U		0.0929	0.500	1	01/26/2020 13:23	WG1417330
Di-isopropyl ether	U		0.0924	0.500	1	01/26/2020 13:23	WG1417330
Ethylbenzene	U		0.158	0.500	1	01/26/2020 13:23	WG1417330
Hexachloro-1,3-butadiene	U		0.157	1.00	1	01/26/2020 13:23	WG1417330
2-Hexanone	U		0.757	5.00	1	01/26/2020 13:23	WG1417330
n-Hexane	U		0.305	5.00	1	01/26/2020 13:23	WG1417330
Iodomethane	U		0.377	10.0	1	01/26/2020 13:23	WG1417330
Isopropylbenzene	U		0.126	0.500	1	01/26/2020 13:23	WG1417330
p-Isopropyltoluene	U		0.138	0.500	1	01/26/2020 13:23	WG1417330
2-Butanone (MEK)	U		1.28	5.00	1	01/26/2020 13:23	WG1417330
Methylene Chloride	U		1.07	2.50	1	01/26/2020 13:23	WG1417330
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	01/26/2020 13:23	WG1417330
Methyl tert-butyl ether	U		0.102	0.500	1	01/26/2020 13:23	WG1417330
Naphthalene	U		0.174	2.50	1	01/26/2020 13:23	WG1417330
n-Propylbenzene	U		0.162	0.500	1	01/26/2020 13:23	WG1417330
Styrene	U		0.117	0.500	1	01/26/2020 13:23	WG1417330
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	01/26/2020 13:23	WG1417330
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	01/26/2020 13:23	WG1417330
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	01/26/2020 13:23	WG1417330
Tetrachloroethene	U		0.199	0.500	1	01/28/2020 21:49	WG1418320
Toluene	0.501		0.412	0.500	1	01/26/2020 13:23	WG1417330
1,2,3-Trichlorobenzene	U		0.164	0.500	1	01/26/2020 13:23	WG1417330
1,2,4-Trichlorobenzene	U		0.355	0.500	1	01/26/2020 13:23	WG1417330
1,1,1-Trichloroethane	U		0.0940	0.500	1	01/26/2020 13:23	WG1417330
1,1,2-Trichloroethane	U		0.186	0.500	1	01/26/2020 13:23	WG1417330
Trichloroethene	U		0.153	0.500	1	01/28/2020 21:49	WG1418320
Trichlorofluoromethane	U		0.130	2.50	1	01/26/2020 13:23	WG1417330
1,2,3-Trichloropropane	U		0.247	2.50	1	01/26/2020 13:23	WG1417330
1,2,4-Trimethylbenzene	U		0.123	0.500	1	01/26/2020 13:23	WG1417330
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	01/26/2020 13:23	WG1417330
1,3,5-Trimethylbenzene	U		0.124	0.500	1	01/26/2020 13:23	WG1417330

JC 2/6/2020

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

Analyte	Result ug/l		Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Vinyl acetate	U	UJ	J0	0.645	5.00	1	01/26/2020 13:23	WG1417330
Vinyl chloride	3.01			0.118	0.500	1	01/26/2020 13:23	WG1417330
Xylenes, Total	U			0.316	1.50	1	01/26/2020 13:23	WG1417330
(S) Toluene-d8	*99.1*				*80.0-120*		*01/26/2020 13:23*	WG1417330
(S) Toluene-d8	*102*				*80.0-120*		*01/28/2020 21:49*	WG1418320
(S) 4-Bromofluorobenzene	*101*				*77.0-126*		*01/26/2020 13:23*	WG1417330
(S) 4-Bromofluorobenzene	*97.4*				*77.0-126*		*01/28/2020 21:49*	WG1418320
(S) 1,2-Dichloroethane-d4	*106*				*70.0-130*		*01/26/2020 13:23*	WG1417330
(S) 1,2-Dichloroethane-d4	*112*				*70.0-130*		*01/28/2020 21:49*	WG1418320

JC 2/6/2020

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

Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Alkalinity	262000		2710	20000	1	01/24/2020 17:41	WG1416495

Sample Narrative:

L1182486-03 WG1416495: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chloride	29000		51.9	1000	1	01/24/2020 20:47	WG1416463
Nitrate	U		22.7	100	1	01/24/2020 20:47	WG1416463
Sulfate	9020		77.4	5000	1	01/24/2020 20:47	WG1416463

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
TOC (Total Organic Carbon)	4990		102	1000	1	01/29/2020 23:54	WG1418866

Metals (ICPMS) by Method 6020B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Iron	9730		15.0	100	1	01/27/2020 02:18	WG1416647
Manganese	200		0.250	5.00	1	01/27/2020 02:18	WG1416647

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Gasoline Range Organics-NWTPH	U		31.6	100	1	01/26/2020 06:22	WG1416895
(S) a,a,a-Trifluorotoluene(FID)	*106*			*78.0-120*		*01/26/2020 06:22*	WG1416895

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Methane	580		0.287	0.678	1	01/25/2020 15:19	WG1416794
Ethane	U		0.296	1.29	1	01/25/2020 15:19	WG1416794
Ethene	19.5		0.422	1.27	1	01/25/2020 15:19	WG1416794

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	1.94	J	1.05	25.0	1	01/28/2020 22:09	WG1418320
Acrylonitrile	U		0.873	5.00	1	01/28/2020 22:09	WG1418320
Benzene	U		0.0896	0.500	1	01/28/2020 22:09	WG1418320
Bromobenzene	U		0.133	0.500	1	01/28/2020 22:09	WG1418320
Bromodichloromethane	U		0.0800	0.500	1	01/28/2020 22:09	WG1418320
Bromochloromethane	U		0.145	0.500	1	01/28/2020 22:09	WG1418320
Bromoform	U		0.186	0.500	1	01/28/2020 22:09	WG1418320
Bromomethane	U		0.157	2.50	1	01/28/2020 22:09	WG1418320
n-Butylbenzene	U		0.143	0.500	1	01/28/2020 22:09	WG1418320
sec-Butylbenzene	U		0.134	0.500	1	01/28/2020 22:09	WG1418320
tert-Butylbenzene	U		0.183	0.500	1	01/28/2020 22:09	WG1418320
Carbon disulfide	0.595		0.101	0.500	1	01/28/2020 22:09	WG1418320
Carbon tetrachloride	U		0.159	0.500	1	01/28/2020 22:09	WG1418320

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chlorobenzene	U		0.140	0.500	1	01/28/2020 22:09	WG1418320
Chlorodibromomethane	U		0.128	0.500	1	01/28/2020 22:09	WG1418320
Chloroethane	U		0.141	2.50	1	01/28/2020 22:09	WG1418320
Chloroform	U		0.0860	0.500	1	01/28/2020 22:09	WG1418320
Chloromethane	U		0.153	1.25	1	01/28/2020 22:09	WG1418320
2-Chlorotoluene	U		0.111	0.500	1	01/28/2020 22:09	WG1418320
4-Chlorotoluene	U		0.0972	0.500	1	01/28/2020 22:09	WG1418320
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	01/28/2020 22:09	WG1418320
1,2-Dibromoethane	U		0.193	0.500	1	01/28/2020 22:09	WG1418320
Dibromomethane	U		0.117	0.500	1	01/28/2020 22:09	WG1418320
1,2-Dichlorobenzene	U		0.101	0.500	1	01/28/2020 22:09	WG1418320
1,3-Dichlorobenzene	U		0.130	0.500	1	01/28/2020 22:09	WG1418320
1,4-Dichlorobenzene	U		0.121	0.500	1	01/28/2020 22:09	WG1418320
Dichlorodifluoromethane	U		0.127	2.50	1	01/28/2020 22:09	WG1418320
1,1-Dichloroethane	U		0.114	0.500	1	01/28/2020 22:09	WG1418320
1,2-Dichloroethane	U		0.108	0.500	1	01/28/2020 22:09	WG1418320
1,1-Dichloroethene	U		0.188	0.500	1	01/28/2020 22:09	WG1418320
cis-1,2-Dichloroethene	81.9		0.0933	0.500	1	01/28/2020 22:09	WG1418320
trans-1,2-Dichloroethene	0.281	J	0.152	0.500	1	01/28/2020 22:09	WG1418320
1,2-Dichloropropane	U		0.190	0.500	1	01/28/2020 22:09	WG1418320
1,1-Dichloropropene	U		0.128	0.500	1	01/28/2020 22:09	WG1418320
1,3-Dichloropropane	U		0.147	1.00	1	01/28/2020 22:09	WG1418320
cis-1,3-Dichloropropene	U		0.0976	0.500	1	01/28/2020 22:09	WG1418320
trans-1,3-Dichloropropene	U		0.222	0.500	1	01/28/2020 22:09	WG1418320
trans-1,4-Dichloro-2-butene	U UJ	J0	0.257	5.00	1	01/28/2020 22:09	WG1418320
2,2-Dichloropropane	U	~~J4~~	0.0929	0.500	1	01/28/2020 22:09	WG1418320
Di-isopropyl ether	U		0.0924	0.500	1	01/28/2020 22:09	WG1418320
Ethylbenzene	U		0.158	0.500	1	01/28/2020 22:09	WG1418320
Hexachloro-1,3-butadiene	U		0.157	1.00	1	01/28/2020 22:09	WG1418320
2-Hexanone	U		0.757	5.00	1	01/28/2020 22:09	WG1418320
n-Hexane	U		0.305	5.00	1	01/28/2020 22:09	WG1418320
Iodomethane	U		0.377	10.0	1	01/28/2020 22:09	WG1418320
Isopropylbenzene	U		0.126	0.500	1	01/28/2020 22:09	WG1418320
p-Isopropyltoluene	U		0.138	0.500	1	01/28/2020 22:09	WG1418320
2-Butanone (MEK)	U		1.28	5.00	1	01/28/2020 22:09	WG1418320
Methylene Chloride	U		1.07	2.50	1	01/28/2020 22:09	WG1418320
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	01/28/2020 22:09	WG1418320
Methyl tert-butyl ether	U		0.102	0.500	1	01/28/2020 22:09	WG1418320
Naphthalene	U	~~J4~~	0.174	2.50	1	01/28/2020 22:09	WG1418320
n-Propylbenzene	U		0.162	0.500	1	01/28/2020 22:09	WG1418320
Styrene	U		0.117	0.500	1	01/28/2020 22:09	WG1418320
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	01/28/2020 22:09	WG1418320
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	01/28/2020 22:09	WG1418320
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	01/28/2020 22:09	WG1418320
Tetrachloroethene	0.407	J	0.199	0.500	1	01/28/2020 22:09	WG1418320
Toluene	U		0.412	0.500	1	01/28/2020 22:09	WG1418320
1,2,3-Trichlorobenzene	U		0.164	0.500	1	01/28/2020 22:09	WG1418320
1,2,4-Trichlorobenzene	U		0.355	0.500	1	01/28/2020 22:09	WG1418320
1,1,1-Trichloroethane	U		0.0940	0.500	1	01/28/2020 22:09	WG1418320
1,1,2-Trichloroethane	U		0.186	0.500	1	01/28/2020 22:09	WG1418320
Trichloroethene	0.687		0.153	0.500	1	01/28/2020 22:09	WG1418320
Trichlorofluoromethane	U		0.130	2.50	1	01/28/2020 22:09	WG1418320
1,2,3-Trichloropropane	U		0.247	2.50	1	01/28/2020 22:09	WG1418320
1,2,4-Trimethylbenzene	U		0.123	0.500	1	01/28/2020 22:09	WG1418320
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	01/28/2020 22:09	WG1418320
1,3,5-Trimethylbenzene	U		0.124	0.500	1	01/28/2020 22:09	WG1418320

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

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Vinyl acetate	U		0.645	5.00	1	01/28/2020 22:09	WG1418320
Vinyl chloride	20.7		0.118	0.500	1	01/28/2020 22:09	WG1418320
Xylenes, Total	U		0.316	1.50	1	01/28/2020 22:09	WG1418320
(S) Toluene-d8	*101*			*80.0-120*		*01/28/2020 22:09*	WG1418320
(S) 4-Bromofluorobenzene	*100*			*77.0-126*		*01/28/2020 22:09*	WG1418320
(S) 1,2-Dichloroethane-d4	*110*			*70.0-130*		*01/28/2020 22:09*	WG1418320

JC 2/6/2020

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

Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	173000		2710	20000	1	01/24/2020 18:00	WG1416495

Sample Narrative:

L1182486-04 WG1416495: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	10500		51.9	1000	1	01/24/2020 21:00	WG1416463
Nitrate	U		22.7	100	1	01/24/2020 21:00	WG1416463
Sulfate	4060	J	77.4	5000	1	01/24/2020 21:00	WG1416463

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	4460		102	1000	1	01/30/2020 00:11	WG1418866

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	1490		15.0	100	1	01/27/2020 02:21	WG1416647
Manganese	273		0.250	5.00	1	01/27/2020 02:21	WG1416647

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	U		31.6	100	1	01/26/2020 06:46	WG1416895
(S) a,a,a-Trifluorotoluene(FID)	*106*			*78.0-120*		*01/26/2020 06:46*	WG1416895

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	656		0.287	0.678	1	01/25/2020 15:24	WG1416794
Ethane	U		0.296	1.29	1	01/25/2020 15:24	WG1416794
Ethene	U		0.422	1.27	1	01/25/2020 15:24	WG1416794

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	1.84 J	J J0	1.05	25.0	1	01/26/2020 14:03	WG1417330
Acrylonitrile	U		0.873	5.00	1	01/26/2020 14:03	WG1417330
Benzene	0.150	J	0.0896	0.500	1	01/26/2020 14:03	WG1417330
Bromobenzene	U		0.133	0.500	1	01/26/2020 14:03	WG1417330
Bromodichloromethane	U		0.0800	0.500	1	01/26/2020 14:03	WG1417330
Bromochloromethane	U		0.145	0.500	1	01/26/2020 14:03	WG1417330
Bromoform	U		0.186	0.500	1	01/26/2020 14:03	WG1417330
Bromomethane	U		0.157	2.50	1	01/26/2020 14:03	WG1417330
n-Butylbenzene	U		0.143	0.500	1	01/26/2020 14:03	WG1417330
sec-Butylbenzene	U		0.134	0.500	1	01/26/2020 14:03	WG1417330
tert-Butylbenzene	U		0.183	0.500	1	01/26/2020 14:03	WG1417330
Carbon disulfide	0.625		0.101	0.500	1	01/26/2020 14:03	WG1417330
Carbon tetrachloride	U		0.159	0.500	1	01/26/2020 14:03	WG1417330

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MW-190-012320
Collected date/time: 01/23/20 12:40

SAMPLE RESULTS - 04
L1182486

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

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chlorobenzene	U		0.140	0.500	1	01/26/2020 14:03	WG1417330
Chlorodibromomethane	U		0.128	0.500	1	01/26/2020 14:03	WG1417330
Chloroethane	U		0.141	2.50	1	01/26/2020 14:03	WG1417330
Chloroform	U		0.0860	0.500	1	01/26/2020 14:03	WG1417330
Chloromethane	U		0.153	1.25	1	01/26/2020 14:03	WG1417330
2-Chlorotoluene	U		0.111	0.500	1	01/26/2020 14:03	WG1417330
4-Chlorotoluene	U		0.0972	0.500	1	01/26/2020 14:03	WG1417330
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	01/26/2020 14:03	WG1417330
1,2-Dibromoethane	U		0.193	0.500	1	01/26/2020 14:03	WG1417330
Dibromomethane	U		0.117	0.500	1	01/26/2020 14:03	WG1417330
1,2-Dichlorobenzene	U		0.101	0.500	1	01/26/2020 14:03	WG1417330
1,3-Dichlorobenzene	U		0.130	0.500	1	01/26/2020 14:03	WG1417330
1,4-Dichlorobenzene	U		0.121	0.500	1	01/26/2020 14:03	WG1417330
Dichlorodifluoromethane	U UJ	J0	0.127	2.50	1	01/26/2020 14:03	WG1417330
1,1-Dichloroethane	U		0.114	0.500	1	01/26/2020 14:03	WG1417330
1,2-Dichloroethane	U		0.108	0.500	1	01/26/2020 14:03	WG1417330
1,1-Dichloroethene	U		0.188	0.500	1	01/26/2020 14:03	WG1417330
cis-1,2-Dichloroethene	0.389	J	0.0933	0.500	1	01/28/2020 22:29	WG1418320
trans-1,2-Dichloroethene	U		0.152	0.500	1	01/26/2020 14:03	WG1417330
1,2-Dichloropropane	U		0.190	0.500	1	01/26/2020 14:03	WG1417330
1,1-Dichloropropene	U		0.128	0.500	1	01/26/2020 14:03	WG1417330
1,3-Dichloropropane	U		0.147	1.00	1	01/26/2020 14:03	WG1417330
cis-1,3-Dichloropropene	U		0.0976	0.500	1	01/26/2020 14:03	WG1417330
trans-1,3-Dichloropropene	U		0.222	0.500	1	01/26/2020 14:03	WG1417330
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	01/26/2020 14:03	WG1417330
2,2-Dichloropropane	U		0.0929	0.500	1	01/26/2020 14:03	WG1417330
Di-isopropyl ether	U		0.0924	0.500	1	01/26/2020 14:03	WG1417330
Ethylbenzene	U		0.158	0.500	1	01/26/2020 14:03	WG1417330
Hexachloro-1,3-butadiene	U		0.157	1.00	1	01/26/2020 14:03	WG1417330
2-Hexanone	U		0.757	5.00	1	01/26/2020 14:03	WG1417330
n-Hexane	U		0.305	5.00	1	01/26/2020 14:03	WG1417330
Iodomethane	U		0.377	10.0	1	01/26/2020 14:03	WG1417330
Isopropylbenzene	U		0.126	0.500	1	01/26/2020 14:03	WG1417330
p-Isopropyltoluene	U		0.138	0.500	1	01/26/2020 14:03	WG1417330
2-Butanone (MEK)	U		1.28	5.00	1	01/26/2020 14:03	WG1417330
Methylene Chloride	U		1.07	2.50	1	01/26/2020 14:03	WG1417330
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	01/26/2020 14:03	WG1417330
Methyl tert-butyl ether	U		0.102	0.500	1	01/26/2020 14:03	WG1417330
Naphthalene	U		0.174	2.50	1	01/26/2020 14:03	WG1417330
n-Propylbenzene	U		0.162	0.500	1	01/26/2020 14:03	WG1417330
Styrene	U		0.117	0.500	1	01/26/2020 14:03	WG1417330
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	01/26/2020 14:03	WG1417330
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	01/26/2020 14:03	WG1417330
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	01/26/2020 14:03	WG1417330
Tetrachloroethene	U		0.199	0.500	1	01/28/2020 22:29	WG1418320
Toluene	1.57		0.412	0.500	1	01/26/2020 14:03	WG1417330
1,2,3-Trichlorobenzene	U		0.164	0.500	1	01/26/2020 14:03	WG1417330
1,2,4-Trichlorobenzene	U		0.355	0.500	1	01/26/2020 14:03	WG1417330
1,1,1-Trichloroethane	U		0.0940	0.500	1	01/26/2020 14:03	WG1417330
1,1,2-Trichloroethane	U		0.186	0.500	1	01/26/2020 14:03	WG1417330
Trichloroethene	U		0.153	0.500	1	01/28/2020 22:29	WG1418320
Trichlorofluoromethane	U		0.130	2.50	1	01/26/2020 14:03	WG1417330
1,2,3-Trichloropropane	U		0.247	2.50	1	01/26/2020 14:03	WG1417330
1,2,4-Trimethylbenzene	U		0.123	0.500	1	01/26/2020 14:03	WG1417330
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	01/26/2020 14:03	WG1417330
1,3,5-Trimethylbenzene	U		0.124	0.500	1	01/26/2020 14:03	WG1417330

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

Analyte	Result ug/l		Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Vinyl acetate	U	UJ	J0	0.645	5.00	1	01/26/2020 14:03	WG1417330
Vinyl chloride	U			0.118	0.500	1	01/26/2020 14:03	WG1417330
Xylenes, Total	0.344		J	0.316	1.50	1	01/26/2020 14:03	WG1417330
(S) Toluene-d8	*101*				*80.0-120*		*01/26/2020 14:03*	WG1417330
(S) Toluene-d8	*101*				*80.0-120*		*01/28/2020 22:29*	WG1418320
(S) 4-Bromofluorobenzene	*103*				*77.0-126*		*01/26/2020 14:03*	WG1417330
(S) 4-Bromofluorobenzene	*95.9*				*77.0-126*		*01/28/2020 22:29*	WG1418320
(S) 1,2-Dichloroethane-d4	*107*				*70.0-130*		*01/26/2020 14:03*	WG1417330
(S) 1,2-Dichloroethane-d4	*115*				*70.0-130*		*01/28/2020 22:29*	WG1418320

JC 2/6/2020

MEMORANDUM

TO:	Project File	**DATE:**	February 17, 2020
FROM:	Jessie Compeau		
SUBJECT:	Laboratory Data Validation Review		
PROJECT:	American Linen Data Validation		
PROJECT #:	1413.001.02.501E		
TASK:	EIM Data Validation Level EPA2A for 1st Quarter 2020 – Groundwater Samples		
LAB:	Pace Sample Delivery Groups (SDGs): L1181608, L1182886, L1182898, and L1183293		

Nineteen (19) groundwater samples (including one field duplicate sample), two equipment blanks, and three trip blanks were collected as part of the Remedial Investigation (RI) first quarter of 2020 groundwater sampling event at the Former American Linen Supply Site, in Seattle, Washington on January 21, 24, and 27, 2020. The samples were shipped and delivered to Pace Lab Sciences (Pace) of Mount Juliet, TN for laboratory analysis. Selected samples were analyzed for the following:

- Volatile organic compounds (VOCs) by United States Environmental Protection Agency (USEPA) Method 8260D;
- Total petroleum hydrocarbons as gasoline (TPH-Gx) by NWTPH-Gx per analytical method stipulated by Washington State Department of Ecology;
- VOCs (dissolved gases – methane, ethane, and ethene) by EPA SOP RSK 175;
- Alkalinity by Method 2320 B-2011;
- Anions (chloride, nitrate, and sulfate) by USEPA Method 9056A;
- Total Organic Carbon (TOC) by USEPA Method 9060A; and
- Metals (iron and manganese) by USEPA Method 6020B.

The first quarter of RI sampling was conducted January of 2020. Results are reported in multiple SDGs from Pace. Pace SDGs are reviewed in groups (less than 10 SDGs) for each data validation report. Group 3 analytical results are reported in SDGs L1181608, L1182886, L1182898, and L1183293. The quality assurance review of the laboratory data associated with Group 3 is summarized below.

DATA QUALIFICATIONS

Guidelines established by USEPA for a limited data validation review of analytical data along with Pace control limit criteria were used to validate the data. The comments presented in this memorandum refer to the laboratory's performance in meeting the quality control criteria

outlined in the USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (USEPA, 2017) and USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Superfund Methods Data Review (USEPA, 2017). Following Guidelines, non-project-specific laboratory duplicates and matrix spike results were not evaluated as part of this data validation.

DATA VALIDATION

Completeness

All samples were collected and analyzed as requested with the following exception:

- SDG L1183293: On January 28, 2020 Pace contacted PES regarding a conflict on the chain of custody (COC). Sample MW-18**2**-012720 with a collection time of 0951 was not received however a sample MW-18**7**-012720 with a collection time of 0951was received. PES instructed Pace to log the sample as MW-18**2**-012720. No action is taken other than to note this.

Sample Collection and Preservation

Samples were collected in laboratory-supplied sample containers preserved as appropriate for the individual analyses conducted. The samples were packed on ice in coolers and delivered by courier to the analytical laboratory. The laboratory reported that the coolers were received at a cooler temperature less than the recommended temperature preservation of 6°C. Samples were received in good condition. No data were qualified based upon the sample collection and preservation information.

Holding Times

USEPA Method 8260D:
All samples were analyzed for VOCs within the EPA recommended holding time of fourteen days for preserved waters from the date of collection. All holding time criteria are met.

NWTPH-Gx Method:
All samples were analyzed within the WA State recommended holding time of fourteen days for preserved waters from the date of sample collection. All holding time criteria are met.

Dissolved Gases (Methane, Ethane, and Ethene) by RSK 175:
All samples were analyzed within the WA State recommended holding time of fourteen days for preserved waters from the date of sample collection. All holding time criteria are met.

USEPA Method 6020B:
All samples were analyzed within the USEPA recommended holding time for iron and manganese of 180 days for preserved waters from the date of sample collection. All holding time criteria are met.

General Chemistry (Alkalinity, Chloride, Sulfate, Nitrate, and TOC):

All samples were analyzed within the USEPA recommended holding time for alkalinity (14 days), chloride (28 days), sulfate (28 days), and nitrate (48 hours), and TOC (28 days) for preserved waters from the date of sample collection. All holding time criteria are met.

Initial and Continuing Calibration

Calibration data for this project are not required for this deliverable however Pace's notes indicate the following:

- Multiple SDGs - *USEPA Method 8260D:* Continuing calibration verification (CCV) issues were noted by Pace for multiple compounds associated with analytical batches in each SDG. These compounds are qualified by the laboratory "J0" to indicate that percent difference CCV is outside of laboratory acceptance criteria. **Associated sample results with laboratory qualified (J0) results are estimated and qualified (J/UJ) unless qualified as not detected (U) due to blank contamination.**

Method Blank Results

USEPA Method 8260D:
Laboratory method blanks were included with the analytical batches per method requirement. The target analytes were not detected in the method blanks at or above the reporting detection limits (RDLs) with the following exceptions:

- SDG L1181608 – Analytical batch WG1415610: Low levels of 2-butanone (MEK) and naphthalene are detected in the method blank. No action is taken for these compounds as these are not detected in the associated samples.

NWTPH-Gx Method:
Laboratory method blanks were included with the analytical batches per method requirement. The target analyte (gasoline) was not detected in the method blanks at or above the RDLs with one exception:

- SDG L1183293 – Analytical batch WG1418226: A low level gasoline concentration is detected in the method blank. **The associated gasoline range organic (GRO) detection in sample MW-304-012720 is below the RDL and qualified as not detected (U) due to method or trip blank contamination.**

Dissolved Gases (Methane, Ethane, and Ethene) by RSK 175:
Laboratory method blanks were included with the analytical batches per method requirement. The target analytes (dissolved gases) are not detected in the method blanks at or above the RDLs.

USEPA Method 6020B and General Chemistry (Alkalinity, Chloride, Sulfate, Nitrate, and TOC):
Laboratory method blanks were included with the analytical batches per method requirement. The target analytes were detected in the method blanks below the RDLs. Per Guidance, no action is taken for blank detections less than the RDL when associated sample detections are greater than the RDL. General chemistry and metal blank detections are shown below:

SDG	Batch	Method	Analyte	Method Blank Result	Qualifier	RDL	Units	Associated Result(s) Qualified
L1181608	WG1415297	SM2320B	Alkalinity as CaCO3, Total	4440	J	20000	µg/L	NO
L1181608	WG1415072	9056A	Chloride	61.3	J	1000	µg/L	NO
L1181608	WG1415072	9056A	Nitrate	23.0	J	100	µg/L	**YES**
L1181608	WG1416628	9060A	TOC	420	J	1000	µg/L	NO
L1181608	WG1415176	6020B	Manganese	0.339	J	5.00	µg/L	NO
L1181649	WG1417179	9060A	TOC	381	J	1000	µg/L	NO
L1182886	WG1417009	SM2320B	Alkalinity as CaCO3, Total	4410	J	20000	µg/L	NO
L1182886	WG1418866	9060A	TOC	301	J	1000	µg/L	NO
L1182886	WG1416986	6020B	Iron	37.7	J	100	µg/L	NO
L1182886	WG1416986	6020B	Manganese	1.18	J	5.00	µg/L	NO
L1182898	WG1417009	SM2320B	Alkalinity as CaCO3, Total	4410	J	20000	µg/L	NO
L1182898	WG1419599	9060A	TOC	486	J	1000	µg/L	NO
L1183293	WG1418552	SM2320B	Alkalinity as CaCO3, Total	6840	J	20000	µg/L	NO
L1183293	WG1418181	9056A	Chloride	417	J	1000	µg/L	NO
L1183293	WG1418181	9056A	Sulfate	569	J	5000	µg/L	**YES**
L1183293	WG1419929	9060A	TOC	356	J	1000	µg/L	NO

Target analytes were detected in method blanks at low levels with no impact to the associated samples with the following exceptions:

- SDG L1181608 – Analytical batch WG1415072: A low level of nitrate is detected in the method blank. **Samples MW-158A-012120, MW-153-012120, MW-144R-012120, and MW-145R-012120 nitrate detections are below the RDL and are qualified as not detected (U).**

- SDG L1183293 – Analytical batch WG1418181: A low level of sulfate is detected in the method blank. **Sample MW-181-012720 sulfate detection is below the RDL and qualified as not detected (U).**

Trip Blank Results

USEPA Method 8260D and NWTPH-Gx:
Four trip blanks were collected and analyzed. The target analytes (gasoline and VOCs) were not detected in the trip blanks at or above the RDLs with the following exceptions:

- SDG L1182886: A low level of acetone is detected in the trip blank (TB-012420). **Low levels of acetone are detected in the associated samples MW-303-012420, MW-302-012420, and MW112-012420 and are qualified as not detected (U) due to method or trip blank contamination.**

- SDG L1183293: A low level of iodomethane is detected in the trip blank (TB-012720). No action is necessary since iodomethane is not detected in the associated samples.

Field, Rinsate, or Equipment Blank Results

All Analytical Methods:

Two equipment blanks were collected as follows:

- SDG L1181608: Equipment blank (EQ-012120) is associated with all samples in the SDG.
- SDG L1183293: Equipment blank (EQ-012720) is associated with samples MW-304-012720 and MW-138-012720.

Equipment blanks were analyzed for all analytical parameters and positive detections are shown in the table below:

SDG	Equipment Blank Identification	Method	Analyte	Equipment Blank Result	Qualifier	RDL	Units	Associated Result(s) Qualified
L1181608	EQ-012120	SM2320B	Alkalinity as CaCO3, Total	8520	J	20000	µg/L	NO
L1181608	EQ-012120	9056A	Chloride	68.9	J	1000	µg/L	NO
L1181608	EQ-012120	9056A	Nitrate	23.1	J	100	µg/L	**YES**
L1181608	EQ-012120	9056A	Sulfate	176	J	5000	µg/L	NO
L1181608	EQ-012120	9060A	TOC	525	J	1000	µg/L	NO
L1181608	EQ-012120	6020B	Iron	19.7	J	100	µg/L	**YES**
L1181608	EQ-012120	6020B	Manganese	2.15	J	5.00	µg/L	NO
L1181608	EQ-012120	8260D	Acetone	1.59	J	25.0	µg/L	**YES**
L1181608	EQ-012120	8260D	Chloroform	0.300	J	0.500	µg/L	NO
L1183293	EQ-012720	SM2320B	Alkalinity as CaCO3, Total	4520	J	20000	µg/L	NO
L1183293	EQ-012720	9056A	Chloride	418	J	1000	µg/L	NO
L1183293	EQ-012720	9056A	Nitrate	64.2	J	100	µg/L	NO
L1183293	EQ-012720	9056A	Sulfate	518	J	5000	µg/L	NO
L1183293	EQ-012720	9060A	TOC	343	J	1000	µg/L	NO
L1183293	EQ-012720	RSK 175	Methane	25.0	J	0.678	µg/L	**YES**
L1183293	EQ-012720	8260D	Acetone	1.59	J	25.0	µg/L	NO
L1183293	EQ-012720	8260D	Chloroform	0.300	J	0.500	µg/L	NO

Target analytes were detected in equipment blanks at low levels with no impact to the associated samples with the following exceptions:

- SDG L1181608 – Analytical batch WG1415072: A low level of nitrate is detected in the method and equipment blanks. **Samples MW-158A-012120, MW-153-012120, MW-144R-012120, and MW-145R-012120 nitrate detections are below the RDL and are qualified as not detected (U) due to blank contamination.**

- SDG L1181608 – Analytical batch WG1415072: A low level of sulfate (176 µg/L) is detected in the equipment blank. Sample MW-145R-012120 sulfate detection is at 3170 µg/L and is also below the RDL. *In this case, using professional judgement, no action is taken other than to note this.*

- SDG L1181608 – Analytical batch WG1415072: A low level of iron is detected in the equipment blank. **Sample MW-154-012120 iron detection is at 62.4 µg/L is below the RDL and is qualified as not detected (U) due to blank contamination.**

- SDG L1181608 – Analytical batch WG1415072: A low level of acetone is detected in the equipment blank. **Sample MW-145R-012120 acetone detection is below the RDL and is qualified as not detected (U) due to blank contamination.**

- SDG L1183293 – Analytical batch WG1418181: A low level of sulfate is detected in the method blank. **Sample MW-181-012720 sulfate detection is below the RDL and qualified as not detected (U).**

- SDG L1183293 – Analytical batch WG1418181: A low level of methane is detected in the method blank. **Sample MW-304-012720 methane detection is below the RDL and qualified as estimated (J+).**

Field Duplicate Analyses

Field duplicate pairs were submitted and analyzed. Field duplicate sample pair is as follows:

- SDG L1182886: Samples MW-146-012420 and MW-925-012420

Target analyte results are comparable and within a relative percent difference (RPD) of 30% (± 1x RDL for groundwater results <5X the RDL) for the field duplicate pair with the following exceptions:

- Samples MW-146-012420 and MW-925-012420: Gasoline range organics (GRO) and methane field duplicate results are not comparable with RPDs greater than 30%. **Methane sample MW-146-012420 and MW-925-012420 results are estimated and qualified (J).** GRO results are already estimated and qualified. Refer to Compound Identification and Quantitation Limits

- Samples MW-146-012420 and MW-925-012420: Sample MW-146-012420 was diluted 100X and sample MW-925-012420 was analyzed undiluted except for a 200X dilution factor for two compounds (cis-1,2-dichloroethene and vinyl chloride). Certain VOC compounds (1,1-dichloroethene, trans-1,2-dichloroethene, and trichloroethene) are not detected in MW-146-012420 because they were diluted out. No action is taken in these cases. **Tetrachloroethene and vinyl chloride sample MW-146-012420 and MW-925-012420 results are estimated (J).**
- Sample MW-146-012420 was diluted 100X and sample MW-925-012420 was undiluted with the two exceptions compounds (cis-1,2-dichloroethene and vinyl chloride) were diluted 200X. Certain VOC compounds (1,1-dichloroethene, trans-1,2-dichloroethene, and trichloroethene) are not detected in MW-146-012420 because they were diluted out. No action is taken in these cases. **Tetrachloroethene and vinyl chloride sample MW-146-012420 and MW-925-012420 results are estimated (J).**

Laboratory Duplicate Analyses

USEPA Method 8260D:

Laboratory duplicate samples were not analyzed. Refer to laboratory control sample/sample duplicate (LCS/LCSD) or matrix spike/matrix spike duplicate (MS/MSD) results for precision data.

NWTPH-Gx Method:
Laboratory duplicate samples were not analyzed. Refer to laboratory control sample/sample duplicate (LCS/LCSD) or matrix spike/matrix spike duplicate (MS/MSD) results for precision data. In some cases, only LCS data are available (SDGs L1179348, L1179855, and L1181269). No action is taken other than note that precision data are not available for several analytical batches.

Dissolved Gases (Methane, Ethane, and Ethene) by RSK 175:
Laboratory duplicate sample analyses were performed on client and non-client samples within the analytical batches. The primary/duplicate RPDs for dissolved gas analyses are within the laboratory control limit of 20%.

USEPA Method 6020B:
Laboratory duplicate samples were not analyzed. Refer to LCS/LCSD or MS/MSD results for precision data.

General Chemistry (Alkalinity, Chloride, Sulfate, Nitrate, and TOC):
Laboratory duplicate sample analyses were performed on client samples and/or on non-client samples. The primary/duplicate RPDs for general chemistry parameters are within the laboratory control RPD limits or ± 1x RDL for groundwater results <5X the RDL.

Surrogate Recoveries

USEPA Method 8260D:
The surrogate recovery results for the samples, laboratory control samples, matrix spike samples, and the blanks are within the laboratory surrogate control limits for all the analyses.

NWTPH-Gx Method:
The surrogate recovery results for the samples, laboratory control samples, matrix spike samples, and the blanks are within the laboratory surrogate control limits for all analyses.

Laboratory Control Samples

USEPA Method 8260D:
Laboratory control sample/laboratory control sample duplicate (LCS/LCSD) or laboratory control sample (LCS) were analyzed by USEPA Method 8260D method. The LCS % Rs or LCS/LCSD % Rs and RPDs for the all target compounds are within the laboratory control criteria for waters with the following discussion:

- SDG L1181608 - Analytical batch WG1415610: LCS % recoveries for chloromethane and 2,2-dichloropropane are above laboratory acceptance criteria and laboratory qualified (J4). No action is needed because these compounds are not detected in the associated samples.

- SDG L1183293 - Analytical batch WG1418645: LCS % recovery for bromomethane are above laboratory acceptance criteria and laboratory qualified (J4). No action is needed because this compound is not detected in the associated samples.

NWTPH-Gx Method:
The LCS % Rs or LCS/LCSD % Rs and RPDs for the target compound (gasoline) are within the laboratory control criteria for waters.

Dissolved Gases (Methane, Ethane, and Ethene) by RSK 175:
The LCS/LCSD % Rs and RPDs for the target compound (dissolved gases) are within the laboratory control criteria for waters.

USEPA Method 6020B:
The LCS/LCSD % Rs and RPDs for the target compound (iron and manganese) are within the laboratory control criteria for waters.

General Chemistry (Alkalinity, Chloride, Sulfate, Nitrate, and TOC):
The LCS % Rs for general chemistry parameters are within the laboratory control criteria for waters.

Matrix Spike/Matrix Spike Duplicates

USEPA Method 8260D:
Matrix spike/matrix spike duplicate (MS/MSD) analyses were not performed. Refer to LCS/LCSD results for accuracy and precision data.

NWTPH-Gx Method:
MS/MSD analyses were performed on non-client samples within several analytical batches. The MS/MSD % Rs and RPD were acceptable and within laboratory control limit criteria for water samples. Refer to LCS/LCSD results for accuracy and precision data.

Dissolved Gases (Methane, Ethane, and Ethene) by RSK 175:
MS/MSD analyses were not performed. Refer to LCS results and field duplicate sample for accuracy and precision data.

USEPA Method 6020B:
MS/MSD analyses were performed on client and/or non-client samples within the analytical batches. The MS/MSD % Rs and RPD were acceptable and within laboratory control limit criteria for water samples with the following discussion:

- SDGs L1182886 and L1182898: Matrix spike analysis was performed on client sample MW-146-012420 (SDG L1182886) and manganese MS/MSD recoveries are laboratory qualified (V) to indicate that the sample amount is greater than four times the spike amount. Per Guidance, no action is necessary. Refer to LCS/LCSD results for accuracy and precision data.

General Chemistry (Alkalinity, Chloride, Sulfate, Nitrate, and TOC):

MS or MS/MSD analyses were performed on client and/or non-client samples within the analytical batches. In cases where MS/MSD spike analyses are not performed refer to LCS/LCSD or laboratory duplicate data for accuracy and precision data. The MS/MSD % Rs and RPDs are acceptable and within laboratory control limit criteria for water samples with the following discussions:

- SDG L1181608: Chloride, nitrate, and sulfate spike analysis were performed on non-client samples within the analytical batch. MS/MSD recoveries are laboratory qualified (E) because the spiked amount exceeded the upper limit of the calibration limit and sample matrix interference. No action is taken other than to note this. Refer to laboratory duplicate and laboratory control sample results for precision and accuracy data.

- SDG L1183293: Sulfate spike analysis was performed on a non-client sample within the analytical batch. MS/MSD recoveries for sulfate are laboratory qualified (E) because the spiked amount exceeded the upper limit calibration limit. No action is taken other than to note this.

Other Quality Control Issues

No laboratory quality control issues were identified in the laboratory report with the following discussions:

- Multiple SDGs: Selected sample narratives for alkalinity results indicate that several sample containers had some headspace and exposure to air may have impacted the reported results. No action was taken other than to note this.

- Electronic data deliverables (EDDs) for these SDGs were provided by the laboratory and data validator qualifiers were entered. In some cases, different chemical synonyms are used between the EDD and the hardcopy however associated Chemical Abstracts Service (CAS) numbers are provided in the EDD to confirm chemical identifications.

Compound Identification and Quantitation Limits

Results of the analyses were reported based on laboratory RDLs for all compounds. RDLs for selected compounds are elevated due to method-required dilutions. No action is taken other than to note this.

Gasoline and gasoline range organics are analyzed for via Volatile Organic Compounds (GC) by Washington State Method NWTPHGx (using a gas chromatograph/flame ionization detector (GC/FID)) and Pace reported gasoline range organic-NWTPH results. Several chlorinated VOC compounds (including cis-1,2-dichloroethene, trans-1,2-dichloroethene, trichloroethene, tetrachloroethene, and vinyl chloride) elute within the gasoline range organics (GRO) retention time range as specified by Washington State (detections falling between the toluene and dodecane range).

Non-petroleum organics (e.g. chlorinated VOC compounds) eluting within the gasoline range contribute to the GRO result and GRO results are likely biased high (J+). PES requested that Pace evaluate chromatograms associated with positive sample detections to confirm the potential presence of gasoline. Per PES's request Pace reviewed selected sample chromatograms against the gasoline standard chromatograms and assigned "no discernible petroleum pattern to GRO results associated with this Task. PES assigned an additional project level qualifier (Z) to GRO results when the chromatogram for the sample does not match a discernible petroleum pattern. Associated chromatograms and qualified samples for this Task are as follows:

Sample ID	Laboratory Identification	Gasoline Range Organic Result (µg/L)	DV Qualifier	Data Validation Comments	Pace Chromatogram Review Notes
MW-925-012420	L1182886-04	423	Z, J+	Elevated chlorinated VOCs detected within the GRO elution range.	No discernible petroleum pattern
MW-146-012420	L1182886-06	1,140	Z, J+	Elevated chlorinated VOCs detected within the GRO elution range	No discernible petroleum pattern
MW-147-012420	L1182886-07	1,200	Z, J+	Elevated chlorinated VOCs detected within the GRO elution range	No discernible petroleum pattern
MW-177-012420	L1182898-02	89,400	Z, J+	Elevated chlorinated VOCs detected within the GRO elution range	No discernible petroleum pattern
MW-180-012420	L1182898-03	186	Z, J+	Elevated chlorinated VOCs detected within the GRO elution range	No discernible petroleum pattern
MW-182-012720	L1183293-01	2,420	Z, J+	Elevated chlorinated VOCs detected within the GRO elution range	No discernible petroleum pattern
MW-181-012720	L1183293-05	9,090	Z, J+	Elevated chlorinated VOCs detected within the GRO elution range	No discernible petroleum pattern

Project level qualifiers have been included to the PES's project database (Epiphany) as (ZJ+). Washington State EIM valid values were reviewed. In this case no Washington State EIM valid value descriptor is ideal and the default estimated value (J) has been selected as the best match to qualify GRO (ZJ+) data.

Data Assessment

The laboratory data reported for this project were reviewed based on the criteria outlined in:

- USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (USEPA, 2017); and
- USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Superfund Methods Data Review (USEPA, 2017).

Data qualifiers are assigned and laboratory report pages with qualifiers are attached. All data, including qualified data, are judged to be acceptable for their intended use.

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

Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	319000		2710	20000	1	01/22/2020 19:05	WG1415297

Sample Narrative:

L1181608-01 WG1415297: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	25300		51.9	1000	1	01/22/2020 14:50	WG1415072
Nitrate	25.5	U ~~B J~~	22.7	100	1	01/22/2020 14:50	WG1415072
Sulfate	19800		77.4	5000	1	01/22/2020 14:50	WG1415072

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	1190	~~B~~	102	1000	1	01/24/2020 21:37	WG1416628

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	4540		15.0	100	1	01/22/2020 16:05	WG1415176
Manganese	326		0.250	5.00	1	01/22/2020 16:05	WG1415176

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	U		31.6	100	1	01/25/2020 01:44	WG1416679
(S) a,a,a-Trifluorotoluene(FID)	*111*			*78.0-120*		*01/25/2020 01:44*	WG1416679

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	187		0.287	0.678	1	01/23/2020 15:12	WG1415760
Ethane	2.06		0.296	1.29	1	01/23/2020 15:12	WG1415760
Ethene	9.78		0.422	1.27	1	01/23/2020 15:12	WG1415760

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U		1.05	25.0	1	01/22/2020 23:19	WG1415610
Acrylonitrile	U		0.873	5.00	1	01/22/2020 23:19	WG1415610
Benzene	U		0.0896	0.500	1	01/22/2020 23:19	WG1415610
Bromobenzene	U		0.133	0.500	1	01/22/2020 23:19	WG1415610
Bromodichloromethane	U		0.0800	0.500	1	01/22/2020 23:19	WG1415610
Bromochloromethane	U		0.145	0.500	1	01/22/2020 23:19	WG1415610
Bromoform	U		0.186	0.500	1	01/22/2020 23:19	WG1415610
Bromomethane	U		0.157	2.50	1	01/22/2020 23:19	WG1415610
n-Butylbenzene	U		0.143	0.500	1	01/22/2020 23:19	WG1415610
sec-Butylbenzene	U		0.134	0.500	1	01/22/2020 23:19	WG1415610
tert-Butylbenzene	U		0.183	0.500	1	01/22/2020 23:19	WG1415610
Carbon disulfide	U		0.101	0.500	1	01/22/2020 23:19	WG1415610
Carbon tetrachloride	U		0.159	0.500	1	01/22/2020 23:19	WG1415610

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

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Chlorobenzene	U		0.140	0.500	1	01/22/2020 23:19	WG1415610
Chlorodibromomethane	U		0.128	0.500	1	01/22/2020 23:19	WG1415610
Chloroethane	U	UJ J0	0.141	2.50	1	01/22/2020 23:19	WG1415610
Chloroform	U		0.0860	0.500	1	01/22/2020 23:19	WG1415610
Chloromethane	U	~~J4~~	0.153	1.25	1	01/22/2020 23:19	WG1415610
2-Chlorotoluene	U		0.111	0.500	1	01/22/2020 23:19	WG1415610
4-Chlorotoluene	U		0.0972	0.500	1	01/22/2020 23:19	WG1415610
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	01/22/2020 23:19	WG1415610
1,2-Dibromoethane	U		0.193	0.500	1	01/22/2020 23:19	WG1415610
Dibromomethane	U		0.117	0.500	1	01/22/2020 23:19	WG1415610
1,2-Dichlorobenzene	U		0.101	0.500	1	01/22/2020 23:19	WG1415610
1,3-Dichlorobenzene	U		0.130	0.500	1	01/22/2020 23:19	WG1415610
1,4-Dichlorobenzene	U		0.121	0.500	1	01/22/2020 23:19	WG1415610
Dichlorodifluoromethane	U		0.127	2.50	1	01/22/2020 23:19	WG1415610
1,1-Dichloroethane	U		0.114	0.500	1	01/22/2020 23:19	WG1415610
1,2-Dichloroethane	U		0.108	0.500	1	01/22/2020 23:19	WG1415610
1,1-Dichloroethene	U		0.188	0.500	1	01/22/2020 23:19	WG1415610
cis-1,2-Dichloroethene	U		0.0933	0.500	1	01/22/2020 23:19	WG1415610
trans-1,2-Dichloroethene	U		0.152	0.500	1	01/22/2020 23:19	WG1415610
1,2-Dichloropropane	U		0.190	0.500	1	01/22/2020 23:19	WG1415610
1,1-Dichloropropene	U		0.128	0.500	1	01/22/2020 23:19	WG1415610
1,3-Dichloropropane	U		0.147	1.00	1	01/22/2020 23:19	WG1415610
cis-1,3-Dichloropropene	U		0.0976	0.500	1	01/22/2020 23:19	WG1415610
trans-1,3-Dichloropropene	U		0.222	0.500	1	01/22/2020 23:19	WG1415610
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	01/22/2020 23:19	WG1415610
2,2-Dichloropropane	U	~~J4~~	0.0929	0.500	1	01/22/2020 23:19	WG1415610
Di-isopropyl ether	U		0.0924	0.500	1	01/22/2020 23:19	WG1415610
Ethylbenzene	U		0.158	0.500	1	01/22/2020 23:19	WG1415610
Hexachloro-1,3-butadiene	U		0.157	1.00	1	01/22/2020 23:19	WG1415610
2-Hexanone	U		0.757	5.00	1	01/22/2020 23:19	WG1415610
n-Hexane	U		0.305	5.00	1	01/22/2020 23:19	WG1415610
Iodomethane	U		0.377	10.0	1	01/22/2020 23:19	WG1415610
Isopropylbenzene	U		0.126	0.500	1	01/22/2020 23:19	WG1415610
p-Isopropyltoluene	U		0.138	0.500	1	01/22/2020 23:19	WG1415610
2-Butanone (MEK)	U		1.28	5.00	1	01/22/2020 23:19	WG1415610
Methylene Chloride	U		1.07	2.50	1	01/22/2020 23:19	WG1415610
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	01/22/2020 23:19	WG1415610
Methyl tert-butyl ether	U		0.102	0.500	1	01/22/2020 23:19	WG1415610
Naphthalene	0.269	J	0.174	2.50	1	01/28/2020 04:10	WG1417877
n-Propylbenzene	U		0.162	0.500	1	01/22/2020 23:19	WG1415610
Styrene	U		0.117	0.500	1	01/22/2020 23:19	WG1415610
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	01/22/2020 23:19	WG1415610
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	01/22/2020 23:19	WG1415610
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	01/22/2020 23:19	WG1415610
Tetrachloroethene	U		0.199	0.500	1	01/22/2020 23:19	WG1415610
Toluene	U		0.412	0.500	1	01/22/2020 23:19	WG1415610
1,2,3-Trichlorobenzene	U		0.164	0.500	1	01/22/2020 23:19	WG1415610
1,2,4-Trichlorobenzene	U		0.355	0.500	1	01/22/2020 23:19	WG1415610
1,1,1-Trichloroethane	U		0.0940	0.500	1	01/22/2020 23:19	WG1415610
1,1,2-Trichloroethane	U		0.186	0.500	1	01/22/2020 23:19	WG1415610
Trichloroethene	U		0.153	0.500	1	01/22/2020 23:19	WG1415610
Trichlorofluoromethane	U		0.130	2.50	1	01/22/2020 23:19	WG1415610
1,2,3-Trichloropropane	U		0.247	2.50	1	01/22/2020 23:19	WG1415610
1,2,4-Trimethylbenzene	U		0.123	0.500	1	01/22/2020 23:19	WG1415610
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	01/22/2020 23:19	WG1415610
1,3,5-Trimethylbenzene	U		0.124	0.500	1	01/22/2020 23:19	WG1415610

JC 2/14/2020

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Vinyl acetate	U		0.645	5.00	1	01/22/2020 23:19	WG1415610
Vinyl chloride	0.195	J	0.118	0.500	1	01/22/2020 23:19	WG1415610
Xylenes, Total	U		0.316	1.50	1	01/22/2020 23:19	WG1415610
(S) Toluene-d8	*103*			*80.0-120*		*01/22/2020 23:19*	WG1415610
(S) Toluene-d8	*103*			*80.0-120*		*01/28/2020 04:10*	WG1417877
(S) 4-Bromofluorobenzene	*104*			*77.0-126*		*01/22/2020 23:19*	WG1415610
(S) 4-Bromofluorobenzene	*111*			*77.0-126*		*01/28/2020 04:10*	WG1417877
(S) 1,2-Dichloroethane-d4	*122*			*70.0-130*		*01/22/2020 23:19*	WG1415610
(S) 1,2-Dichloroethane-d4	*92.3*			*70.0-130*		*01/28/2020 04:10*	WG1417877

JC 2/14/2020

Wet Chemistry by Method 2320 B-2011

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Alkalinity	166000		2710	20000	1	01/22/2020 20:08	WG1415297

Sample Narrative:

L1181608-03 WG1415297: Endpoint pH 4.5

Wet Chemistry by Method 9056A

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Chloride	10700		51.9	1000	1	01/22/2020 15:16	WG1415072
Nitrate	24.8 U	~~B J~~	22.7	100	1	01/22/2020 15:16	WG1415072
Sulfate	8490		77.4	5000	1	01/22/2020 15:16	WG1415072

Wet Chemistry by Method 9060A

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
TOC (Total Organic Carbon)	2720	~~B~~	102	1000	1	01/24/2020 22:13	WG1416628

Metals (ICPMS) by Method 6020B

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Iron	799		15.0	100	1	01/22/2020 16:11	WG1415176
Manganese	317		0.250	5.00	1	01/22/2020 16:11	WG1415176

Volatile Organic Compounds (GC) by Method NWTPHGX

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Gasoline Range Organics-NWTPH	U		31.6	100	1	01/25/2020 02:32	WG1416679
(S) a,a,a-Trifluorotoluene(FID)	*111*			*78.0-120*		*01/25/2020 02:32*	WG1416679

Volatile Organic Compounds (GC) by Method RSK175

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Methane	8.66		0.287	0.678	1	01/23/2020 15:23	WG1415760
Ethane	U		0.296	1.29	1	01/23/2020 15:23	WG1415760
Ethene	U		0.422	1.27	1	01/23/2020 15:23	WG1415760

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

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Acetone	U		1.05	25.0	1	01/23/2020 00:00	WG1415610
Acrylonitrile	U		0.873	5.00	1	01/23/2020 00:00	WG1415610
Benzene	U		0.0896	0.500	1	01/23/2020 00:00	WG1415610
Bromobenzene	U		0.133	0.500	1	01/23/2020 00:00	WG1415610
Bromodichloromethane	U		0.0800	0.500	1	01/23/2020 00:00	WG1415610
Bromochloromethane	U		0.145	0.500	1	01/23/2020 00:00	WG1415610
Bromoform	U		0.186	0.500	1	01/23/2020 00:00	WG1415610
Bromomethane	U		0.157	2.50	1	01/23/2020 00:00	WG1415610
n-Butylbenzene	U		0.143	0.500	1	01/23/2020 00:00	WG1415610
sec-Butylbenzene	U		0.134	0.500	1	01/23/2020 00:00	WG1415610
tert-Butylbenzene	U		0.183	0.500	1	01/23/2020 00:00	WG1415610
Carbon disulfide	U		0.101	0.500	1	01/23/2020 00:00	WG1415610
Carbon tetrachloride	U		0.159	0.500	1	01/23/2020 00:00	WG1415610

JC 2/14/2020

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

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

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Chlorobenzene	U		0.140	0.500	1	01/23/2020 00:00	WG1415610
Chlorodibromomethane	U		0.128	0.500	1	01/23/2020 00:00	WG1415610
Chloroethane	U UJ	J0	0.141	2.50	1	01/23/2020 00:00	WG1415610
Chloroform	U		0.0860	0.500	1	01/23/2020 00:00	WG1415610
Chloromethane	U	~~J4~~	0.153	1.25	1	01/23/2020 00:00	WG1415610
2-Chlorotoluene	U		0.111	0.500	1	01/23/2020 00:00	WG1415610
4-Chlorotoluene	U		0.0972	0.500	1	01/23/2020 00:00	WG1415610
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	01/23/2020 00:00	WG1415610
1,2-Dibromoethane	U		0.193	0.500	1	01/23/2020 00:00	WG1415610
Dibromomethane	U		0.117	0.500	1	01/23/2020 00:00	WG1415610
1,2-Dichlorobenzene	U		0.101	0.500	1	01/23/2020 00:00	WG1415610
1,3-Dichlorobenzene	U		0.130	0.500	1	01/23/2020 00:00	WG1415610
1,4-Dichlorobenzene	U		0.121	0.500	1	01/23/2020 00:00	WG1415610
Dichlorodifluoromethane	U		0.127	2.50	1	01/23/2020 00:00	WG1415610
1,1-Dichloroethane	U		0.114	0.500	1	01/23/2020 00:00	WG1415610
1,2-Dichloroethane	U		0.108	0.500	1	01/23/2020 00:00	WG1415610
1,1-Dichloroethene	U		0.188	0.500	1	01/23/2020 00:00	WG1415610
cis-1,2-Dichloroethene	U		0.0933	0.500	1	01/23/2020 00:00	WG1415610
trans-1,2-Dichloroethene	U		0.152	0.500	1	01/23/2020 00:00	WG1415610
1,2-Dichloropropane	U		0.190	0.500	1	01/23/2020 00:00	WG1415610
1,1-Dichloropropene	U		0.128	0.500	1	01/23/2020 00:00	WG1415610
1,3-Dichloropropane	U		0.147	1.00	1	01/23/2020 00:00	WG1415610
cis-1,3-Dichloropropene	U		0.0976	0.500	1	01/23/2020 00:00	WG1415610
trans-1,3-Dichloropropene	U		0.222	0.500	1	01/23/2020 00:00	WG1415610
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	01/23/2020 00:00	WG1415610
2,2-Dichloropropane	U	~~J4~~	0.0929	0.500	1	01/23/2020 00:00	WG1415610
Di-isopropyl ether	U		0.0924	0.500	1	01/23/2020 00:00	WG1415610
Ethylbenzene	U		0.158	0.500	1	01/23/2020 00:00	WG1415610
Hexachloro-1,3-butadiene	U		0.157	1.00	1	01/23/2020 00:00	WG1415610
2-Hexanone	U		0.757	5.00	1	01/23/2020 00:00	WG1415610
n-Hexane	U		0.305	5.00	1	01/23/2020 00:00	WG1415610
Iodomethane	U		0.377	10.0	1	01/23/2020 00:00	WG1415610
Isopropylbenzene	U		0.126	0.500	1	01/23/2020 00:00	WG1415610
p-Isopropyltoluene	U		0.138	0.500	1	01/23/2020 00:00	WG1415610
2-Butanone (MEK)	U		1.28	5.00	1	01/23/2020 00:00	WG1415610
Methylene Chloride	U		1.07	2.50	1	01/23/2020 00:00	WG1415610
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	01/23/2020 00:00	WG1415610
Methyl tert-butyl ether	U		0.102	0.500	1	01/23/2020 00:00	WG1415610
Naphthalene	U		0.174	2.50	1	01/23/2020 00:00	WG1415610
n-Propylbenzene	U		0.162	0.500	1	01/23/2020 00:00	WG1415610
Styrene	U		0.117	0.500	1	01/23/2020 00:00	WG1415610
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	01/23/2020 00:00	WG1415610
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	01/23/2020 00:00	WG1415610
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	01/23/2020 00:00	WG1415610
Tetrachloroethene	U		0.199	0.500	1	01/23/2020 00:00	WG1415610
Toluene	U		0.412	0.500	1	01/23/2020 00:00	WG1415610
1,2,3-Trichlorobenzene	U		0.164	0.500	1	01/23/2020 00:00	WG1415610
1,2,4-Trichlorobenzene	U		0.355	0.500	1	01/23/2020 00:00	WG1415610
1,1,1-Trichloroethane	U		0.0940	0.500	1	01/23/2020 00:00	WG1415610
1,1,2-Trichloroethane	U		0.186	0.500	1	01/23/2020 00:00	WG1415610
Trichloroethene	U		0.153	0.500	1	01/23/2020 00:00	WG1415610
Trichlorofluoromethane	U		0.130	2.50	1	01/23/2020 00:00	WG1415610
1,2,3-Trichloropropane	U		0.247	2.50	1	01/23/2020 00:00	WG1415610
1,2,4-Trimethylbenzene	U		0.123	0.500	1	01/23/2020 00:00	WG1415610
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	01/23/2020 00:00	WG1415610
1,3,5-Trimethylbenzene	U		0.124	0.500	1	01/23/2020 00:00	WG1415610

JC 2/14/2020

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Vinyl acetate	U		0.645	5.00	1	01/23/2020 00:00	WG1415610
Vinyl chloride	U		0.118	0.500	1	01/23/2020 00:00	WG1415610
Xylenes, Total	U		0.316	1.50	1	01/23/2020 00:00	WG1415610
(S) Toluene-d8	*106*			*80.0-120*		*01/23/2020 00:00*	WG1415610
(S) 4-Bromofluorobenzene	*106*			*77.0-126*		*01/23/2020 00:00*	WG1415610
(S) 1,2-Dichloroethane-d4	*123*			*70.0-130*		*01/23/2020 00:00*	WG1415610

JC 2/14/2020

MW-144R-012120
Collected date/time: 01/21/20 12:35

SAMPLE RESULTS - 04
L1181608

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

Wet Chemistry by Method 2320 B-2011

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Alkalinity	573000		2710	20000	1	01/22/2020 20:17	WG1415297

Sample Narrative:

L1181608-04 WG1415297: Endpoint pH 4.5

Wet Chemistry by Method 9056A

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Chloride	93400		51.9	1000	1	01/22/2020 15:29	WG1415072
Nitrate	23.9	U ~~B J~~	22.7	100	1	01/22/2020 15:29	WG1415072
Sulfate	U		77.4	5000	1	01/22/2020 15:29	WG1415072

Wet Chemistry by Method 9060A

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
TOC (Total Organic Carbon)	47700		102	1000	1	01/24/2020 22:30	WG1416628

Metals (ICPMS) by Method 6020B

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Iron	5060		15.0	100	1	01/22/2020 16:15	WG1415176
Manganese	1990		0.250	5.00	1	01/22/2020 16:15	WG1415176

Volatile Organic Compounds (GC) by Method NWTPHGX

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Gasoline Range Organics-NWTPH	60.7	J	31.6	100	1	01/26/2020 16:52	WG1417147
(S) a,a,a-Trifluorotoluene(FID)	*99.2*			*78.0-120*		*01/26/2020 16:52*	WG1417147

Volatile Organic Compounds (GC) by Method RSK175

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Methane	5560		0.287	0.678	1	01/23/2020 15:25	WG1415760
Ethane	9.61		0.296	1.29	1	01/23/2020 15:25	WG1415760
Ethene	276		0.422	1.27	1	01/23/2020 15:25	WG1415760

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

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Acetone	U		10.5	250	10	01/23/2020 00:21	WG1415610
Acrylonitrile	U		8.73	50.0	10	01/23/2020 00:21	WG1415610
Benzene	U		0.896	5.00	10	01/23/2020 00:21	WG1415610
Bromobenzene	U		1.33	5.00	10	01/23/2020 00:21	WG1415610
Bromodichloromethane	U		0.800	5.00	10	01/23/2020 00:21	WG1415610
Bromochloromethane	U		1.45	5.00	10	01/23/2020 00:21	WG1415610
Bromoform	U		1.86	5.00	10	01/23/2020 00:21	WG1415610
Bromomethane	U		1.57	25.0	10	01/23/2020 00:21	WG1415610
n-Butylbenzene	U		1.43	5.00	10	01/23/2020 00:21	WG1415610
sec-Butylbenzene	U		1.34	5.00	10	01/23/2020 00:21	WG1415610
tert-Butylbenzene	U		1.83	5.00	10	01/23/2020 00:21	WG1415610
Carbon disulfide	U		1.01	5.00	10	01/23/2020 00:21	WG1415610
Carbon tetrachloride	U		1.59	5.00	10	01/23/2020 00:21	WG1415610

JC 2/14/2020

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

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chlorobenzene	U		1.40	5.00	10	01/23/2020 00:21	WG1415610
Chlorodibromomethane	U		1.28	5.00	10	01/23/2020 00:21	WG1415610
Chloroethane	U	UJ J0	1.41	25.0	10	01/23/2020 00:21	WG1415610
Chloroform	U		0.860	5.00	10	01/23/2020 00:21	WG1415610
Chloromethane	U	~~J4~~	1.53	12.5	10	01/23/2020 00:21	WG1415610
2-Chlorotoluene	U		1.11	5.00	10	01/23/2020 00:21	WG1415610
4-Chlorotoluene	U		0.972	5.00	10	01/23/2020 00:21	WG1415610
1,2-Dibromo-3-Chloropropane	U		3.25	25.0	10	01/23/2020 00:21	WG1415610
1,2-Dibromoethane	U		1.93	5.00	10	01/23/2020 00:21	WG1415610
Dibromomethane	U		1.17	5.00	10	01/23/2020 00:21	WG1415610
1,2-Dichlorobenzene	U		1.01	5.00	10	01/23/2020 00:21	WG1415610
1,3-Dichlorobenzene	U		1.30	5.00	10	01/23/2020 00:21	WG1415610
1,4-Dichlorobenzene	U		1.21	5.00	10	01/23/2020 00:21	WG1415610
Dichlorodifluoromethane	U		1.27	25.0	10	01/23/2020 00:21	WG1415610
1,1-Dichloroethane	U		1.14	5.00	10	01/23/2020 00:21	WG1415610
1,2-Dichloroethane	U		1.08	5.00	10	01/23/2020 00:21	WG1415610
1,1-Dichloroethene	U		1.88	5.00	10	01/23/2020 00:21	WG1415610
cis-1,2-Dichloroethene	200		0.933	5.00	10	01/23/2020 00:21	WG1415610
trans-1,2-Dichloroethene	U		1.52	5.00	10	01/23/2020 00:21	WG1415610
1,2-Dichloropropane	U		1.90	5.00	10	01/23/2020 00:21	WG1415610
1,1-Dichloropropene	U		1.28	5.00	10	01/23/2020 00:21	WG1415610
1,3-Dichloropropane	U		1.47	10.0	10	01/23/2020 00:21	WG1415610
cis-1,3-Dichloropropene	U		0.976	5.00	10	01/23/2020 00:21	WG1415610
trans-1,3-Dichloropropene	U		2.22	5.00	10	01/23/2020 00:21	WG1415610
trans-1,4-Dichloro-2-butene	U		2.57	50.0	10	01/23/2020 00:21	WG1415610
2,2-Dichloropropane	U	~~J4~~	0.929	5.00	10	01/23/2020 00:21	WG1415610
Di-isopropyl ether	U		0.924	5.00	10	01/23/2020 00:21	WG1415610
Ethylbenzene	U		1.58	5.00	10	01/23/2020 00:21	WG1415610
Hexachloro-1,3-butadiene	U		1.57	10.0	10	01/23/2020 00:21	WG1415610
2-Hexanone	U		7.57	50.0	10	01/23/2020 00:21	WG1415610
n-Hexane	U		3.05	50.0	10	01/23/2020 00:21	WG1415610
Iodomethane	U		3.77	100	10	01/23/2020 00:21	WG1415610
Isopropylbenzene	U		1.26	5.00	10	01/23/2020 00:21	WG1415610
p-Isopropyltoluene	U		1.38	5.00	10	01/23/2020 00:21	WG1415610
2-Butanone (MEK)	U		12.8	50.0	10	01/23/2020 00:21	WG1415610
Methylene Chloride	U		10.7	25.0	10	01/23/2020 00:21	WG1415610
4-Methyl-2-pentanone (MIBK)	U		8.23	50.0	10	01/23/2020 00:21	WG1415610
Methyl tert-butyl ether	U		1.02	5.00	10	01/23/2020 00:21	WG1415610
Naphthalene	U		1.74	25.0	10	01/23/2020 00:21	WG1415610
n-Propylbenzene	U		1.62	5.00	10	01/23/2020 00:21	WG1415610
Styrene	U		1.17	5.00	10	01/23/2020 00:21	WG1415610
1,1,1,2-Tetrachloroethane	U		1.20	5.00	10	01/23/2020 00:21	WG1415610
1,1,2,2-Tetrachloroethane	U		1.30	5.00	10	01/23/2020 00:21	WG1415610
1,1,2-Trichlorotrifluoroethane	U		1.64	5.00	10	01/23/2020 00:21	WG1415610
Tetrachloroethene	U		1.99	5.00	10	01/23/2020 00:21	WG1415610
Toluene	U		4.12	5.00	10	01/23/2020 00:21	WG1415610
1,2,3-Trichlorobenzene	U		1.64	5.00	10	01/23/2020 00:21	WG1415610
1,2,4-Trichlorobenzene	U		3.55	5.00	10	01/23/2020 00:21	WG1415610
1,1,1-Trichloroethane	U		0.940	5.00	10	01/23/2020 00:21	WG1415610
1,1,2-Trichloroethane	U		1.86	5.00	10	01/23/2020 00:21	WG1415610
Trichloroethene	U		1.53	5.00	10	01/23/2020 00:21	WG1415610
Trichlorofluoromethane	U		1.30	25.0	10	01/23/2020 00:21	WG1415610
1,2,3-Trichloropropane	U		2.47	25.0	10	01/23/2020 00:21	WG1415610
1,2,4-Trimethylbenzene	U		1.23	5.00	10	01/23/2020 00:21	WG1415610
1,2,3-Trimethylbenzene	U		0.739	5.00	10	01/23/2020 00:21	WG1415610
1,3,5-Trimethylbenzene	U		1.24	5.00	10	01/23/2020 00:21	WG1415610

JC 2/14/2020

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Vinyl acetate	U		6.45	50.0	10	01/23/2020 00:21	WG1415610
Vinyl chloride	90.2		1.18	5.00	10	01/23/2020 00:21	WG1415610
Xylenes, Total	U		3.16	15.0	10	01/23/2020 00:21	WG1415610
(S) Toluene-d8	*104*			*80.0-120*		*01/23/2020 00:21*	WG1415610
(S) 4-Bromofluorobenzene	*105*			*77.0-126*		*01/23/2020 00:21*	WG1415610
(S) 1,2-Dichloroethane-d4	*125*			*70.0-130*		*01/23/2020 00:21*	WG1415610

JC 2/14/2020

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

Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	197000		2710	20000	1	01/22/2020 20:25	WG1415297

Sample Narrative:

L1181608-05 WG1415297: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	19100		51.9	1000	1	01/22/2020 15:54	WG1415072
Nitrate	3430		22.7	100	1	01/22/2020 15:54	WG1415072
Sulfate	88800		77.4	5000	1	01/22/2020 15:54	WG1415072

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	3700	~~B~~	102	1000	1	01/24/2020 22:45	WG1416628

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	62.4	U ~~J~~	15.0	100	1	01/22/2020 16:18	WG1415176
Manganese	147		0.250	5.00	1	01/22/2020 16:18	WG1415176

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	U		31.6	100	1	01/26/2020 18:19	WG1417147
(S) a,a,a-Trifluorotoluene(FID)	*99.0*			*78.0-120*		*01/26/2020 18:19*	WG1417147

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	128		0.287	0.678	1	01/23/2020 15:32	WG1415760
Ethane	U		0.296	1.29	1	01/23/2020 15:32	WG1415760
Ethene	5.03		0.422	1.27	1	01/23/2020 15:32	WG1415760

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U		1.05	25.0	1	01/23/2020 00:42	WG1415610
Acrylonitrile	U		0.873	5.00	1	01/23/2020 00:42	WG1415610
Benzene	U		0.0896	0.500	1	01/23/2020 00:42	WG1415610
Bromobenzene	U		0.133	0.500	1	01/23/2020 00:42	WG1415610
Bromodichloromethane	U		0.0800	0.500	1	01/23/2020 00:42	WG1415610
Bromochloromethane	U		0.145	0.500	1	01/23/2020 00:42	WG1415610
Bromoform	U		0.186	0.500	1	01/23/2020 00:42	WG1415610
Bromomethane	U		0.157	2.50	1	01/23/2020 00:42	WG1415610
n-Butylbenzene	U		0.143	0.500	1	01/23/2020 00:42	WG1415610
sec-Butylbenzene	U		0.134	0.500	1	01/23/2020 00:42	WG1415610
tert-Butylbenzene	U		0.183	0.500	1	01/23/2020 00:42	WG1415610
Carbon disulfide	U		0.101	0.500	1	01/23/2020 00:42	WG1415610
Carbon tetrachloride	U		0.159	0.500	1	01/23/2020 00:42	WG1415610

JC 2/14/2020

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

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chlorobenzene	U		0.140	0.500	1	01/23/2020 00:42	WG1415610
Chlorodibromomethane	U		0.128	0.500	1	01/23/2020 00:42	WG1415610
Chloroethane	U UJ	J0	0.141	2.50	1	01/23/2020 00:42	WG1415610
Chloroform	U		0.0860	0.500	1	01/23/2020 00:42	WG1415610
Chloromethane	U	~~J4~~	0.153	1.25	1	01/23/2020 00:42	WG1415610
2-Chlorotoluene	U		0.111	0.500	1	01/23/2020 00:42	WG1415610
4-Chlorotoluene	U		0.0972	0.500	1	01/23/2020 00:42	WG1415610
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	01/23/2020 00:42	WG1415610
1,2-Dibromoethane	U		0.193	0.500	1	01/23/2020 00:42	WG1415610
Dibromomethane	U		0.117	0.500	1	01/23/2020 00:42	WG1415610
1,2-Dichlorobenzene	U		0.101	0.500	1	01/23/2020 00:42	WG1415610
1,3-Dichlorobenzene	U		0.130	0.500	1	01/23/2020 00:42	WG1415610
1,4-Dichlorobenzene	U		0.121	0.500	1	01/23/2020 00:42	WG1415610
Dichlorodifluoromethane	U		0.127	2.50	1	01/23/2020 00:42	WG1415610
1,1-Dichloroethane	U		0.114	0.500	1	01/23/2020 00:42	WG1415610
1,2-Dichloroethane	U		0.108	0.500	1	01/23/2020 00:42	WG1415610
1,1-Dichloroethene	U		0.188	0.500	1	01/23/2020 00:42	WG1415610
cis-1,2-Dichloroethene	2.26		0.0933	0.500	1	01/23/2020 00:42	WG1415610
trans-1,2-Dichloroethene	U		0.152	0.500	1	01/23/2020 00:42	WG1415610
1,2-Dichloropropane	U		0.190	0.500	1	01/23/2020 00:42	WG1415610
1,1-Dichloropropene	U		0.128	0.500	1	01/23/2020 00:42	WG1415610
1,3-Dichloropropane	U		0.147	1.00	1	01/23/2020 00:42	WG1415610
cis-1,3-Dichloropropene	U		0.0976	0.500	1	01/23/2020 00:42	WG1415610
trans-1,3-Dichloropropene	U		0.222	0.500	1	01/23/2020 00:42	WG1415610
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	01/23/2020 00:42	WG1415610
2,2-Dichloropropane	U	~~J4~~	0.0929	0.500	1	01/23/2020 00:42	WG1415610
Di-isopropyl ether	U		0.0924	0.500	1	01/23/2020 00:42	WG1415610
Ethylbenzene	U		0.158	0.500	1	01/23/2020 00:42	WG1415610
Hexachloro-1,3-butadiene	U		0.157	1.00	1	01/23/2020 00:42	WG1415610
2-Hexanone	U		0.757	5.00	1	01/23/2020 00:42	WG1415610
n-Hexane	U		0.305	5.00	1	01/23/2020 00:42	WG1415610
Iodomethane	U		0.377	10.0	1	01/23/2020 00:42	WG1415610
Isopropylbenzene	U		0.126	0.500	1	01/23/2020 00:42	WG1415610
p-Isopropyltoluene	U		0.138	0.500	1	01/23/2020 00:42	WG1415610
2-Butanone (MEK)	U		1.28	5.00	1	01/23/2020 00:42	WG1415610
Methylene Chloride	U		1.07	2.50	1	01/23/2020 00:42	WG1415610
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	01/23/2020 00:42	WG1415610
Methyl tert-butyl ether	U		0.102	0.500	1	01/23/2020 00:42	WG1415610
Naphthalene	U		0.174	2.50	1	01/23/2020 00:42	WG1415610
n-Propylbenzene	U		0.162	0.500	1	01/23/2020 00:42	WG1415610
Styrene	U		0.117	0.500	1	01/23/2020 00:42	WG1415610
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	01/23/2020 00:42	WG1415610
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	01/23/2020 00:42	WG1415610
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	01/23/2020 00:42	WG1415610
Tetrachloroethene	11.6		0.199	0.500	1	01/23/2020 00:42	WG1415610
Toluene	U		0.412	0.500	1	01/23/2020 00:42	WG1415610
1,2,3-Trichlorobenzene	U		0.164	0.500	1	01/23/2020 00:42	WG1415610
1,2,4-Trichlorobenzene	U		0.355	0.500	1	01/23/2020 00:42	WG1415610
1,1,1-Trichloroethane	U		0.0940	0.500	1	01/23/2020 00:42	WG1415610
1,1,2-Trichloroethane	U		0.186	0.500	1	01/23/2020 00:42	WG1415610
Trichloroethene	0.999		0.153	0.500	1	01/23/2020 00:42	WG1415610
Trichlorofluoromethane	U		0.130	2.50	1	01/23/2020 00:42	WG1415610
1,2,3-Trichloropropane	U		0.247	2.50	1	01/23/2020 00:42	WG1415610
1,2,4-Trimethylbenzene	U		0.123	0.500	1	01/23/2020 00:42	WG1415610
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	01/23/2020 00:42	WG1415610
1,3,5-Trimethylbenzene	U		0.124	0.500	1	01/23/2020 00:42	WG1415610

JC 2/14/2020

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

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Vinyl acetate	U		0.645	5.00	1	01/23/2020 00:42	WG1415610
Vinyl chloride	U		0.118	0.500	1	01/23/2020 00:42	WG1415610
Xylenes, Total	U		0.316	1.50	1	01/23/2020 00:42	WG1415610
(S) Toluene-d8	*105*			*80.0-120*		*01/23/2020 00:42*	WG1415610
(S) 4-Bromofluorobenzene	*106*			*77.0-126*		*01/23/2020 00:42*	WG1415610
(S) 1,2-Dichloroethane-d4	*122*			*70.0-130*		*01/23/2020 00:42*	WG1415610

JC 2/14/2020

Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	233000		2710	20000	1	01/22/2020 20:33	WG1415297

Sample Narrative:

L1181608-06 WG1415297: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	20100		51.9	1000	1	01/22/2020 16:07	WG1415072
Nitrate	24.9	U ~~B J~~	22.7	100	1	01/22/2020 16:07	WG1415072
Sulfate	3170	J	77.4	5000	1	01/22/2020 16:07	WG1415072

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	5320		102	1000	1	01/24/2020 23:34	WG1416628

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	1320		15.0	100	1	01/22/2020 16:21	WG1415176
Manganese	305		0.250	5.00	1	01/22/2020 16:21	WG1415176

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	U		31.6	100	1	01/26/2020 18:43	WG1417147
(S) a,a,a-Trifluorotoluene(FID)	*99.2*			*78.0-120*		*01/26/2020 18:43*	WG1417147

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	449		0.287	0.678	1	01/23/2020 15:37	WG1415760
Ethane	1.72		0.296	1.29	1	01/23/2020 15:37	WG1415760
Ethene	U		0.422	1.27	1	01/23/2020 15:37	WG1415760

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	1.41	U ~~J~~	1.05	25.0	1	01/23/2020 01:02	WG1415610
Acrylonitrile	U		0.873	5.00	1	01/23/2020 01:02	WG1415610
Benzene	U		0.0896	0.500	1	01/23/2020 01:02	WG1415610
Bromobenzene	U		0.133	0.500	1	01/23/2020 01:02	WG1415610
Bromodichloromethane	U		0.0800	0.500	1	01/23/2020 01:02	WG1415610
Bromochloromethane	U		0.145	0.500	1	01/23/2020 01:02	WG1415610
Bromoform	U		0.186	0.500	1	01/23/2020 01:02	WG1415610
Bromomethane	U		0.157	2.50	1	01/23/2020 01:02	WG1415610
n-Butylbenzene	U		0.143	0.500	1	01/23/2020 01:02	WG1415610
sec-Butylbenzene	U		0.134	0.500	1	01/23/2020 01:02	WG1415610
tert-Butylbenzene	U		0.183	0.500	1	01/23/2020 01:02	WG1415610
Carbon disulfide	0.299	J	0.101	0.500	1	01/23/2020 01:02	WG1415610
Carbon tetrachloride	U		0.159	0.500	1	01/23/2020 01:02	WG1415610

JC 2/14/2020

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chlorobenzene	U		0.140	0.500	1	01/23/2020 01:02	WG1415610
Chlorodibromomethane	U		0.128	0.500	1	01/23/2020 01:02	WG1415610
Chloroethane	U UJ	J0	0.141	2.50	1	01/23/2020 01:02	WG1415610
Chloroform	U		0.0860	0.500	1	01/23/2020 01:02	WG1415610
Chloromethane	U	~~J4~~	0.153	1.25	1	01/23/2020 01:02	WG1415610
2-Chlorotoluene	U		0.111	0.500	1	01/23/2020 01:02	WG1415610
4-Chlorotoluene	U		0.0972	0.500	1	01/23/2020 01:02	WG1415610
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	01/23/2020 01:02	WG1415610
1,2-Dibromoethane	U		0.193	0.500	1	01/23/2020 01:02	WG1415610
Dibromomethane	U		0.117	0.500	1	01/23/2020 01:02	WG1415610
1,2-Dichlorobenzene	U		0.101	0.500	1	01/23/2020 01:02	WG1415610
1,3-Dichlorobenzene	U		0.130	0.500	1	01/23/2020 01:02	WG1415610
1,4-Dichlorobenzene	U		0.121	0.500	1	01/23/2020 01:02	WG1415610
Dichlorodifluoromethane	U		0.127	2.50	1	01/23/2020 01:02	WG1415610
1,1-Dichloroethane	U		0.114	0.500	1	01/23/2020 01:02	WG1415610
1,2-Dichloroethane	U		0.108	0.500	1	01/23/2020 01:02	WG1415610
1,1-Dichloroethene	U		0.188	0.500	1	01/23/2020 01:02	WG1415610
cis-1,2-Dichloroethene	0.230	J	0.0933	0.500	1	01/23/2020 01:02	WG1415610
trans-1,2-Dichloroethene	U		0.152	0.500	1	01/23/2020 01:02	WG1415610
1,2-Dichloropropane	U		0.190	0.500	1	01/23/2020 01:02	WG1415610
1,1-Dichloropropene	U		0.128	0.500	1	01/23/2020 01:02	WG1415610
1,3-Dichloropropane	U		0.147	1.00	1	01/23/2020 01:02	WG1415610
cis-1,3-Dichloropropene	U		0.0976	0.500	1	01/23/2020 01:02	WG1415610
trans-1,3-Dichloropropene	U		0.222	0.500	1	01/23/2020 01:02	WG1415610
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	01/23/2020 01:02	WG1415610
2,2-Dichloropropane	U	~~J4~~	0.0929	0.500	1	01/23/2020 01:02	WG1415610
Di-isopropyl ether	U		0.0924	0.500	1	01/23/2020 01:02	WG1415610
Ethylbenzene	U		0.158	0.500	1	01/23/2020 01:02	WG1415610
Hexachloro-1,3-butadiene	U		0.157	1.00	1	01/23/2020 01:02	WG1415610
2-Hexanone	U		0.757	5.00	1	01/23/2020 01:02	WG1415610
n-Hexane	U		0.305	5.00	1	01/23/2020 01:02	WG1415610
Iodomethane	U		0.377	10.0	1	01/23/2020 01:02	WG1415610
Isopropylbenzene	U		0.126	0.500	1	01/23/2020 01:02	WG1415610
p-Isopropyltoluene	U		0.138	0.500	1	01/23/2020 01:02	WG1415610
2-Butanone (MEK)	U		1.28	5.00	1	01/23/2020 01:02	WG1415610
Methylene Chloride	U		1.07	2.50	1	01/23/2020 01:02	WG1415610
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	01/23/2020 01:02	WG1415610
Methyl tert-butyl ether	U		0.102	0.500	1	01/23/2020 01:02	WG1415610
Naphthalene	U		0.174	2.50	1	01/23/2020 01:02	WG1415610
n-Propylbenzene	U		0.162	0.500	1	01/23/2020 01:02	WG1415610
Styrene	U		0.117	0.500	1	01/23/2020 01:02	WG1415610
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	01/23/2020 01:02	WG1415610
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	01/23/2020 01:02	WG1415610
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	01/23/2020 01:02	WG1415610
Tetrachloroethene	U		0.199	0.500	1	01/23/2020 01:02	WG1415610
Toluene	U		0.412	0.500	1	01/23/2020 01:02	WG1415610
1,2,3-Trichlorobenzene	U		0.164	0.500	1	01/23/2020 01:02	WG1415610
1,2,4-Trichlorobenzene	U		0.355	0.500	1	01/23/2020 01:02	WG1415610
1,1,1-Trichloroethane	U		0.0940	0.500	1	01/23/2020 01:02	WG1415610
1,1,2-Trichloroethane	U		0.186	0.500	1	01/23/2020 01:02	WG1415610
Trichloroethene	U		0.153	0.500	1	01/23/2020 01:02	WG1415610
Trichlorofluoromethane	U		0.130	2.50	1	01/23/2020 01:02	WG1415610
1,2,3-Trichloropropane	U		0.247	2.50	1	01/23/2020 01:02	WG1415610
1,2,4-Trimethylbenzene	U		0.123	0.500	1	01/23/2020 01:02	WG1415610
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	01/23/2020 01:02	WG1415610
1,3,5-Trimethylbenzene	U		0.124	0.500	1	01/23/2020 01:02	WG1415610

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Vinyl acetate	U		0.645	5.00	1	01/23/2020 01:02	WG1415610
Vinyl chloride	U		0.118	0.500	1	01/23/2020 01:02	WG1415610
Xylenes, Total	U		0.316	1.50	1	01/23/2020 01:02	WG1415610
(S) Toluene-d8	*105*			*80.0-120*		*01/23/2020 01:02*	WG1415610
(S) 4-Bromofluorobenzene	*108*			*77.0-126*		*01/23/2020 01:02*	WG1415610
(S) 1,2-Dichloroethane-d4	*122*			*70.0-130*		*01/23/2020 01:02*	WG1415610

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Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	107000		2710	20000	1	01/26/2020 18:45	WG1417009

Sample Narrative:

L1182886-01 WG1417009: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	29400		51.9	1000	1	01/25/2020 21:24	WG1417084
Nitrate	U		22.7	100	1	01/25/2020 21:24	WG1417084
Sulfate	18500		77.4	5000	1	01/25/2020 21:24	WG1417084

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	2740	~~B~~	102	1000	1	01/30/2020 04:40	WG1418866

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	10200		15.0	100	1	01/29/2020 09:46	WG1416986
Manganese	999		0.250	5.00	1	01/29/2020 09:46	WG1416986

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	U		31.6	100	1	01/26/2020 23:07	WG1417147
(S) a,a,a-Trifluorotoluene(FID)	*100*			*78.0-120*		*01/26/2020 23:07*	WG1417147

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	197		0.287	0.678	1	01/28/2020 15:29	WG1418072
Ethane	U		0.296	1.29	1	01/28/2020 15:29	WG1418072
Ethene	U		0.422	1.27	1	01/28/2020 15:29	WG1418072

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U UJ	J0	1.05	25.0	1	01/26/2020 15:04	WG1417330
Acrylonitrile	U		0.873	5.00	1	01/26/2020 15:04	WG1417330
Benzene	U		0.0896	0.500	1	01/26/2020 15:04	WG1417330
Bromobenzene	U		0.133	0.500	1	01/26/2020 15:04	WG1417330
Bromodichloromethane	U		0.0800	0.500	1	01/26/2020 15:04	WG1417330
Bromochloromethane	U		0.145	0.500	1	01/26/2020 15:04	WG1417330
Bromoform	U		0.186	0.500	1	01/26/2020 15:04	WG1417330
Bromomethane	U		0.157	2.50	1	01/26/2020 15:04	WG1417330
n-Butylbenzene	U		0.143	0.500	1	01/26/2020 15:04	WG1417330
sec-Butylbenzene	U		0.134	0.500	1	01/26/2020 15:04	WG1417330
tert-Butylbenzene	U		0.183	0.500	1	01/26/2020 15:04	WG1417330
Carbon disulfide	U		0.101	0.500	1	01/26/2020 15:04	WG1417330
Carbon tetrachloride	U		0.159	0.500	1	01/26/2020 15:04	WG1417330

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chlorobenzene	U		0.140	0.500	1	01/26/2020 15:04	WG1417330
Chlorodibromomethane	U		0.128	0.500	1	01/26/2020 15:04	WG1417330
Chloroethane	U		0.141	2.50	1	01/26/2020 15:04	WG1417330
Chloroform	U		0.0860	0.500	1	01/26/2020 15:04	WG1417330
Chloromethane	U		0.153	1.25	1	01/26/2020 15:04	WG1417330
2-Chlorotoluene	U		0.111	0.500	1	01/26/2020 15:04	WG1417330
4-Chlorotoluene	U		0.0972	0.500	1	01/26/2020 15:04	WG1417330
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	01/26/2020 15:04	WG1417330
1,2-Dibromoethane	U		0.193	0.500	1	01/26/2020 15:04	WG1417330
Dibromomethane	U		0.117	0.500	1	01/26/2020 15:04	WG1417330
1,2-Dichlorobenzene	U		0.101	0.500	1	01/26/2020 15:04	WG1417330
1,3-Dichlorobenzene	U		0.130	0.500	1	01/26/2020 15:04	WG1417330
1,4-Dichlorobenzene	U		0.121	0.500	1	01/26/2020 15:04	WG1417330
Dichlorodifluoromethane	U UJ	J0	0.127	2.50	1	01/26/2020 15:04	WG1417330
1,1-Dichloroethane	U		0.114	0.500	1	01/26/2020 15:04	WG1417330
1,2-Dichloroethane	U		0.108	0.500	1	01/26/2020 15:04	WG1417330
1,1-Dichloroethene	U		0.188	0.500	1	01/26/2020 15:04	WG1417330
cis-1,2-Dichloroethene	0.265	J	0.0933	0.500	1	01/26/2020 15:04	WG1417330
trans-1,2-Dichloroethene	U		0.152	0.500	1	01/26/2020 15:04	WG1417330
1,2-Dichloropropane	U		0.190	0.500	1	01/26/2020 15:04	WG1417330
1,1-Dichloropropene	U		0.128	0.500	1	01/26/2020 15:04	WG1417330
1,3-Dichloropropane	U		0.147	1.00	1	01/26/2020 15:04	WG1417330
cis-1,3-Dichloropropene	U		0.0976	0.500	1	01/26/2020 15:04	WG1417330
trans-1,3-Dichloropropene	U		0.222	0.500	1	01/26/2020 15:04	WG1417330
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	01/26/2020 15:04	WG1417330
2,2-Dichloropropane	U		0.0929	0.500	1	01/26/2020 15:04	WG1417330
Di-isopropyl ether	U		0.0924	0.500	1	01/26/2020 15:04	WG1417330
Ethylbenzene	U		0.158	0.500	1	01/26/2020 15:04	WG1417330
Hexachloro-1,3-butadiene	U		0.157	1.00	1	01/26/2020 15:04	WG1417330
2-Hexanone	U		0.757	5.00	1	01/26/2020 15:04	WG1417330
n-Hexane	U		0.305	5.00	1	01/26/2020 15:04	WG1417330
Iodomethane	U		0.377	10.0	1	01/26/2020 15:04	WG1417330
Isopropylbenzene	U		0.126	0.500	1	01/26/2020 15:04	WG1417330
p-Isopropyltoluene	U		0.138	0.500	1	01/26/2020 15:04	WG1417330
2-Butanone (MEK)	U		1.28	5.00	1	01/26/2020 15:04	WG1417330
Methylene Chloride	U		1.07	2.50	1	01/26/2020 15:04	WG1417330
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	01/26/2020 15:04	WG1417330
Methyl tert-butyl ether	U		0.102	0.500	1	01/26/2020 15:04	WG1417330
Naphthalene	U		0.174	2.50	1	01/26/2020 15:04	WG1417330
n-Propylbenzene	U		0.162	0.500	1	01/26/2020 15:04	WG1417330
Styrene	U		0.117	0.500	1	01/26/2020 15:04	WG1417330
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	01/26/2020 15:04	WG1417330
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	01/26/2020 15:04	WG1417330
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	01/26/2020 15:04	WG1417330
Tetrachloroethene	0.931		0.199	0.500	1	01/26/2020 15:04	WG1417330
Toluene	U		0.412	0.500	1	01/26/2020 15:04	WG1417330
1,2,3-Trichlorobenzene	U		0.164	0.500	1	01/26/2020 15:04	WG1417330
1,2,4-Trichlorobenzene	U		0.355	0.500	1	01/26/2020 15:04	WG1417330
1,1,1-Trichloroethane	U		0.0940	0.500	1	01/26/2020 15:04	WG1417330
1,1,2-Trichloroethane	U		0.186	0.500	1	01/26/2020 15:04	WG1417330
Trichloroethene	0.374	J	0.153	0.500	1	01/26/2020 15:04	WG1417330
Trichlorofluoromethane	U		0.130	2.50	1	01/26/2020 15:04	WG1417330
1,2,3-Trichloropropane	U		0.247	2.50	1	01/26/2020 15:04	WG1417330
1,2,4-Trimethylbenzene	U		0.123	0.500	1	01/26/2020 15:04	WG1417330
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	01/26/2020 15:04	WG1417330
1,3,5-Trimethylbenzene	U		0.124	0.500	1	01/26/2020 15:04	WG1417330

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

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Vinyl acetate	U UJ	J0	0.645	5.00	1	01/26/2020 15:04	WG1417330
Vinyl chloride	U		0.118	0.500	1	01/26/2020 15:04	WG1417330
Xylenes, Total	U		0.316	1.50	1	01/26/2020 15:04	WG1417330
(S) Toluene-d8	*99.8*			*80.0-120*		*01/26/2020 15:04*	WG1417330
(S) 4-Bromofluorobenzene	*101*			*77.0-126*		*01/26/2020 15:04*	WG1417330
(S) 1,2-Dichloroethane-d4	*108*			*70.0-130*		*01/26/2020 15:04*	WG1417330

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Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	162000		2710	20000	1	01/26/2020 18:52	WG1417009

Sample Narrative:

L1182886-02 WG1417009: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	14800		51.9	1000	1	01/25/2020 22:42	WG1417084
Nitrate	U		22.7	100	1	01/25/2020 22:42	WG1417084
Sulfate	29800		77.4	5000	1	01/25/2020 22:42	WG1417084

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	3540		102	1000	1	01/30/2020 06:17	WG1418866

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	1320		15.0	100	1	01/29/2020 11:06	WG1416986
Manganese	285		0.250	5.00	1	01/29/2020 11:06	WG1416986

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	U		31.6	100	1	01/26/2020 23:32	WG1417147
(S) a,a,a-Trifluorotoluene(FID)	*99.8*			*78.0-120*		*01/26/2020 23:32*	WG1417147

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	137		0.287	0.678	1	01/28/2020 15:33	WG1418072
Ethane	U		0.296	1.29	1	01/28/2020 15:33	WG1418072
Ethene	U		0.422	1.27	1	01/28/2020 15:33	WG1418072

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	2.64 U	~~J J0~~	1.05	25.0	1	01/26/2020 15:24	WG1417330
Acrylonitrile	U		0.873	5.00	1	01/26/2020 15:24	WG1417330
Benzene	U		0.0896	0.500	1	01/26/2020 15:24	WG1417330
Bromobenzene	U		0.133	0.500	1	01/26/2020 15:24	WG1417330
Bromodichloromethane	U		0.0800	0.500	1	01/26/2020 15:24	WG1417330
Bromochloromethane	U		0.145	0.500	1	01/26/2020 15:24	WG1417330
Bromoform	U		0.186	0.500	1	01/26/2020 15:24	WG1417330
Bromomethane	U		0.157	2.50	1	01/26/2020 15:24	WG1417330
n-Butylbenzene	U		0.143	0.500	1	01/26/2020 15:24	WG1417330
sec-Butylbenzene	U		0.134	0.500	1	01/26/2020 15:24	WG1417330
tert-Butylbenzene	U		0.183	0.500	1	01/26/2020 15:24	WG1417330
Carbon disulfide	0.941		0.101	0.500	1	01/26/2020 15:24	WG1417330
Carbon tetrachloride	U		0.159	0.500	1	01/26/2020 15:24	WG1417330

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chlorobenzene	U		0.140	0.500	1	01/26/2020 15:24	WG1417330
Chlorodibromomethane	U		0.128	0.500	1	01/26/2020 15:24	WG1417330
Chloroethane	U		0.141	2.50	1	01/26/2020 15:24	WG1417330
Chloroform	U		0.0860	0.500	1	01/26/2020 15:24	WG1417330
Chloromethane	U		0.153	1.25	1	01/26/2020 15:24	WG1417330
2-Chlorotoluene	U		0.111	0.500	1	01/26/2020 15:24	WG1417330
4-Chlorotoluene	U		0.0972	0.500	1	01/26/2020 15:24	WG1417330
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	01/26/2020 15:24	WG1417330
1,2-Dibromoethane	U		0.193	0.500	1	01/26/2020 15:24	WG1417330
Dibromomethane	U		0.117	0.500	1	01/26/2020 15:24	WG1417330
1,2-Dichlorobenzene	U		0.101	0.500	1	01/26/2020 15:24	WG1417330
1,3-Dichlorobenzene	U		0.130	0.500	1	01/26/2020 15:24	WG1417330
1,4-Dichlorobenzene	U		0.121	0.500	1	01/26/2020 15:24	WG1417330
Dichlorodifluoromethane	U UJ	J0	0.127	2.50	1	01/26/2020 15:24	WG1417330
1,1-Dichloroethane	U		0.114	0.500	1	01/26/2020 15:24	WG1417330
1,2-Dichloroethane	U		0.108	0.500	1	01/26/2020 15:24	WG1417330
1,1-Dichloroethene	U		0.188	0.500	1	01/26/2020 15:24	WG1417330
cis-1,2-Dichloroethene	U		0.0933	0.500	1	01/26/2020 15:24	WG1417330
trans-1,2-Dichloroethene	U		0.152	0.500	1	01/26/2020 15:24	WG1417330
1,2-Dichloropropane	U		0.190	0.500	1	01/26/2020 15:24	WG1417330
1,1-Dichloropropene	U		0.128	0.500	1	01/26/2020 15:24	WG1417330
1,3-Dichloropropane	U		0.147	1.00	1	01/26/2020 15:24	WG1417330
cis-1,3-Dichloropropene	U		0.0976	0.500	1	01/26/2020 15:24	WG1417330
trans-1,3-Dichloropropene	U		0.222	0.500	1	01/26/2020 15:24	WG1417330
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	01/26/2020 15:24	WG1417330
2,2-Dichloropropane	U		0.0929	0.500	1	01/26/2020 15:24	WG1417330
Di-isopropyl ether	U		0.0924	0.500	1	01/26/2020 15:24	WG1417330
Ethylbenzene	U		0.158	0.500	1	01/26/2020 15:24	WG1417330
Hexachloro-1,3-butadiene	U		0.157	1.00	1	01/26/2020 15:24	WG1417330
2-Hexanone	U		0.757	5.00	1	01/26/2020 15:24	WG1417330
n-Hexane	U		0.305	5.00	1	01/26/2020 15:24	WG1417330
Iodomethane	U		0.377	10.0	1	01/26/2020 15:24	WG1417330
Isopropylbenzene	U		0.126	0.500	1	01/26/2020 15:24	WG1417330
p-Isopropyltoluene	U		0.138	0.500	1	01/26/2020 15:24	WG1417330
2-Butanone (MEK)	U		1.28	5.00	1	01/26/2020 15:24	WG1417330
Methylene Chloride	U		1.07	2.50	1	01/26/2020 15:24	WG1417330
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	01/26/2020 15:24	WG1417330
Methyl tert-butyl ether	U		0.102	0.500	1	01/26/2020 15:24	WG1417330
Naphthalene	U		0.174	2.50	1	01/26/2020 15:24	WG1417330
n-Propylbenzene	U		0.162	0.500	1	01/26/2020 15:24	WG1417330
Styrene	U		0.117	0.500	1	01/26/2020 15:24	WG1417330
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	01/26/2020 15:24	WG1417330
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	01/26/2020 15:24	WG1417330
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	01/26/2020 15:24	WG1417330
Tetrachloroethene	0.313	J	0.199	0.500	1	01/26/2020 15:24	WG1417330
Toluene	U		0.412	0.500	1	01/26/2020 15:24	WG1417330
1,2,3-Trichlorobenzene	U		0.164	0.500	1	01/26/2020 15:24	WG1417330
1,2,4-Trichlorobenzene	U		0.355	0.500	1	01/26/2020 15:24	WG1417330
1,1,1-Trichloroethane	U		0.0940	0.500	1	01/26/2020 15:24	WG1417330
1,1,2-Trichloroethane	U		0.186	0.500	1	01/26/2020 15:24	WG1417330
Trichloroethene	0.153	J	0.153	0.500	1	01/26/2020 15:24	WG1417330
Trichlorofluoromethane	U		0.130	2.50	1	01/26/2020 15:24	WG1417330
1,2,3-Trichloropropane	U		0.247	2.50	1	01/26/2020 15:24	WG1417330
1,2,4-Trimethylbenzene	U		0.123	0.500	1	01/26/2020 15:24	WG1417330
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	01/26/2020 15:24	WG1417330
1,3,5-Trimethylbenzene	U		0.124	0.500	1	01/26/2020 15:24	WG1417330

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Vinyl acetate	U UJ	J0	0.645	5.00	1	01/26/2020 15:24	WG1417330
Vinyl chloride	U		0.118	0.500	1	01/26/2020 15:24	WG1417330
Xylenes, Total	U		0.316	1.50	1	01/26/2020 15:24	WG1417330
(S) Toluene-d8	*101*			*80.0-120*		*01/26/2020 15:24*	WG1417330
(S) 4-Bromofluorobenzene	*102*			*77.0-126*		*01/26/2020 15:24*	WG1417330
(S) 1,2-Dichloroethane-d4	*106*			*70.0-130*		*01/26/2020 15:24*	WG1417330

JC 2/14/2020

Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	331000		2710	20000	1	01/26/2020 19:01	WG1417009

Sample Narrative:

L1182886-03 WG1417009: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	20600		51.9	1000	1	01/25/2020 22:55	WG1417084
Nitrate	U		22.7	100	1	01/25/2020 22:55	WG1417084
Sulfate	22800		77.4	5000	1	01/25/2020 22:55	WG1417084

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	1570	~~B~~	102	1000	1	01/30/2020 06:30	WG1418866

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	1130		15.0	100	1	01/29/2020 11:10	WG1416986
Manganese	332		0.250	5.00	1	01/29/2020 11:10	WG1416986

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	U		31.6	100	1	01/26/2020 23:56	WG1417147
(S) a,a,a-Trifluorotoluene(FID)	*99.3*			*78.0-120*		*01/26/2020 23:56*	WG1417147

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	590		0.287	0.678	1	01/28/2020 15:35	WG1418072
Ethane	U		0.296	1.29	1	01/28/2020 15:35	WG1418072
Ethene	U		0.422	1.27	1	01/28/2020 15:35	WG1418072

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	1.21 U	~~J J0~~	1.05	25.0	1	01/26/2020 15:44	WG1417330
Acrylonitrile	U		0.873	5.00	1	01/26/2020 15:44	WG1417330
Benzene	U		0.0896	0.500	1	01/26/2020 15:44	WG1417330
Bromobenzene	U		0.133	0.500	1	01/26/2020 15:44	WG1417330
Bromodichloromethane	U		0.0800	0.500	1	01/26/2020 15:44	WG1417330
Bromochloromethane	U		0.145	0.500	1	01/26/2020 15:44	WG1417330
Bromoform	U		0.186	0.500	1	01/26/2020 15:44	WG1417330
Bromomethane	U		0.157	2.50	1	01/26/2020 15:44	WG1417330
n-Butylbenzene	U		0.143	0.500	1	01/26/2020 15:44	WG1417330
sec-Butylbenzene	U		0.134	0.500	1	01/26/2020 15:44	WG1417330
tert-Butylbenzene	U		0.183	0.500	1	01/26/2020 15:44	WG1417330
Carbon disulfide	0.718		0.101	0.500	1	01/26/2020 15:44	WG1417330
Carbon tetrachloride	U		0.159	0.500	1	01/26/2020 15:44	WG1417330

JC 2/14/2020

MW-302-012420

Collected date/time: 01/24/20 10:29

SAMPLE RESULTS - 03

L1182886

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

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chlorobenzene	U		0.140	0.500	1	01/26/2020 15:44	WG1417330
Chlorodibromomethane	U		0.128	0.500	1	01/26/2020 15:44	WG1417330
Chloroethane	U		0.141	2.50	1	01/26/2020 15:44	WG1417330
Chloroform	U		0.0860	0.500	1	01/26/2020 15:44	WG1417330
Chloromethane	U		0.153	1.25	1	01/26/2020 15:44	WG1417330
2-Chlorotoluene	U		0.111	0.500	1	01/26/2020 15:44	WG1417330
4-Chlorotoluene	U		0.0972	0.500	1	01/26/2020 15:44	WG1417330
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	01/26/2020 15:44	WG1417330
1,2-Dibromoethane	U		0.193	0.500	1	01/26/2020 15:44	WG1417330
Dibromomethane	U		0.117	0.500	1	01/26/2020 15:44	WG1417330
1,2-Dichlorobenzene	U		0.101	0.500	1	01/26/2020 15:44	WG1417330
1,3-Dichlorobenzene	U		0.130	0.500	1	01/26/2020 15:44	WG1417330
1,4-Dichlorobenzene	U		0.121	0.500	1	01/26/2020 15:44	WG1417330
Dichlorodifluoromethane	U UJ	J0	0.127	2.50	1	01/26/2020 15:44	WG1417330
1,1-Dichloroethane	U		0.114	0.500	1	01/26/2020 15:44	WG1417330
1,2-Dichloroethane	U		0.108	0.500	1	01/26/2020 15:44	WG1417330
1,1-Dichloroethene	U		0.188	0.500	1	01/26/2020 15:44	WG1417330
cis-1,2-Dichloroethene	U		0.0933	0.500	1	01/26/2020 15:44	WG1417330
trans-1,2-Dichloroethene	U		0.152	0.500	1	01/26/2020 15:44	WG1417330
1,2-Dichloropropane	U		0.190	0.500	1	01/26/2020 15:44	WG1417330
1,1-Dichloropropene	U		0.128	0.500	1	01/26/2020 15:44	WG1417330
1,3-Dichloropropane	U		0.147	1.00	1	01/26/2020 15:44	WG1417330
cis-1,3-Dichloropropene	U		0.0976	0.500	1	01/26/2020 15:44	WG1417330
trans-1,3-Dichloropropene	U		0.222	0.500	1	01/26/2020 15:44	WG1417330
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	01/26/2020 15:44	WG1417330
2,2-Dichloropropane	U		0.0929	0.500	1	01/26/2020 15:44	WG1417330
Di-isopropyl ether	U		0.0924	0.500	1	01/26/2020 15:44	WG1417330
Ethylbenzene	U		0.158	0.500	1	01/26/2020 15:44	WG1417330
Hexachloro-1,3-butadiene	U		0.157	1.00	1	01/26/2020 15:44	WG1417330
2-Hexanone	U		0.757	5.00	1	01/26/2020 15:44	WG1417330
n-Hexane	U		0.305	5.00	1	01/26/2020 15:44	WG1417330
Iodomethane	U		0.377	10.0	1	01/26/2020 15:44	WG1417330
Isopropylbenzene	U		0.126	0.500	1	01/26/2020 15:44	WG1417330
p-Isopropyltoluene	U		0.138	0.500	1	01/26/2020 15:44	WG1417330
2-Butanone (MEK)	U		1.28	5.00	1	01/26/2020 15:44	WG1417330
Methylene Chloride	U		1.07	2.50	1	01/26/2020 15:44	WG1417330
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	01/26/2020 15:44	WG1417330
Methyl tert-butyl ether	U		0.102	0.500	1	01/26/2020 15:44	WG1417330
Naphthalene	U		0.174	2.50	1	01/26/2020 15:44	WG1417330
n-Propylbenzene	U		0.162	0.500	1	01/26/2020 15:44	WG1417330
Styrene	U		0.117	0.500	1	01/26/2020 15:44	WG1417330
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	01/26/2020 15:44	WG1417330
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	01/26/2020 15:44	WG1417330
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	01/26/2020 15:44	WG1417330
Tetrachloroethene	0.353	J	0.199	0.500	1	01/26/2020 15:44	WG1417330
Toluene	U		0.412	0.500	1	01/26/2020 15:44	WG1417330
1,2,3-Trichlorobenzene	U		0.164	0.500	1	01/26/2020 15:44	WG1417330
1,2,4-Trichlorobenzene	U		0.355	0.500	1	01/26/2020 15:44	WG1417330
1,1,1-Trichloroethane	U		0.0940	0.500	1	01/26/2020 15:44	WG1417330
1,1,2-Trichloroethane	U		0.186	0.500	1	01/26/2020 15:44	WG1417330
Trichloroethene	0.164	J	0.153	0.500	1	01/26/2020 15:44	WG1417330
Trichlorofluoromethane	U		0.130	2.50	1	01/26/2020 15:44	WG1417330
1,2,3-Trichloropropane	U		0.247	2.50	1	01/26/2020 15:44	WG1417330
1,2,4-Trimethylbenzene	U		0.123	0.500	1	01/26/2020 15:44	WG1417330
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	01/26/2020 15:44	WG1417330
1,3,5-Trimethylbenzene	U		0.124	0.500	1	01/26/2020 15:44	WG1417330

JC 2/14/2020

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Vinyl acetate	U UJ	J0	0.645	5.00	1	01/26/2020 15:44	WG1417330
Vinyl chloride	U		0.118	0.500	1	01/26/2020 15:44	WG1417330
Xylenes, Total	U		0.316	1.50	1	01/26/2020 15:44	WG1417330
(S) Toluene-d8	*101*			*80.0-120*		*01/26/2020 15:44*	WG1417330
(S) 4-Bromofluorobenzene	*102*			*77.0-126*		*01/26/2020 15:44*	WG1417330
(S) 1,2-Dichloroethane-d4	*106*			*70.0-130*		*01/26/2020 15:44*	WG1417330

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

JC 2/14/2020

MW-925-012420
Collected date/time: 01/24/20 11:15

SAMPLE RESULTS - 04

L1182886

Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	365000		2710	20000	1	01/26/2020 19:10	WG1417009

Sample Narrative:

L1182886-04 WG1417009: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	30900		51.9	1000	1	01/25/2020 23:08	WG1417084
Nitrate	U		22.7	100	1	01/25/2020 23:08	WG1417084
Sulfate	15300		77.4	5000	1	01/25/2020 23:08	WG1417084

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	3300		102	1000	1	01/30/2020 07:28	WG1418866

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	3220		15.0	100	1	01/29/2020 11:13	WG1416986
Manganese	1120		0.250	5.00	1	01/29/2020 11:13	WG1416986

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	423	Z, J+	31.6	100	1	01/27/2020 01:21	WG1417147
(S) a,a,a-Trifluorotoluene(FID)	*99.5*			*78.0-120*		*01/27/2020 01:21*	WG1417147

JC 2/14/2020

Sample Narrative:

L1182886-04 WG1417147: No discernable petroleum pattern.

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	6280	J	0.287	0.678	1	01/28/2020 15:38	WG1418072
Ethane	3.27		0.296	1.29	1	01/28/2020 15:38	WG1418072
Ethene	672		0.422	1.27	1	01/28/2020 15:38	WG1418072

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U	UJ J0	1.05	25.0	1	01/26/2020 16:05	WG1417330
Acrylonitrile	U		0.873	5.00	1	01/26/2020 16:05	WG1417330
Benzene	U		0.0896	0.500	1	01/26/2020 16:05	WG1417330
Bromobenzene	U		0.133	0.500	1	01/26/2020 16:05	WG1417330
Bromodichloromethane	U		0.0800	0.500	1	01/26/2020 16:05	WG1417330
Bromochloromethane	U		0.145	0.500	1	01/26/2020 16:05	WG1417330
Bromoform	U		0.186	0.500	1	01/26/2020 16:05	WG1417330
Bromomethane	U		0.157	2.50	1	01/26/2020 16:05	WG1417330
n-Butylbenzene	U		0.143	0.500	1	01/26/2020 16:05	WG1417330
sec-Butylbenzene	U		0.134	0.500	1	01/26/2020 16:05	WG1417330

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
tert-Butylbenzene	U		0.183	0.500	1	01/26/2020 16:05	WG1417330
Carbon disulfide	U		0.101	0.500	1	01/26/2020 16:05	WG1417330
Carbon tetrachloride	U		0.159	0.500	1	01/26/2020 16:05	WG1417330
Chlorobenzene	U		0.140	0.500	1	01/26/2020 16:05	WG1417330
Chlorodibromomethane	U		0.128	0.500	1	01/26/2020 16:05	WG1417330
Chloroethane	U		0.141	2.50	1	01/26/2020 16:05	WG1417330
Chloroform	U		0.0860	0.500	1	01/26/2020 16:05	WG1417330
Chloromethane	U		0.153	1.25	1	01/26/2020 16:05	WG1417330
2-Chlorotoluene	U		0.111	0.500	1	01/26/2020 16:05	WG1417330
4-Chlorotoluene	U		0.0972	0.500	1	01/26/2020 16:05	WG1417330
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	01/26/2020 16:05	WG1417330
1,2-Dibromoethane	U		0.193	0.500	1	01/26/2020 16:05	WG1417330
Dibromomethane	U		0.117	0.500	1	01/26/2020 16:05	WG1417330
1,2-Dichlorobenzene	U		0.101	0.500	1	01/26/2020 16:05	WG1417330
1,3-Dichlorobenzene	U		0.130	0.500	1	01/26/2020 16:05	WG1417330
1,4-Dichlorobenzene	U		0.121	0.500	1	01/26/2020 16:05	WG1417330
Dichlorodifluoromethane	U	UJ J0	0.127	2.50	1	01/26/2020 16:05	WG1417330
1,1-Dichloroethane	U		0.114	0.500	1	01/26/2020 16:05	WG1417330
1,2-Dichloroethane	U		0.108	0.500	1	01/26/2020 16:05	WG1417330
1,1-Dichloroethene	2.59		0.188	0.500	1	01/26/2020 16:05	WG1417330
cis-1,2-Dichloroethene	1510		18.7	100	200	01/28/2020 23:31	WG1418320
trans-1,2-Dichloroethene	8.45		0.152	0.500	1	01/26/2020 16:05	WG1417330
1,2-Dichloropropane	U		0.190	0.500	1	01/26/2020 16:05	WG1417330
1,1-Dichloropropene	U		0.128	0.500	1	01/26/2020 16:05	WG1417330
1,3-Dichloropropane	U		0.147	1.00	1	01/26/2020 16:05	WG1417330
cis-1,3-Dichloropropene	U		0.0976	0.500	1	01/26/2020 16:05	WG1417330
trans-1,3-Dichloropropene	U		0.222	0.500	1	01/26/2020 16:05	WG1417330
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	01/26/2020 16:05	WG1417330
2,2-Dichloropropane	U		0.0929	0.500	1	01/26/2020 16:05	WG1417330
Di-isopropyl ether	U		0.0924	0.500	1	01/26/2020 16:05	WG1417330
Ethylbenzene	U		0.158	0.500	1	01/26/2020 16:05	WG1417330
Hexachloro-1,3-butadiene	U		0.157	1.00	1	01/26/2020 16:05	WG1417330
2-Hexanone	U		0.757	5.00	1	01/26/2020 16:05	WG1417330
n-Hexane	U		0.305	5.00	1	01/26/2020 16:05	WG1417330
Iodomethane	U		0.377	10.0	1	01/26/2020 16:05	WG1417330
Isopropylbenzene	U		0.126	0.500	1	01/26/2020 16:05	WG1417330
p-Isopropyltoluene	U		0.138	0.500	1	01/26/2020 16:05	WG1417330
2-Butanone (MEK)	U		1.28	5.00	1	01/26/2020 16:05	WG1417330
Methylene Chloride	U		1.07	2.50	1	01/26/2020 16:05	WG1417330
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	01/26/2020 16:05	WG1417330
Methyl tert-butyl ether	U		0.102	0.500	1	01/26/2020 16:05	WG1417330
Naphthalene	U		0.174	2.50	1	01/26/2020 16:05	WG1417330
n-Propylbenzene	U		0.162	0.500	1	01/26/2020 16:05	WG1417330
Styrene	U		0.117	0.500	1	01/26/2020 16:05	WG1417330
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	01/26/2020 16:05	WG1417330
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	01/26/2020 16:05	WG1417330
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	01/26/2020 16:05	WG1417330
Tetrachloroethene	1.39	J	0.199	0.500	1	01/26/2020 16:05	WG1417330
Toluene	U		0.412	0.500	1	01/26/2020 16:05	WG1417330
1,2,3-Trichlorobenzene	U		0.164	0.500	1	01/26/2020 16:05	WG1417330
1,2,4-Trichlorobenzene	U		0.355	0.500	1	01/26/2020 16:05	WG1417330
1,1,1-Trichloroethane	U		0.0940	0.500	1	01/26/2020 16:05	WG1417330
1,1,2-Trichloroethane	U		0.186	0.500	1	01/26/2020 16:05	WG1417330
Trichloroethene	4.80		0.153	0.500	1	01/26/2020 16:05	WG1417330
Trichlorofluoromethane	U		0.130	2.50	1	01/26/2020 16:05	WG1417330
1,2,3-Trichloropropane	U		0.247	2.50	1	01/26/2020 16:05	WG1417330

JC 2/14/2020

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

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
1,2,4-Trimethylbenzene	U		0.123	0.500	1	01/26/2020 16:05	WG1417330
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	01/26/2020 16:05	WG1417330
1,3,5-Trimethylbenzene	U		0.124	0.500	1	01/26/2020 16:05	WG1417330
Vinyl acetate	U UJ	J0	0.645	5.00	1	01/26/2020 16:05	WG1417330
Vinyl chloride	5800 J		23.6	100	200	01/28/2020 23:31	WG1418320
Xylenes, Total	U		0.316	1.50	1	01/26/2020 16:05	WG1417330
(S) Toluene-d8	*104*			*80.0-120*		*01/26/2020 16:05*	WG1417330
(S) Toluene-d8	*98.1*			*80.0-120*		*01/28/2020 23:31*	WG1418320
(S) 4-Bromofluorobenzene	*101*			*77.0-126*		*01/26/2020 16:05*	WG1417330
(S) 4-Bromofluorobenzene	*99.1*			*77.0-126*		*01/28/2020 23:31*	WG1418320
(S) 1,2-Dichloroethane-d4	*101*			*70.0-130*		*01/26/2020 16:05*	WG1417330
(S) 1,2-Dichloroethane-d4	*116*			*70.0-130*		*01/28/2020 23:31*	WG1418320

JC 2/14/2020

Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	50800		2710	20000	1	01/26/2020 19:17	WG1417009

Sample Narrative:

L1182886-05 WG1417009: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	7700		51.9	1000	1	01/25/2020 23:21	WG1417084
Nitrate	U		22.7	100	1	01/25/2020 23:21	WG1417084
Sulfate	322	J	77.4	5000	1	01/25/2020 23:21	WG1417084

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	3410		102	1000	1	01/30/2020 07:45	WG1418866

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	3560		15.0	100	1	01/29/2020 11:16	WG1416986
Manganese	220		0.250	5.00	1	01/29/2020 11:16	WG1416986

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	U		31.6	100	1	01/27/2020 01:45	WG1417147
(S) a,a,a-Trifluorotoluene(FID)	*98.6*			*78.0-120*		*01/27/2020 01:45*	WG1417147

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	1670		0.287	0.678	1	01/28/2020 15:40	WG1418072
Ethane	U		0.296	1.29	1	01/28/2020 15:40	WG1418072
Ethene	35.0		0.422	1.27	1	01/28/2020 15:40	WG1418072

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	2.33 U	~~J J0~~	1.05	25.0	1	01/26/2020 16:25	WG1417330
Acrylonitrile	U		0.873	5.00	1	01/26/2020 16:25	WG1417330
Benzene	U		0.0896	0.500	1	01/26/2020 16:25	WG1417330
Bromobenzene	U		0.133	0.500	1	01/26/2020 16:25	WG1417330
Bromodichloromethane	U		0.0800	0.500	1	01/26/2020 16:25	WG1417330
Bromochloromethane	U		0.145	0.500	1	01/26/2020 16:25	WG1417330
Bromoform	U		0.186	0.500	1	01/26/2020 16:25	WG1417330
Bromomethane	U		0.157	2.50	1	01/26/2020 16:25	WG1417330
n-Butylbenzene	U		0.143	0.500	1	01/26/2020 16:25	WG1417330
sec-Butylbenzene	U		0.134	0.500	1	01/26/2020 16:25	WG1417330
tert-Butylbenzene	U		0.183	0.500	1	01/26/2020 16:25	WG1417330
Carbon disulfide	U		0.101	0.500	1	01/26/2020 16:25	WG1417330
Carbon tetrachloride	U		0.159	0.500	1	01/26/2020 16:25	WG1417330

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

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chlorobenzene	U		0.140	0.500	1	01/26/2020 16:25	WG1417330
Chlorodibromomethane	U		0.128	0.500	1	01/26/2020 16:25	WG1417330
Chloroethane	U		0.141	2.50	1	01/26/2020 16:25	WG1417330
Chloroform	U		0.0860	0.500	1	01/26/2020 16:25	WG1417330
Chloromethane	U		0.153	1.25	1	01/26/2020 16:25	WG1417330
2-Chlorotoluene	U		0.111	0.500	1	01/26/2020 16:25	WG1417330
4-Chlorotoluene	U		0.0972	0.500	1	01/26/2020 16:25	WG1417330
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	01/26/2020 16:25	WG1417330
1,2-Dibromoethane	U		0.193	0.500	1	01/26/2020 16:25	WG1417330
Dibromomethane	U		0.117	0.500	1	01/26/2020 16:25	WG1417330
1,2-Dichlorobenzene	U		0.101	0.500	1	01/26/2020 16:25	WG1417330
1,3-Dichlorobenzene	U		0.130	0.500	1	01/26/2020 16:25	WG1417330
1,4-Dichlorobenzene	U		0.121	0.500	1	01/26/2020 16:25	WG1417330
Dichlorodifluoromethane	U	UJ J0	0.127	2.50	1	01/26/2020 16:25	WG1417330
1,1-Dichloroethane	U		0.114	0.500	1	01/26/2020 16:25	WG1417330
1,2-Dichloroethane	U		0.108	0.500	1	01/26/2020 16:25	WG1417330
1,1-Dichloroethene	U		0.188	0.500	1	01/26/2020 16:25	WG1417330
cis-1,2-Dichloroethene	U		0.0933	0.500	1	01/28/2020 23:51	WG1418320
trans-1,2-Dichloroethene	U		0.152	0.500	1	01/26/2020 16:25	WG1417330
1,2-Dichloropropane	U		0.190	0.500	1	01/26/2020 16:25	WG1417330
1,1-Dichloropropene	U		0.128	0.500	1	01/26/2020 16:25	WG1417330
1,3-Dichloropropane	U		0.147	1.00	1	01/26/2020 16:25	WG1417330
cis-1,3-Dichloropropene	U		0.0976	0.500	1	01/26/2020 16:25	WG1417330
trans-1,3-Dichloropropene	U		0.222	0.500	1	01/26/2020 16:25	WG1417330
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	01/26/2020 16:25	WG1417330
2,2-Dichloropropane	U		0.0929	0.500	1	01/26/2020 16:25	WG1417330
Di-isopropyl ether	U		0.0924	0.500	1	01/26/2020 16:25	WG1417330
Ethylbenzene	U		0.158	0.500	1	01/26/2020 16:25	WG1417330
Hexachloro-1,3-butadiene	U		0.157	1.00	1	01/26/2020 16:25	WG1417330
2-Hexanone	U		0.757	5.00	1	01/26/2020 16:25	WG1417330
n-Hexane	U		0.305	5.00	1	01/26/2020 16:25	WG1417330
Iodomethane	U		0.377	10.0	1	01/26/2020 16:25	WG1417330
Isopropylbenzene	U		0.126	0.500	1	01/26/2020 16:25	WG1417330
p-Isopropyltoluene	U		0.138	0.500	1	01/26/2020 16:25	WG1417330
2-Butanone (MEK)	U		1.28	5.00	1	01/26/2020 16:25	WG1417330
Methylene Chloride	U		1.07	2.50	1	01/26/2020 16:25	WG1417330
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	01/26/2020 16:25	WG1417330
Methyl tert-butyl ether	U		0.102	0.500	1	01/26/2020 16:25	WG1417330
Naphthalene	U		0.174	2.50	1	01/26/2020 16:25	WG1417330
n-Propylbenzene	U		0.162	0.500	1	01/26/2020 16:25	WG1417330
Styrene	U		0.117	0.500	1	01/26/2020 16:25	WG1417330
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	01/26/2020 16:25	WG1417330
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	01/26/2020 16:25	WG1417330
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	01/26/2020 16:25	WG1417330
Tetrachloroethene	0.248	J	0.199	0.500	1	01/26/2020 16:25	WG1417330
Toluene	1.24		0.412	0.500	1	01/26/2020 16:25	WG1417330
1,2,3-Trichlorobenzene	U		0.164	0.500	1	01/26/2020 16:25	WG1417330
1,2,4-Trichlorobenzene	U		0.355	0.500	1	01/26/2020 16:25	WG1417330
1,1,1-Trichloroethane	U		0.0940	0.500	1	01/26/2020 16:25	WG1417330
1,1,2-Trichloroethane	U		0.186	0.500	1	01/26/2020 16:25	WG1417330
Trichloroethene	U		0.153	0.500	1	01/26/2020 16:25	WG1417330
Trichlorofluoromethane	U		0.130	2.50	1	01/26/2020 16:25	WG1417330
1,2,3-Trichloropropane	U		0.247	2.50	1	01/26/2020 16:25	WG1417330
1,2,4-Trimethylbenzene	U		0.123	0.500	1	01/26/2020 16:25	WG1417330
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	01/26/2020 16:25	WG1417330
1,3,5-Trimethylbenzene	U		0.124	0.500	1	01/26/2020 16:25	WG1417330

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

Analyte	Result ug/l		Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Vinyl acetate	U	UJ	J0	0.645	5.00	1	01/26/2020 16:25	WG1417330
Vinyl chloride	U			0.118	0.500	1	01/28/2020 23:51	WG1418320
Xylenes, Total	U			0.316	1.50	1	01/26/2020 16:25	WG1417330
(S) Toluene-d8	*101*				*80.0-120*		*01/26/2020 16:25*	WG1417330
(S) Toluene-d8	*99.7*				*80.0-120*		*01/28/2020 23:51*	WG1418320
(S) 4-Bromofluorobenzene	*101*				*77.0-126*		*01/26/2020 16:25*	WG1417330
(S) 4-Bromofluorobenzene	*96.6*				*77.0-126*		*01/28/2020 23:51*	WG1418320
(S) 1,2-Dichloroethane-d4	*106*				*70.0-130*		*01/26/2020 16:25*	WG1417330
(S) 1,2-Dichloroethane-d4	*117*				*70.0-130*		*01/28/2020 23:51*	WG1418320

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Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	362000		2710	20000	1	01/26/2020 19:24	WG1417009

Sample Narrative:

L1182886-06 WG1417009: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	32100		51.9	1000	1	01/25/2020 23:34	WG1417084
Nitrate	U		22.7	100	1	01/25/2020 23:34	WG1417084
Sulfate	15500		77.4	5000	1	01/25/2020 23:34	WG1417084

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	3310		102	1000	1	01/30/2020 08:01	WG1418866

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	3720		15.0	100	1	01/27/2020 18:10	WG1417103
Manganese	1170	~~V~~	0.250	5.00	1	01/27/2020 18:10	WG1417103

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	1140 Z,J+		31.6	100	1	01/28/2020 04:37	WG1417851
(S) a,a,a-Trifluorotoluene(FID)	*106*			*78.0-120*		*01/28/2020 04:37*	WG1417851

Sample Narrative:

L1182886-06 WG1417851: No discernable petroleum pattern.

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	888 J		2.87	6.78	10	01/31/2020 11:13	WG1420207
Ethane	3.09		0.296	1.29	1	01/28/2020 15:53	WG1418072
Ethene	728		0.422	1.27	1	01/28/2020 15:53	WG1418072

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U UJ	J0	105	2500	100	01/26/2020 16:45	WG1417330
Acrylonitrile	U		87.3	500	100	01/26/2020 16:45	WG1417330
Benzene	U		8.96	50.0	100	01/26/2020 16:45	WG1417330
Bromobenzene	U		13.3	50.0	100	01/26/2020 16:45	WG1417330
Bromodichloromethane	U		8.00	50.0	100	01/26/2020 16:45	WG1417330
Bromochloromethane	U		14.5	50.0	100	01/26/2020 16:45	WG1417330
Bromoform	U		18.6	50.0	100	01/26/2020 16:45	WG1417330
Bromomethane	U		15.7	250	100	01/26/2020 16:45	WG1417330
n-Butylbenzene	U		14.3	50.0	100	01/26/2020 16:45	WG1417330
sec-Butylbenzene	U		13.4	50.0	100	01/26/2020 16:45	WG1417330

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
tert-Butylbenzene	U		18.3	50.0	100	01/26/2020 16:45	WG1417330
Carbon disulfide	U		10.1	50.0	100	01/26/2020 16:45	WG1417330
Carbon tetrachloride	U		15.9	50.0	100	01/26/2020 16:45	WG1417330
Chlorobenzene	U		14.0	50.0	100	01/26/2020 16:45	WG1417330
Chlorodibromomethane	U		12.8	50.0	100	01/26/2020 16:45	WG1417330
Chloroethane	U		14.1	250	100	01/26/2020 16:45	WG1417330
Chloroform	U		8.60	50.0	100	01/26/2020 16:45	WG1417330
Chloromethane	U		15.3	125	100	01/26/2020 16:45	WG1417330
2-Chlorotoluene	U		11.1	50.0	100	01/26/2020 16:45	WG1417330
4-Chlorotoluene	U		9.72	50.0	100	01/26/2020 16:45	WG1417330
1,2-Dibromo-3-Chloropropane	U		32.5	250	100	01/26/2020 16:45	WG1417330
1,2-Dibromoethane	U		19.3	50.0	100	01/26/2020 16:45	WG1417330
Dibromomethane	U		11.7	50.0	100	01/26/2020 16:45	WG1417330
1,2-Dichlorobenzene	U		10.1	50.0	100	01/26/2020 16:45	WG1417330
1,3-Dichlorobenzene	U		13.0	50.0	100	01/26/2020 16:45	WG1417330
1,4-Dichlorobenzene	U		12.1	50.0	100	01/26/2020 16:45	WG1417330
Dichlorodifluoromethane	U UJ	J0	12.7	250	100	01/26/2020 16:45	WG1417330
1,1-Dichloroethane	U		11.4	50.0	100	01/26/2020 16:45	WG1417330
1,2-Dichloroethane	U		10.8	50.0	100	01/26/2020 16:45	WG1417330
1,1-Dichloroethene	U		18.8	50.0	100	01/26/2020 16:45	WG1417330
cis-1,2-Dichloroethene	1460		9.33	50.0	100	01/26/2020 16:45	WG1417330
trans-1,2-Dichloroethene	U		15.2	50.0	100	01/26/2020 16:45	WG1417330
1,2-Dichloropropane	U		19.0	50.0	100	01/26/2020 16:45	WG1417330
1,1-Dichloropropene	U		12.8	50.0	100	01/26/2020 16:45	WG1417330
1,3-Dichloropropane	U		14.7	100	100	01/26/2020 16:45	WG1417330
cis-1,3-Dichloropropene	U		9.76	50.0	100	01/26/2020 16:45	WG1417330
trans-1,3-Dichloropropene	U		22.2	50.0	100	01/26/2020 16:45	WG1417330
trans-1,4-Dichloro-2-butene	U		25.7	500	100	01/26/2020 16:45	WG1417330
2,2-Dichloropropane	U		9.29	50.0	100	01/26/2020 16:45	WG1417330
Di-isopropyl ether	U		9.24	50.0	100	01/26/2020 16:45	WG1417330
Ethylbenzene	U		15.8	50.0	100	01/26/2020 16:45	WG1417330
Hexachloro-1,3-butadiene	U		15.7	100	100	01/26/2020 16:45	WG1417330
2-Hexanone	U		75.7	500	100	01/26/2020 16:45	WG1417330
n-Hexane	U		30.5	500	100	01/26/2020 16:45	WG1417330
Iodomethane	U		37.7	1000	100	01/26/2020 16:45	WG1417330
Isopropylbenzene	U		12.6	50.0	100	01/26/2020 16:45	WG1417330
p-Isopropyltoluene	U		13.8	50.0	100	01/26/2020 16:45	WG1417330
2-Butanone (MEK)	U		128	500	100	01/26/2020 16:45	WG1417330
Methylene Chloride	U		107	250	100	01/26/2020 16:45	WG1417330
4-Methyl-2-pentanone (MIBK)	U		82.3	500	100	01/26/2020 16:45	WG1417330
Methyl tert-butyl ether	U		10.2	50.0	100	01/26/2020 16:45	WG1417330
Naphthalene	U		17.4	250	100	01/26/2020 16:45	WG1417330
n-Propylbenzene	U		16.2	50.0	100	01/26/2020 16:45	WG1417330
Styrene	U		11.7	50.0	100	01/26/2020 16:45	WG1417330
1,1,1,2-Tetrachloroethane	U		12.0	50.0	100	01/26/2020 16:45	WG1417330
1,1,2,2-Tetrachloroethane	U		13.0	50.0	100	01/26/2020 16:45	WG1417330
1,1,2-Trichlorotrifluoroethane	U		16.4	50.0	100	01/26/2020 16:45	WG1417330
Tetrachloroethene	21.1 J	J	19.9	50.0	100	01/26/2020 16:45	WG1417330
Toluene	U		41.2	50.0	100	01/26/2020 16:45	WG1417330
1,2,3-Trichlorobenzene	U		16.4	50.0	100	01/26/2020 16:45	WG1417330
1,2,4-Trichlorobenzene	U		35.5	50.0	100	01/26/2020 16:45	WG1417330
1,1,1-Trichloroethane	U		9.40	50.0	100	01/26/2020 16:45	WG1417330
1,1,2-Trichloroethane	U		18.6	50.0	100	01/26/2020 16:45	WG1417330
Trichloroethene	U		15.3	50.0	100	01/26/2020 16:45	WG1417330
Trichlorofluoromethane	U		13.0	250	100	01/26/2020 16:45	WG1417330
1,2,3-Trichloropropane	U		24.7	250	100	01/26/2020 16:45	WG1417330

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,2,4-Trimethylbenzene	U		12.3	50.0	100	01/26/2020 16:45	WG1417330
1,2,3-Trimethylbenzene	U		7.39	50.0	100	01/26/2020 16:45	WG1417330
1,3,5-Trimethylbenzene	U		12.4	50.0	100	01/26/2020 16:45	WG1417330
Vinyl acetate	U UJ	J0	64.5	500	100	01/26/2020 16:45	WG1417330
Vinyl chloride	3900 J		11.8	50.0	100	01/26/2020 16:45	WG1417330
Xylenes, Total	U		31.6	150	100	01/26/2020 16:45	WG1417330
(S) Toluene-d8	*103*			*80.0-120*		*01/26/2020 16:45*	WG1417330
(S) 4-Bromofluorobenzene	*102*			*77.0-126*		*01/26/2020 16:45*	WG1417330
(S) 1,2-Dichloroethane-d4	*104*			*70.0-130*		*01/26/2020 16:45*	WG1417330

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Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	351000		2710	20000	1	01/26/2020 19:32	WG1417009

Sample Narrative:

L1182886-07 WG1417009: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	28300		51.9	1000	1	01/25/2020 23:47	WG1417084
Nitrate	U		22.7	100	1	01/25/2020 23:47	WG1417084
Sulfate	25600		77.4	5000	1	01/25/2020 23:47	WG1417084

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	3340		102	1000	1	01/30/2020 08:18	WG1418866

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	13500		15.0	100	1	01/27/2020 18:23	WG1417103
Manganese	995		0.250	5.00	1	01/27/2020 18:23	WG1417103

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	1200	Z, J+	31.6	100	1	01/28/2020 05:01	WG1417851
(S) a,a,a-Trifluorotoluene(FID)	*106*			*78.0-120*		*01/28/2020 05:01*	WG1417851

Sample Narrative:

L1182886-07 WG1417851: No discernable petroleum pattern.

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	1550		0.287	0.678	1	01/28/2020 16:00	WG1418072
Ethane	U		0.296	1.29	1	01/28/2020 16:00	WG1418072
Ethene	172		0.422	1.27	1	01/28/2020 16:00	WG1418072

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U	UJ J0	26.3	625	25	01/26/2020 17:05	WG1417330
Acrylonitrile	U		21.8	125	25	01/26/2020 17:05	WG1417330
Benzene	U		2.24	12.5	25	01/26/2020 17:05	WG1417330
Bromobenzene	U		3.33	12.5	25	01/26/2020 17:05	WG1417330
Bromodichloromethane	U		2.00	12.5	25	01/26/2020 17:05	WG1417330
Bromochloromethane	U		3.63	12.5	25	01/26/2020 17:05	WG1417330
Bromoform	U		4.65	12.5	25	01/26/2020 17:05	WG1417330
Bromomethane	U		3.93	62.5	25	01/26/2020 17:05	WG1417330
n-Butylbenzene	U		3.58	12.5	25	01/26/2020 17:05	WG1417330
sec-Butylbenzene	U		3.35	12.5	25	01/26/2020 17:05	WG1417330

JC 2/14/2020

MW-147-012420

Collected date/time: 01/24/20 14:45

SAMPLE RESULTS - 07

L1182886

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
tert-Butylbenzene	U		4.58	12.5	25	01/26/2020 17:05	WG1417330
Carbon disulfide	U		2.53	12.5	25	01/26/2020 17:05	WG1417330
Carbon tetrachloride	U		3.97	12.5	25	01/26/2020 17:05	WG1417330
Chlorobenzene	U		3.50	12.5	25	01/26/2020 17:05	WG1417330
Chlorodibromomethane	U		3.20	12.5	25	01/26/2020 17:05	WG1417330
Chloroethane	U		3.53	62.5	25	01/26/2020 17:05	WG1417330
Chloroform	U		2.15	12.5	25	01/26/2020 17:05	WG1417330
Chloromethane	U		3.83	31.3	25	01/26/2020 17:05	WG1417330
2-Chlorotoluene	U		2.78	12.5	25	01/26/2020 17:05	WG1417330
4-Chlorotoluene	U		2.43	12.5	25	01/26/2020 17:05	WG1417330
1,2-Dibromo-3-Chloropropane	U		8.13	62.5	25	01/26/2020 17:05	WG1417330
1,2-Dibromoethane	U		4.83	12.5	25	01/26/2020 17:05	WG1417330
Dibromomethane	U		2.93	12.5	25	01/26/2020 17:05	WG1417330
1,2-Dichlorobenzene	U		2.53	12.5	25	01/26/2020 17:05	WG1417330
1,3-Dichlorobenzene	U		3.25	12.5	25	01/26/2020 17:05	WG1417330
1,4-Dichlorobenzene	U		3.03	12.5	25	01/26/2020 17:05	WG1417330
Dichlorodifluoromethane	U UJ	J0	3.18	62.5	25	01/26/2020 17:05	WG1417330
1,1-Dichloroethane	U		2.85	12.5	25	01/26/2020 17:05	WG1417330
1,2-Dichloroethane	U		2.70	12.5	25	01/26/2020 17:05	WG1417330
1,1-Dichloroethene	U		4.70	12.5	25	01/26/2020 17:05	WG1417330
cis-1,2-Dichloroethene	1100		2.33	12.5	25	01/26/2020 17:05	WG1417330
trans-1,2-Dichloroethene	U		3.80	12.5	25	01/26/2020 17:05	WG1417330
1,2-Dichloropropane	U		4.75	12.5	25	01/26/2020 17:05	WG1417330
1,1-Dichloropropene	U		3.20	12.5	25	01/26/2020 17:05	WG1417330
1,3-Dichloropropane	U		3.68	25.0	25	01/26/2020 17:05	WG1417330
cis-1,3-Dichloropropene	U		2.44	12.5	25	01/26/2020 17:05	WG1417330
trans-1,3-Dichloropropene	U		5.55	12.5	25	01/26/2020 17:05	WG1417330
trans-1,4-Dichloro-2-butene	U		6.43	125	25	01/26/2020 17:05	WG1417330
2,2-Dichloropropane	U		2.32	12.5	25	01/26/2020 17:05	WG1417330
Di-isopropyl ether	U		2.31	12.5	25	01/26/2020 17:05	WG1417330
Ethylbenzene	U		3.95	12.5	25	01/26/2020 17:05	WG1417330
Hexachloro-1,3-butadiene	U		3.93	25.0	25	01/26/2020 17:05	WG1417330
2-Hexanone	U		18.9	125	25	01/26/2020 17:05	WG1417330
n-Hexane	U		7.63	125	25	01/26/2020 17:05	WG1417330
Iodomethane	U		9.43	250	25	01/26/2020 17:05	WG1417330
Isopropylbenzene	U		3.15	12.5	25	01/26/2020 17:05	WG1417330
p-Isopropyltoluene	U		3.45	12.5	25	01/26/2020 17:05	WG1417330
2-Butanone (MEK)	U		32.0	125	25	01/26/2020 17:05	WG1417330
Methylene Chloride	U		26.8	62.5	25	01/26/2020 17:05	WG1417330
4-Methyl-2-pentanone (MIBK)	U		20.6	125	25	01/26/2020 17:05	WG1417330
Methyl tert-butyl ether	U		2.55	12.5	25	01/26/2020 17:05	WG1417330
Naphthalene	U		4.35	62.5	25	01/26/2020 17:05	WG1417330
n-Propylbenzene	U		4.05	12.5	25	01/26/2020 17:05	WG1417330
Styrene	U		2.93	12.5	25	01/26/2020 17:05	WG1417330
1,1,1,2-Tetrachloroethane	U		3.00	12.5	25	01/26/2020 17:05	WG1417330
1,1,2,2-Tetrachloroethane	U		3.25	12.5	25	01/26/2020 17:05	WG1417330
1,1,2-Trichlorotrifluoroethane	U		4.10	12.5	25	01/26/2020 17:05	WG1417330
Tetrachloroethene	U		4.98	12.5	25	01/26/2020 17:05	WG1417330
Toluene	U		10.3	12.5	25	01/26/2020 17:05	WG1417330
1,2,3-Trichlorobenzene	U		4.10	12.5	25	01/26/2020 17:05	WG1417330
1,2,4-Trichlorobenzene	U		8.88	12.5	25	01/26/2020 17:05	WG1417330
1,1,1-Trichloroethane	U		2.35	12.5	25	01/26/2020 17:05	WG1417330
1,1,2-Trichloroethane	U		4.65	12.5	25	01/26/2020 17:05	WG1417330
Trichloroethene	4.63	J	3.83	12.5	25	01/26/2020 17:05	WG1417330
Trichlorofluoromethane	U		3.25	62.5	25	01/26/2020 17:05	WG1417330
1,2,3-Trichloropropane	U		6.17	62.5	25	01/26/2020 17:05	WG1417330

JC 2/14/2020

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,2,4-Trimethylbenzene	U		3.08	12.5	25	01/26/2020 17:05	WG1417330
1,2,3-Trimethylbenzene	U		1.85	12.5	25	01/26/2020 17:05	WG1417330
1,3,5-Trimethylbenzene	U		3.10	12.5	25	01/26/2020 17:05	WG1417330
Vinyl acetate	U UJ	J0	16.1	125	25	01/26/2020 17:05	WG1417330
Vinyl chloride	1340		2.95	12.5	25	01/26/2020 17:05	WG1417330
Xylenes, Total	U		7.90	37.5	25	01/26/2020 17:05	WG1417330
(S) Toluene-d8	*101*			*80.0-120*		*01/26/2020 17:05*	WG1417330
(S) 4-Bromofluorobenzene	*101*			*77.0-126*		*01/26/2020 17:05*	WG1417330
(S) 1,2-Dichloroethane-d4	*105*			*70.0-130*		*01/26/2020 17:05*	WG1417330

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

JC 2/14/2020

MW-178-012420

Collected date/time: 01/24/20 13:31

SAMPLE RESULTS - 01

L1182898

Wet Chemistry by Method 2320 B-2011

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Alkalinity	1810000		2710	20000	1	01/26/2020 20:38	WG1417009

Sample Narrative:

L1182898-01 WG1417009: Endpoint pH 4.5

Wet Chemistry by Method 9056A

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Chloride	178000		260	5000	5	01/26/2020 00:13	WG1417084
Nitrate	40.1	J	22.7	100	1	01/26/2020 00:00	WG1417084
Sulfate	U		77.4	5000	1	01/26/2020 00:00	WG1417084

Wet Chemistry by Method 9060A

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
TOC (Total Organic Carbon)	43800		102	1000	1	01/31/2020 19:48	WG1419599

Metals (ICPMS) by Method 6020B

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Iron	65800		15.0	100	1	01/29/2020 18:06	WG1418373
Manganese	7470		0.250	5.00	1	01/29/2020 18:06	WG1418373

Volatile Organic Compounds (GC) by Method NWTPHGX

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Gasoline Range Organics-NWTPH	U		31.6	100	1	01/28/2020 09:09	WG1417851
(S) a,a,a-Trifluorotoluene(FID)	*104*			*78.0-120*		*01/28/2020 09:09*	WG1417851

Volatile Organic Compounds (GC) by Method RSK175

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Methane	2240		2.87	6.78	10	01/30/2020 11:33	WG1419485
Ethane	784		0.296	1.29	1	01/28/2020 16:13	WG1418072
Ethene	114		0.422	1.27	1	01/28/2020 16:13	WG1418072

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

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Acetone	410 J	J0	1.05	25.0	1	01/27/2020 05:30	WG1417461
Acrylonitrile	U		0.873	5.00	1	01/27/2020 05:30	WG1417461
Benzene	U		0.0896	0.500	1	01/27/2020 05:30	WG1417461
Bromobenzene	U		0.133	0.500	1	01/27/2020 05:30	WG1417461
Bromodichloromethane	U		0.0800	0.500	1	01/27/2020 05:30	WG1417461
Bromochloromethane	U		0.145	0.500	1	01/27/2020 05:30	WG1417461
Bromoform	U		0.186	0.500	1	01/27/2020 05:30	WG1417461
Bromomethane	U		0.157	2.50	1	01/27/2020 05:30	WG1417461
n-Butylbenzene	U		0.143	0.500	1	01/27/2020 05:30	WG1417461
sec-Butylbenzene	U		0.134	0.500	1	01/27/2020 05:30	WG1417461
tert-Butylbenzene	U		0.183	0.500	1	01/27/2020 05:30	WG1417461
Carbon disulfide	U		0.101	0.500	1	01/27/2020 05:30	WG1417461
Carbon tetrachloride	U		0.159	0.500	1	01/27/2020 05:30	WG1417461

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chlorobenzene	U		0.140	0.500	1	01/27/2020 05:30	WG1417461
Chlorodibromomethane	U		0.128	0.500	1	01/27/2020 05:30	WG1417461
Chloroethane	0.265 J	J J0	0.141	2.50	1	01/27/2020 05:30	WG1417461
Chloroform	U		0.0860	0.500	1	01/27/2020 05:30	WG1417461
Chloromethane	U		0.153	1.25	1	01/27/2020 05:30	WG1417461
2-Chlorotoluene	U		0.111	0.500	1	01/27/2020 05:30	WG1417461
4-Chlorotoluene	U		0.0972	0.500	1	01/27/2020 05:30	WG1417461
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	01/27/2020 05:30	WG1417461
1,2-Dibromoethane	U		0.193	0.500	1	01/27/2020 05:30	WG1417461
Dibromomethane	U		0.117	0.500	1	01/27/2020 05:30	WG1417461
1,2-Dichlorobenzene	U		0.101	0.500	1	01/27/2020 05:30	WG1417461
1,3-Dichlorobenzene	U		0.130	0.500	1	01/27/2020 05:30	WG1417461
1,4-Dichlorobenzene	U		0.121	0.500	1	01/27/2020 05:30	WG1417461
Dichlorodifluoromethane	U		0.127	2.50	1	01/27/2020 05:30	WG1417461
1,1-Dichloroethane	U		0.114	0.500	1	01/27/2020 05:30	WG1417461
1,2-Dichloroethane	U		0.108	0.500	1	01/27/2020 05:30	WG1417461
1,1-Dichloroethene	U		0.188	0.500	1	01/27/2020 05:30	WG1417461
cis-1,2-Dichloroethene	0.565		0.0933	0.500	1	01/27/2020 05:30	WG1417461
trans-1,2-Dichloroethene	9.15		0.152	0.500	1	01/27/2020 05:30	WG1417461
1,2-Dichloropropane	U		0.190	0.500	1	01/27/2020 05:30	WG1417461
1,1-Dichloropropene	U		0.128	0.500	1	01/27/2020 05:30	WG1417461
1,3-Dichloropropane	U		0.147	1.00	1	01/27/2020 05:30	WG1417461
cis-1,3-Dichloropropene	U		0.0976	0.500	1	01/27/2020 05:30	WG1417461
trans-1,3-Dichloropropene	U		0.222	0.500	1	01/27/2020 05:30	WG1417461
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	01/27/2020 05:30	WG1417461
2,2-Dichloropropane	U		0.0929	0.500	1	01/27/2020 05:30	WG1417461
Di-isopropyl ether	U		0.0924	0.500	1	01/27/2020 05:30	WG1417461
Ethylbenzene	0.245	J	0.158	0.500	1	01/27/2020 05:30	WG1417461
Hexachloro-1,3-butadiene	U		0.157	1.00	1	01/27/2020 05:30	WG1417461
2-Hexanone	3.36	J	0.757	5.00	1	01/27/2020 05:30	WG1417461
n-Hexane	U		0.305	5.00	1	01/27/2020 05:30	WG1417461
Iodomethane	U		0.377	10.0	1	01/27/2020 05:30	WG1417461
Isopropylbenzene	U		0.126	0.500	1	01/27/2020 05:30	WG1417461
p-Isopropyltoluene	U		0.138	0.500	1	01/27/2020 05:30	WG1417461
2-Butanone (MEK)	200		1.28	5.00	1	01/27/2020 05:30	WG1417461
Methylene Chloride	U		1.07	2.50	1	01/27/2020 05:30	WG1417461
4-Methyl-2-pentanone (MIBK)	1.99	J	0.823	5.00	1	01/27/2020 05:30	WG1417461
Methyl tert-butyl ether	U		0.102	0.500	1	01/27/2020 05:30	WG1417461
Naphthalene	U		0.174	2.50	1	01/27/2020 05:30	WG1417461
n-Propylbenzene	U		0.162	0.500	1	01/27/2020 05:30	WG1417461
Styrene	U		0.117	0.500	1	01/27/2020 05:30	WG1417461
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	01/27/2020 05:30	WG1417461
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	01/27/2020 05:30	WG1417461
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	01/27/2020 05:30	WG1417461
Tetrachloroethene	U		0.199	0.500	1	01/27/2020 05:30	WG1417461
Toluene	U		0.412	0.500	1	01/27/2020 05:30	WG1417461
1,2,3-Trichlorobenzene	U		0.164	0.500	1	01/27/2020 05:30	WG1417461
1,2,4-Trichlorobenzene	U		0.355	0.500	1	01/27/2020 05:30	WG1417461
1,1,1-Trichloroethane	U		0.0940	0.500	1	01/27/2020 05:30	WG1417461
1,1,2-Trichloroethane	U		0.186	0.500	1	01/27/2020 05:30	WG1417461
Trichloroethene	U		0.153	0.500	1	01/27/2020 05:30	WG1417461
Trichlorofluoromethane	U		0.130	2.50	1	01/27/2020 05:30	WG1417461
1,2,3-Trichloropropane	U		0.247	2.50	1	01/27/2020 05:30	WG1417461
1,2,4-Trimethylbenzene	U		0.123	0.500	1	01/27/2020 05:30	WG1417461
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	01/27/2020 05:30	WG1417461
1,3,5-Trimethylbenzene	U		0.124	0.500	1	01/27/2020 05:30	WG1417461

JC 2/14/2020

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

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Vinyl acetate	U		0.645	5.00	1	01/27/2020 05:30	WG1417461
Vinyl chloride	2.14		0.118	0.500	1	01/27/2020 05:30	WG1417461
Xylenes, Total	0.383	J	0.316	1.50	1	01/27/2020 05:30	WG1417461
(S) Toluene-d8	*103*			*80.0-120*		*01/27/2020 05:30*	WG1417461
(S) 4-Bromofluorobenzene	*102*			*77.0-126*		*01/27/2020 05:30*	WG1417461
(S) 1,2-Dichloroethane-d4	*103*			*70.0-130*		*01/27/2020 05:30*	WG1417461

JC 2/14/2020

Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	511000		2710	20000	1	01/26/2020 20:48	WG1417009

Sample Narrative:

L1182898-02 WG1417009: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	241000		260	5000	5	01/26/2020 00:39	WG1417084
Nitrate	U		22.7	100	1	01/26/2020 00:26	WG1417084
Sulfate	67400		77.4	5000	1	01/26/2020 00:26	WG1417084

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	14200		102	1000	1	01/31/2020 20:06	WG1419599

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	20200		15.0	100	1	01/27/2020 19:01	WG1417103
Manganese	3150		0.250	5.00	1	01/27/2020 19:01	WG1417103

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	89400 Z, J+		1580	5000	50	01/28/2020 05:25	WG1417851
(S) a,a,a-Trifluorotoluene(FID)	*107*			*78.0-120*		*01/28/2020 05:25*	WG1417851

Sample Narrative:

L1182898-02 WG1417851: No discernable petroleum pattern.

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	3010		2.87	6.78	10	01/30/2020 11:36	WG1419485
Ethane	102		0.296	1.29	1	01/28/2020 16:43	WG1418072
Ethene	3640		0.422	1.27	1	01/28/2020 16:43	WG1418072

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	72.6 J	J J0	52.5	1250	50	01/27/2020 05:50	WG1417461
Acrylonitrile	U		43.7	250	50	01/27/2020 05:50	WG1417461
Benzene	U		4.48	25.0	50	01/27/2020 05:50	WG1417461
Bromobenzene	U		6.65	25.0	50	01/27/2020 05:50	WG1417461
Bromodichloromethane	U		4.00	25.0	50	01/27/2020 05:50	WG1417461
Bromochloromethane	U		7.25	25.0	50	01/27/2020 05:50	WG1417461
Bromoform	U		9.30	25.0	50	01/27/2020 05:50	WG1417461
Bromomethane	U		7.85	125	50	01/27/2020 05:50	WG1417461
n-Butylbenzene	U		7.15	25.0	50	01/27/2020 05:50	WG1417461
sec-Butylbenzene	U		6.70	25.0	50	01/27/2020 05:50	WG1417461

JC 2/14/2020

MW-177-012420

Collected date/time: 01/24/20 14:55

SAMPLE RESULTS - 02

L1182898

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
tert-Butylbenzene	U		9.15	25.0	50	01/27/2020 05:50	WG1417461
Carbon disulfide	U		5.05	25.0	50	01/27/2020 05:50	WG1417461
Carbon tetrachloride	U		7.95	25.0	50	01/27/2020 05:50	WG1417461
Chlorobenzene	U		7.00	25.0	50	01/27/2020 05:50	WG1417461
Chlorodibromomethane	U		6.40	25.0	50	01/27/2020 05:50	WG1417461
Chloroethane	U UJ	J0	7.05	125	50	01/27/2020 05:50	WG1417461
Chloroform	U		4.30	25.0	50	01/27/2020 05:50	WG1417461
Chloromethane	U		7.65	62.5	50	01/27/2020 05:50	WG1417461
2-Chlorotoluene	U		5.55	25.0	50	01/27/2020 05:50	WG1417461
4-Chlorotoluene	U		4.86	25.0	50	01/27/2020 05:50	WG1417461
1,2-Dibromo-3-Chloropropane	U		16.3	125	50	01/27/2020 05:50	WG1417461
1,2-Dibromoethane	U		9.65	25.0	50	01/27/2020 05:50	WG1417461
Dibromomethane	U		5.85	25.0	50	01/27/2020 05:50	WG1417461
1,2-Dichlorobenzene	U		5.05	25.0	50	01/27/2020 05:50	WG1417461
1,3-Dichlorobenzene	U		6.50	25.0	50	01/27/2020 05:50	WG1417461
1,4-Dichlorobenzene	U		6.05	25.0	50	01/27/2020 05:50	WG1417461
Dichlorodifluoromethane	U		6.35	125	50	01/27/2020 05:50	WG1417461
1,1-Dichloroethane	U		5.70	25.0	50	01/27/2020 05:50	WG1417461
1,2-Dichloroethane	U		5.40	25.0	50	01/27/2020 05:50	WG1417461
1,1-Dichloroethene	120		9.40	25.0	50	01/27/2020 05:50	WG1417461
cis-1,2-Dichloroethene	99800		467	2500	5000	01/30/2020 23:48	WG1419935
trans-1,2-Dichloroethene	265		7.60	25.0	50	01/27/2020 05:50	WG1417461
1,2-Dichloropropane	U		9.50	25.0	50	01/27/2020 05:50	WG1417461
1,1-Dichloropropene	U		6.40	25.0	50	01/27/2020 05:50	WG1417461
1,3-Dichloropropane	U		7.35	50.0	50	01/27/2020 05:50	WG1417461
cis-1,3-Dichloropropene	U		4.88	25.0	50	01/27/2020 05:50	WG1417461
trans-1,3-Dichloropropene	U		11.1	25.0	50	01/27/2020 05:50	WG1417461
trans-1,4-Dichloro-2-butene	U		12.9	250	50	01/27/2020 05:50	WG1417461
2,2-Dichloropropane	U		4.65	25.0	50	01/27/2020 05:50	WG1417461
Di-isopropyl ether	U		4.62	25.0	50	01/27/2020 05:50	WG1417461
Ethylbenzene	U		7.90	25.0	50	01/27/2020 05:50	WG1417461
Hexachloro-1,3-butadiene	U		7.85	50.0	50	01/27/2020 05:50	WG1417461
2-Hexanone	U		37.9	250	50	01/27/2020 05:50	WG1417461
n-Hexane	U		15.3	250	50	01/27/2020 05:50	WG1417461
Iodomethane	U		18.9	500	50	01/27/2020 05:50	WG1417461
Isopropylbenzene	U		6.30	25.0	50	01/27/2020 05:50	WG1417461
p-Isopropyltoluene	U		6.90	25.0	50	01/27/2020 05:50	WG1417461
2-Butanone (MEK)	U		64.0	250	50	01/27/2020 05:50	WG1417461
Methylene Chloride	U		53.5	125	50	01/27/2020 05:50	WG1417461
4-Methyl-2-pentanone (MIBK)	U		41.2	250	50	01/27/2020 05:50	WG1417461
Methyl tert-butyl ether	U		5.10	25.0	50	01/27/2020 05:50	WG1417461
Naphthalene	U		8.70	125	50	01/27/2020 05:50	WG1417461
n-Propylbenzene	U		8.10	25.0	50	01/27/2020 05:50	WG1417461
Styrene	U		5.85	25.0	50	01/27/2020 05:50	WG1417461
1,1,1,2-Tetrachloroethane	U		6.00	25.0	50	01/27/2020 05:50	WG1417461
1,1,2,2-Tetrachloroethane	U		6.50	25.0	50	01/27/2020 05:50	WG1417461
1,1,2-Trichlorotrifluoroethane	U		8.20	25.0	50	01/27/2020 05:50	WG1417461
Tetrachloroethene	26400		995	2500	5000	01/30/2020 23:48	WG1419935
Toluene	U		20.6	25.0	50	01/27/2020 05:50	WG1417461
1,2,3-Trichlorobenzene	U		8.20	25.0	50	01/27/2020 05:50	WG1417461
1,2,4-Trichlorobenzene	U		17.8	25.0	50	01/27/2020 05:50	WG1417461
1,1,1-Trichloroethane	U		4.70	25.0	50	01/27/2020 05:50	WG1417461
1,1,2-Trichloroethane	U		9.30	25.0	50	01/27/2020 05:50	WG1417461
Trichloroethene	7440		7.65	25.0	50	01/27/2020 05:50	WG1417461
Trichlorofluoromethane	U		6.50	125	50	01/27/2020 05:50	WG1417461
1,2,3-Trichloropropane	U		12.3	125	50	01/27/2020 05:50	WG1417461

JC 2/14/2020

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,2,4-Trimethylbenzene	U		6.15	25.0	50	01/27/2020 05:50	WG1417461
1,2,3-Trimethylbenzene	U		3.69	25.0	50	01/27/2020 05:50	WG1417461
1,3,5-Trimethylbenzene	U		6.20	25.0	50	01/27/2020 05:50	WG1417461
Vinyl acetate	U		32.3	250	50	01/27/2020 05:50	WG1417461
Vinyl chloride	8440		5.90	25.0	50	01/27/2020 05:50	WG1417461
Xylenes, Total	U		15.8	75.0	50	01/27/2020 05:50	WG1417461
(S) Toluene-d8	*101*			*80.0-120*		*01/27/2020 05:50*	WG1417461
(S) Toluene-d8	*106*			*80.0-120*		*01/30/2020 23:48*	WG1419935
(S) 4-Bromofluorobenzene	*103*			*77.0-126*		*01/27/2020 05:50*	WG1417461
(S) 4-Bromofluorobenzene	*106*			*77.0-126*		*01/30/2020 23:48*	WG1419935
(S) 1,2-Dichloroethane-d4	*103*			*70.0-130*		*01/27/2020 05:50*	WG1417461
(S) 1,2-Dichloroethane-d4	*94.2*			*70.0-130*		*01/30/2020 23:48*	WG1419935

JC 2/14/2020

Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	623000		2710	20000	1	01/26/2020 20:55	WG1417009

Sample Narrative:

L1182898-03 WG1417009: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	46900		51.9	1000	1	01/26/2020 01:19	WG1417084
Nitrate	U		22.7	100	1	01/26/2020 01:19	WG1417084
Sulfate	97800		77.4	5000	1	01/26/2020 01:19	WG1417084

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	37500		102	1000	1	01/31/2020 21:49	WG1419599

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	17200		15.0	100	1	01/27/2020 19:05	WG1417103
Manganese	9140		0.250	5.00	1	01/27/2020 19:05	WG1417103

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	186 Z, J+		31.6	100	1	01/28/2020 05:49	WG1417851
(S) a,a,a-Trifluorotoluene(FID)	*106*			*78.0-120*		*01/28/2020 05:49*	WG1417851

Sample Narrative:

L1182898-03 WG1417851: No discernable petroleum pattern.

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	2300		2.87	6.78	10	01/30/2020 11:42	WG1419485
Ethane	6.29		0.296	1.29	1	01/28/2020 16:52	WG1418072
Ethene	103		0.422	1.27	1	01/28/2020 16:52	WG1418072

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	4.52 J	J J0	1.05	25.0	1	01/27/2020 06:11	WG1417461
Acrylonitrile	U		0.873	5.00	1	01/27/2020 06:11	WG1417461
Benzene	U		0.0896	0.500	1	01/27/2020 06:11	WG1417461
Bromobenzene	U		0.133	0.500	1	01/27/2020 06:11	WG1417461
Bromodichloromethane	U		0.0800	0.500	1	01/27/2020 06:11	WG1417461
Bromochloromethane	U		0.145	0.500	1	01/27/2020 06:11	WG1417461
Bromoform	U		0.186	0.500	1	01/27/2020 06:11	WG1417461
Bromomethane	U		0.157	2.50	1	01/27/2020 06:11	WG1417461
n-Butylbenzene	U		0.143	0.500	1	01/27/2020 06:11	WG1417461
sec-Butylbenzene	U		0.134	0.500	1	01/27/2020 06:11	WG1417461

JC 2/14/2020

MW-180-012420

Collected date/time: 01/24/20 16:15

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L1182898

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

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
tert-Butylbenzene	U		0.183	0.500	1	01/27/2020 06:11	WG1417461
Carbon disulfide	0.469	J	0.101	0.500	1	01/27/2020 06:11	WG1417461
Carbon tetrachloride	U		0.159	0.500	1	01/27/2020 06:11	WG1417461
Chlorobenzene	U		0.140	0.500	1	01/27/2020 06:11	WG1417461
Chlorodibromomethane	U		0.128	0.500	1	01/27/2020 06:11	WG1417461
Chloroethane	6.73 J	J0	0.141	2.50	1	01/27/2020 06:11	WG1417461
Chloroform	U		0.0860	0.500	1	01/27/2020 06:11	WG1417461
Chloromethane	U		0.153	1.25	1	01/27/2020 06:11	WG1417461
2-Chlorotoluene	U		0.111	0.500	1	01/27/2020 06:11	WG1417461
4-Chlorotoluene	U		0.0972	0.500	1	01/27/2020 06:11	WG1417461
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	01/27/2020 06:11	WG1417461
1,2-Dibromoethane	U		0.193	0.500	1	01/27/2020 06:11	WG1417461
Dibromomethane	U		0.117	0.500	1	01/27/2020 06:11	WG1417461
1,2-Dichlorobenzene	U		0.101	0.500	1	01/27/2020 06:11	WG1417461
1,3-Dichlorobenzene	U		0.130	0.500	1	01/27/2020 06:11	WG1417461
1,4-Dichlorobenzene	U		0.121	0.500	1	01/27/2020 06:11	WG1417461
Dichlorodifluoromethane	U		0.127	2.50	1	01/27/2020 06:11	WG1417461
1,1-Dichloroethane	U		0.114	0.500	1	01/27/2020 06:11	WG1417461
1,2-Dichloroethane	U		0.108	0.500	1	01/27/2020 06:11	WG1417461
1,1-Dichloroethene	0.293	J	0.188	0.500	1	01/27/2020 06:11	WG1417461
cis-1,2-Dichloroethene	222		0.467	2.50	5	01/31/2020 00:08	WG1419935
trans-1,2-Dichloroethene	1.20		0.152	0.500	1	01/27/2020 06:11	WG1417461
1,2-Dichloropropane	U		0.190	0.500	1	01/27/2020 06:11	WG1417461
1,1-Dichloropropene	U		0.128	0.500	1	01/27/2020 06:11	WG1417461
1,3-Dichloropropane	U		0.147	1.00	1	01/27/2020 06:11	WG1417461
cis-1,3-Dichloropropene	U		0.0976	0.500	1	01/27/2020 06:11	WG1417461
trans-1,3-Dichloropropene	U		0.222	0.500	1	01/27/2020 06:11	WG1417461
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	01/27/2020 06:11	WG1417461
2,2-Dichloropropane	U		0.0929	0.500	1	01/27/2020 06:11	WG1417461
Di-isopropyl ether	U		0.0924	0.500	1	01/27/2020 06:11	WG1417461
Ethylbenzene	0.184	J	0.158	0.500	1	01/27/2020 06:11	WG1417461
Hexachloro-1,3-butadiene	U		0.157	1.00	1	01/27/2020 06:11	WG1417461
2-Hexanone	U		0.757	5.00	1	01/27/2020 06:11	WG1417461
n-Hexane	U		0.305	5.00	1	01/27/2020 06:11	WG1417461
Iodomethane	U		0.377	10.0	1	01/27/2020 06:11	WG1417461
Isopropylbenzene	U		0.126	0.500	1	01/27/2020 06:11	WG1417461
p-Isopropyltoluene	U		0.138	0.500	1	01/27/2020 06:11	WG1417461
2-Butanone (MEK)	33.4		1.28	5.00	1	01/27/2020 06:11	WG1417461
Methylene Chloride	U		1.07	2.50	1	01/27/2020 06:11	WG1417461
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	01/27/2020 06:11	WG1417461
Methyl tert-butyl ether	U		0.102	0.500	1	01/27/2020 06:11	WG1417461
Naphthalene	U		0.174	2.50	1	01/27/2020 06:11	WG1417461
n-Propylbenzene	U		0.162	0.500	1	01/27/2020 06:11	WG1417461
Styrene	U		0.117	0.500	1	01/27/2020 06:11	WG1417461
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	01/27/2020 06:11	WG1417461
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	01/27/2020 06:11	WG1417461
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	01/27/2020 06:11	WG1417461
Tetrachloroethene	2.80		0.995	2.50	5	01/31/2020 00:08	WG1419935
Toluene	U		0.412	0.500	1	01/27/2020 06:11	WG1417461
1,2,3-Trichlorobenzene	U		0.164	0.500	1	01/27/2020 06:11	WG1417461
1,2,4-Trichlorobenzene	U		0.355	0.500	1	01/27/2020 06:11	WG1417461
1,1,1-Trichloroethane	U		0.0940	0.500	1	01/27/2020 06:11	WG1417461
1,1,2-Trichloroethane	U		0.186	0.500	1	01/27/2020 06:11	WG1417461
Trichloroethene	3.18		0.153	0.500	1	01/27/2020 06:11	WG1417461
Trichlorofluoromethane	U		0.130	2.50	1	01/27/2020 06:11	WG1417461
1,2,3-Trichloropropane	U		0.247	2.50	1	01/27/2020 06:11	WG1417461

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,2,4-Trimethylbenzene	U		0.123	0.500	1	01/27/2020 06:11	WG1417461
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	01/27/2020 06:11	WG1417461
1,3,5-Trimethylbenzene	U		0.124	0.500	1	01/27/2020 06:11	WG1417461
Vinyl acetate	U		0.645	5.00	1	01/27/2020 06:11	WG1417461
Vinyl chloride	146		0.118	0.500	1	01/27/2020 06:11	WG1417461
Xylenes, Total	U		0.316	1.50	1	01/27/2020 06:11	WG1417461
(S) Toluene-d8	*102*			*80.0-120*		*01/27/2020 06:11*	WG1417461
(S) Toluene-d8	*108*			*80.0-120*		*01/31/2020 00:08*	WG1419935
(S) 4-Bromofluorobenzene	*103*			*77.0-126*		*01/27/2020 06:11*	WG1417461
(S) 4-Bromofluorobenzene	*105*			*77.0-126*		*01/31/2020 00:08*	WG1419935
(S) 1,2-Dichloroethane-d4	*105*			*70.0-130*		*01/27/2020 06:11*	WG1417461
(S) 1,2-Dichloroethane-d4	*93.5*			*70.0-130*		*01/31/2020 00:08*	WG1419935

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Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	1310000		2710	20000	1	01/28/2020 19:35	WG1418552

Sample Narrative:

L1183293-01 WG1418552: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	128000		260	5000	5	01/28/2020 15:31	WG1418181
Nitrate	U		22.7	100	1	01/28/2020 15:18	WG1418181
Sulfate	29600		77.4	5000	1	01/28/2020 15:18	WG1418181

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	293000		1020	10000	10	01/31/2020 03:31	WG1419929

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	72700		15.0	100	1	01/29/2020 18:09	WG1418373
Manganese	8110		0.250	5.00	1	01/29/2020 18:09	WG1418373

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	2420	Z, J+	31.6	100	1	01/28/2020 15:02	WG1418226
(S) a,a,a-Trifluorotoluene(FID)	*96.7*			*78.0-120*		*01/28/2020 15:02*	WG1418226

Sample Narrative:

L1183293-01 WG1418226: No discernable petroleum pattern.

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	17500		2.87	6.78	10	01/31/2020 12:34	WG1420207
Ethane	5.57		0.296	1.29	1	01/30/2020 11:45	WG1419485
Ethene	4990		0.422	1.27	1	01/30/2020 11:45	WG1419485

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U		525	12500	500	01/28/2020 22:33	WG1418645
Acrylonitrile	U		437	2500	500	01/28/2020 22:33	WG1418645
Benzene	U		44.8	250	500	01/28/2020 22:33	WG1418645
Bromobenzene	U		66.5	250	500	01/28/2020 22:33	WG1418645
Bromodichloromethane	U		40.0	250	500	01/28/2020 22:33	WG1418645
Bromochloromethane	U		72.5	250	500	01/28/2020 22:33	WG1418645
Bromoform	U		93.0	250	500	01/28/2020 22:33	WG1418645
Bromomethane	U	~~J4~~	78.5	1250	500	01/28/2020 22:33	WG1418645
n-Butylbenzene	U		71.5	250	500	01/28/2020 22:33	WG1418645
sec-Butylbenzene	U		67.0	250	500	01/28/2020 22:33	WG1418645

JC 2/14/2020

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
tert-Butylbenzene	U		91.5	250	500	01/28/2020 22:33	WG1418645
Carbon disulfide	U		50.5	250	500	01/28/2020 22:33	WG1418645
Carbon tetrachloride	U		79.5	250	500	01/28/2020 22:33	WG1418645
Chlorobenzene	U		70.0	250	500	01/28/2020 22:33	WG1418645
Chlorodibromomethane	U		64.0	250	500	01/28/2020 22:33	WG1418645
Chloroethane	U		70.5	1250	500	01/28/2020 22:33	WG1418645
Chloroform	U		43.0	250	500	01/28/2020 22:33	WG1418645
Chloromethane	U		76.5	625	500	01/28/2020 22:33	WG1418645
2-Chlorotoluene	U		55.5	250	500	01/28/2020 22:33	WG1418645
4-Chlorotoluene	U		48.6	250	500	01/28/2020 22:33	WG1418645
1,2-Dibromo-3-Chloropropane	U		163	1250	500	01/28/2020 22:33	WG1418645
1,2-Dibromoethane	U		96.5	250	500	01/28/2020 22:33	WG1418645
Dibromomethane	U		58.5	250	500	01/28/2020 22:33	WG1418645
1,2-Dichlorobenzene	U		50.5	250	500	01/28/2020 22:33	WG1418645
1,3-Dichlorobenzene	U		65.0	250	500	01/28/2020 22:33	WG1418645
1,4-Dichlorobenzene	U		60.5	250	500	01/28/2020 22:33	WG1418645
Dichlorodifluoromethane	U		63.5	1250	500	01/28/2020 22:33	WG1418645
1,1-Dichloroethane	U		57.0	250	500	01/28/2020 22:33	WG1418645
1,2-Dichloroethane	U		54.0	250	500	01/28/2020 22:33	WG1418645
1,1-Dichloroethene	U		94.0	250	500	01/28/2020 22:33	WG1418645
cis-1,2-Dichloroethene	4500		46.7	250	500	01/28/2020 22:33	WG1418645
trans-1,2-Dichloroethene	U		76.0	250	500	01/28/2020 22:33	WG1418645
1,2-Dichloropropane	U		95.0	250	500	01/28/2020 22:33	WG1418645
1,1-Dichloropropene	U		64.0	250	500	01/28/2020 22:33	WG1418645
1,3-Dichloropropane	U		73.5	500	500	01/28/2020 22:33	WG1418645
cis-1,3-Dichloropropene	U		48.8	250	500	01/28/2020 22:33	WG1418645
trans-1,3-Dichloropropene	U		111	250	500	01/28/2020 22:33	WG1418645
trans-1,4-Dichloro-2-butene	U		129	2500	500	01/28/2020 22:33	WG1418645
2,2-Dichloropropane	U		46.5	250	500	01/28/2020 22:33	WG1418645
Di-isopropyl ether	U		46.2	250	500	01/28/2020 22:33	WG1418645
Ethylbenzene	U		79.0	250	500	01/28/2020 22:33	WG1418645
Hexachloro-1,3-butadiene	U		78.5	500	500	01/28/2020 22:33	WG1418645
2-Hexanone	U		379	2500	500	01/28/2020 22:33	WG1418645
n-Hexane	U		153	2500	500	01/28/2020 22:33	WG1418645
Iodomethane	U UJ	J0	189	5000	500	01/28/2020 22:33	WG1418645
Isopropylbenzene	U		63.0	250	500	01/28/2020 22:33	WG1418645
p-Isopropyltoluene	U		69.0	250	500	01/28/2020 22:33	WG1418645
2-Butanone (MEK)	U		640	2500	500	01/28/2020 22:33	WG1418645
Methylene Chloride	U		535	1250	500	01/28/2020 22:33	WG1418645
4-Methyl-2-pentanone (MIBK)	U		412	2500	500	01/28/2020 22:33	WG1418645
Methyl tert-butyl ether	U		51.0	250	500	01/28/2020 22:33	WG1418645
Naphthalene	U		87.0	1250	500	01/28/2020 22:33	WG1418645
n-Propylbenzene	U		81.0	250	500	01/28/2020 22:33	WG1418645
Styrene	U		58.5	250	500	01/28/2020 22:33	WG1418645
1,1,1,2-Tetrachloroethane	U		60.0	250	500	01/28/2020 22:33	WG1418645
1,1,2,2-Tetrachloroethane	U		65.0	250	500	01/28/2020 22:33	WG1418645
1,1,2-Trichlorotrifluoroethane	U		82.0	250	500	01/28/2020 22:33	WG1418645
Tetrachloroethene	160	J	99.5	250	500	01/28/2020 22:33	WG1418645
Toluene	U		206	250	500	01/28/2020 22:33	WG1418645
1,2,3-Trichlorobenzene	U		82.0	250	500	01/28/2020 22:33	WG1418645
1,2,4-Trichlorobenzene	U		178	250	500	01/28/2020 22:33	WG1418645
1,1,1-Trichloroethane	U		47.0	250	500	01/28/2020 22:33	WG1418645
1,1,2-Trichloroethane	U		93.0	250	500	01/28/2020 22:33	WG1418645
Trichloroethene	115	J	76.5	250	500	01/28/2020 22:33	WG1418645
Trichlorofluoromethane	U		65.0	1250	500	01/28/2020 22:33	WG1418645
1,2,3-Trichloropropane	U		123	1250	500	01/28/2020 22:33	WG1418645

JC 2/14/2020

1 Cp
2 Tc
3 Ss
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Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,2,4-Trimethylbenzene	U		61.5	250	500	01/28/2020 22:33	WG1418645
1,2,3-Trimethylbenzene	U		36.9	250	500	01/28/2020 22:33	WG1418645
1,3,5-Trimethylbenzene	U		62.0	250	500	01/28/2020 22:33	WG1418645
Vinyl acetate	U		322	2500	500	01/28/2020 22:33	WG1418645
Vinyl chloride	1550		59.0	250	500	01/28/2020 22:33	WG1418645
Xylenes, Total	U		158	750	500	01/28/2020 22:33	WG1418645
(S) Toluene-d8	*95.3*			*80.0-120*		*01/28/2020 22:33*	WG1418645
(S) 4-Bromofluorobenzene	*91.8*			*77.0-126*		*01/28/2020 22:33*	WG1418645
(S) 1,2-Dichloroethane-d4	*99.2*			*70.0-130*		*01/28/2020 22:33*	WG1418645

JC 2/14/2020

Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	142000		2710	20000	1	01/28/2020 19:45	WG1418552

Sample Narrative:

L1183293-02 WG1418552: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	11600		51.9	1000	1	01/28/2020 15:44	WG1418181
Nitrate	U		22.7	100	1	01/28/2020 15:44	WG1418181
Sulfate	13200		77.4	5000	1	01/28/2020 15:44	WG1418181

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	3030	~~B~~	102	1000	1	01/31/2020 04:56	WG1419929

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	9620		15.0	100	1	01/29/2020 18:22	WG1418373
Manganese	562		0.250	5.00	1	01/29/2020 18:22	WG1418373

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	42.2	U ~~B J~~	31.6	100	1	01/28/2020 15:23	WG1418226
(S) a,a,a-Trifluorotoluene(FID)	*96.9*			*78.0-120*		*01/28/2020 15:23*	WG1418226

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	34.6	J+	0.287	0.678	1	01/30/2020 11:49	WG1419485
Ethane	U		0.296	1.29	1	01/30/2020 11:49	WG1419485
Ethene	U		0.422	1.27	1	01/30/2020 11:49	WG1419485

JC 2/14/2020

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U		1.05	25.0	1	01/28/2020 22:52	WG1418645
Acrylonitrile	U		0.873	5.00	1	01/28/2020 22:52	WG1418645
Benzene	U		0.0896	0.500	1	01/28/2020 22:52	WG1418645
Bromobenzene	U		0.133	0.500	1	01/28/2020 22:52	WG1418645
Bromodichloromethane	U		0.0800	0.500	1	01/28/2020 22:52	WG1418645
Bromochloromethane	U		0.145	0.500	1	01/28/2020 22:52	WG1418645
Bromoform	U		0.186	0.500	1	01/28/2020 22:52	WG1418645
Bromomethane	U	~~J4~~	0.157	2.50	1	01/28/2020 22:52	WG1418645
n-Butylbenzene	U		0.143	0.500	1	01/28/2020 22:52	WG1418645
sec-Butylbenzene	U		0.134	0.500	1	01/28/2020 22:52	WG1418645
tert-Butylbenzene	U		0.183	0.500	1	01/28/2020 22:52	WG1418645
Carbon disulfide	0.870		0.101	0.500	1	01/28/2020 22:52	WG1418645
Carbon tetrachloride	U		0.159	0.500	1	01/28/2020 22:52	WG1418645

1 Cp
2 Tc
3 Ss
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5 Sr
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7 Gl
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Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chlorobenzene	U		0.140	0.500	1	01/28/2020 22:52	WG1418645
Chlorodibromomethane	U		0.128	0.500	1	01/28/2020 22:52	WG1418645
Chloroethane	U		0.141	2.50	1	01/28/2020 22:52	WG1418645
Chloroform	U		0.0860	0.500	1	01/28/2020 22:52	WG1418645
Chloromethane	U		0.153	1.25	1	01/28/2020 22:52	WG1418645
2-Chlorotoluene	U		0.111	0.500	1	01/28/2020 22:52	WG1418645
4-Chlorotoluene	U		0.0972	0.500	1	01/28/2020 22:52	WG1418645
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	01/28/2020 22:52	WG1418645
1,2-Dibromoethane	U		0.193	0.500	1	01/28/2020 22:52	WG1418645
Dibromomethane	U		0.117	0.500	1	01/28/2020 22:52	WG1418645
1,2-Dichlorobenzene	U		0.101	0.500	1	01/28/2020 22:52	WG1418645
1,3-Dichlorobenzene	U		0.130	0.500	1	01/28/2020 22:52	WG1418645
1,4-Dichlorobenzene	U		0.121	0.500	1	01/28/2020 22:52	WG1418645
Dichlorodifluoromethane	U		0.127	2.50	1	01/28/2020 22:52	WG1418645
1,1-Dichloroethane	U		0.114	0.500	1	01/28/2020 22:52	WG1418645
1,2-Dichloroethane	U		0.108	0.500	1	01/28/2020 22:52	WG1418645
1,1-Dichloroethene	U		0.188	0.500	1	01/28/2020 22:52	WG1418645
cis-1,2-Dichloroethene	U		0.0933	0.500	1	01/28/2020 22:52	WG1418645
trans-1,2-Dichloroethene	U		0.152	0.500	1	01/28/2020 22:52	WG1418645
1,2-Dichloropropane	U		0.190	0.500	1	01/28/2020 22:52	WG1418645
1,1-Dichloropropene	U		0.128	0.500	1	01/28/2020 22:52	WG1418645
1,3-Dichloropropane	U		0.147	1.00	1	01/28/2020 22:52	WG1418645
cis-1,3-Dichloropropene	U		0.0976	0.500	1	01/28/2020 22:52	WG1418645
trans-1,3-Dichloropropene	U		0.222	0.500	1	01/28/2020 22:52	WG1418645
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	01/28/2020 22:52	WG1418645
2,2-Dichloropropane	U		0.0929	0.500	1	01/28/2020 22:52	WG1418645
Di-isopropyl ether	U		0.0924	0.500	1	01/28/2020 22:52	WG1418645
Ethylbenzene	U		0.158	0.500	1	01/28/2020 22:52	WG1418645
Hexachloro-1,3-butadiene	U		0.157	1.00	1	01/28/2020 22:52	WG1418645
2-Hexanone	U		0.757	5.00	1	01/28/2020 22:52	WG1418645
n-Hexane	U		0.305	5.00	1	01/28/2020 22:52	WG1418645
Iodomethane	U UJ	J0	0.377	10.0	1	01/28/2020 22:52	WG1418645
Isopropylbenzene	U		0.126	0.500	1	01/28/2020 22:52	WG1418645
p-Isopropyltoluene	U		0.138	0.500	1	01/28/2020 22:52	WG1418645
2-Butanone (MEK)	U		1.28	5.00	1	01/28/2020 22:52	WG1418645
Methylene Chloride	U		1.07	2.50	1	01/28/2020 22:52	WG1418645
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	01/28/2020 22:52	WG1418645
Methyl tert-butyl ether	U		0.102	0.500	1	01/28/2020 22:52	WG1418645
Naphthalene	U		0.174	2.50	1	01/28/2020 22:52	WG1418645
n-Propylbenzene	U		0.162	0.500	1	01/28/2020 22:52	WG1418645
Styrene	U		0.117	0.500	1	01/28/2020 22:52	WG1418645
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	01/28/2020 22:52	WG1418645
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	01/28/2020 22:52	WG1418645
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	01/28/2020 22:52	WG1418645
Tetrachloroethene	U		0.199	0.500	1	01/28/2020 22:52	WG1418645
Toluene	U		0.412	0.500	1	01/28/2020 22:52	WG1418645
1,2,3-Trichlorobenzene	U		0.164	0.500	1	01/28/2020 22:52	WG1418645
1,2,4-Trichlorobenzene	U		0.355	0.500	1	01/28/2020 22:52	WG1418645
1,1,1-Trichloroethane	U		0.0940	0.500	1	01/28/2020 22:52	WG1418645
1,1,2-Trichloroethane	U		0.186	0.500	1	01/28/2020 22:52	WG1418645
Trichloroethene	U		0.153	0.500	1	01/28/2020 22:52	WG1418645
Trichlorofluoromethane	U		0.130	2.50	1	01/28/2020 22:52	WG1418645
1,2,3-Trichloropropane	U		0.247	2.50	1	01/28/2020 22:52	WG1418645
1,2,4-Trimethylbenzene	U		0.123	0.500	1	01/28/2020 22:52	WG1418645
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	01/28/2020 22:52	WG1418645
1,3,5-Trimethylbenzene	U		0.124	0.500	1	01/28/2020 22:52	WG1418645

JC 2/14/2020

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Vinyl acetate	U		0.645	5.00	1	01/28/2020 22:52	WG1418645
Vinyl chloride	U		0.118	0.500	1	01/28/2020 22:52	WG1418645
Xylenes, Total	U		0.316	1.50	1	01/28/2020 22:52	WG1418645
(S) Toluene-d8	*96.9*			*80.0-120*		*01/28/2020 22:52*	WG1418645
(S) 4-Bromofluorobenzene	*93.9*			*77.0-126*		*01/28/2020 22:52*	WG1418645
(S) 1,2-Dichloroethane-d4	*101*			*70.0-130*		*01/28/2020 22:52*	WG1418645

JC 2/14/2020

Wet Chemistry by Method 2320 B-2011

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Alkalinity	137000		2710	20000	1	01/28/2020 19:54	WG1418552

Sample Narrative:

L1183293-03 WG1418552: Endpoint pH 4.5

Wet Chemistry by Method 9056A

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Chloride	14100		51.9	1000	1	01/28/2020 16:49	WG1418181
Nitrate	U		22.7	100	1	01/28/2020 16:49	WG1418181
Sulfate	48600		77.4	5000	1	01/28/2020 16:49	WG1418181

Wet Chemistry by Method 9060A

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
TOC (Total Organic Carbon)	2200	~~B~~	102	1000	1	01/31/2020 05:09	WG1419929

Metals (ICPMS) by Method 6020B

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Iron	21900		15.0	100	1	01/29/2020 18:25	WG1418373
Manganese	711		0.250	5.00	1	01/29/2020 18:25	WG1418373

Volatile Organic Compounds (GC) by Method NWTPHGX

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Gasoline Range Organics-NWTPH	U		31.6	100	1	01/28/2020 15:44	WG1418226
(S) a,a,a-Trifluorotoluene(FID)	*96.9*			*78.0-120*		*01/28/2020 15:44*	WG1418226

Volatile Organic Compounds (GC) by Method RSK175

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Methane	564		0.287	0.678	1	01/30/2020 11:52	WG1419485
Ethane	U		0.296	1.29	1	01/30/2020 11:52	WG1419485
Ethene	U		0.422	1.27	1	01/30/2020 11:52	WG1419485

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

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Acetone	U		1.05	25.0	1	01/28/2020 23:12	WG1418645
Acrylonitrile	U		0.873	5.00	1	01/28/2020 23:12	WG1418645
Benzene	U		0.0896	0.500	1	01/28/2020 23:12	WG1418645
Bromobenzene	U		0.133	0.500	1	01/28/2020 23:12	WG1418645
Bromodichloromethane	U		0.0800	0.500	1	01/28/2020 23:12	WG1418645
Bromochloromethane	U		0.145	0.500	1	01/28/2020 23:12	WG1418645
Bromoform	U		0.186	0.500	1	01/28/2020 23:12	WG1418645
Bromomethane	U	~~J4~~	0.157	2.50	1	01/28/2020 23:12	WG1418645
n-Butylbenzene	U		0.143	0.500	1	01/28/2020 23:12	WG1418645
sec-Butylbenzene	U		0.134	0.500	1	01/28/2020 23:12	WG1418645
tert-Butylbenzene	U		0.183	0.500	1	01/28/2020 23:12	WG1418645
Carbon disulfide	U		0.101	0.500	1	01/28/2020 23:12	WG1418645
Carbon tetrachloride	U		0.159	0.500	1	01/28/2020 23:12	WG1418645

JC 2/14/2020

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

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch	
Chlorobenzene	U		0.140	0.500	1	01/28/2020 23:12	WG1418645	
Chlorodibromomethane	U		0.128	0.500	1	01/28/2020 23:12	WG1418645	
Chloroethane	U		0.141	2.50	1	01/28/2020 23:12	WG1418645	
Chloroform	U		0.0860	0.500	1	01/28/2020 23:12	WG1418645	
Chloromethane	U		0.153	1.25	1	01/28/2020 23:12	WG1418645	
2-Chlorotoluene	U		0.111	0.500	1	01/28/2020 23:12	WG1418645	
4-Chlorotoluene	U		0.0972	0.500	1	01/28/2020 23:12	WG1418645	
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	01/28/2020 23:12	WG1418645	
1,2-Dibromoethane	U		0.193	0.500	1	01/28/2020 23:12	WG1418645	
Dibromomethane	U		0.117	0.500	1	01/28/2020 23:12	WG1418645	
1,2-Dichlorobenzene	U		0.101	0.500	1	01/28/2020 23:12	WG1418645	
1,3-Dichlorobenzene	U		0.130	0.500	1	01/28/2020 23:12	WG1418645	
1,4-Dichlorobenzene	U		0.121	0.500	1	01/28/2020 23:12	WG1418645	
Dichlorodifluoromethane	U		0.127	2.50	1	01/28/2020 23:12	WG1418645	
1,1-Dichloroethane	U		0.114	0.500	1	01/28/2020 23:12	WG1418645	
1,2-Dichloroethane	U		0.108	0.500	1	01/28/2020 23:12	WG1418645	
1,1-Dichloroethene	U		0.188	0.500	1	01/28/2020 23:12	WG1418645	
cis-1,2-Dichloroethene	U		0.0933	0.500	1	01/28/2020 23:12	WG1418645	
trans-1,2-Dichloroethene	U		0.152	0.500	1	01/28/2020 23:12	WG1418645	
1,2-Dichloropropane	U		0.190	0.500	1	01/28/2020 23:12	WG1418645	
1,1-Dichloropropene	U		0.128	0.500	1	01/28/2020 23:12	WG1418645	
1,3-Dichloropropane	U		0.147	1.00	1	01/28/2020 23:12	WG1418645	
cis-1,3-Dichloropropene	U		0.0976	0.500	1	01/28/2020 23:12	WG1418645	
trans-1,3-Dichloropropene	U		0.222	0.500	1	01/28/2020 23:12	WG1418645	
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	01/28/2020 23:12	WG1418645	
2,2-Dichloropropane	U		0.0929	0.500	1	01/28/2020 23:12	WG1418645	
Di-isopropyl ether	U		0.0924	0.500	1	01/28/2020 23:12	WG1418645	
Ethylbenzene	U		0.158	0.500	1	01/28/2020 23:12	WG1418645	
Hexachloro-1,3-butadiene	U		0.157	1.00	1	01/28/2020 23:12	WG1418645	
2-Hexanone	U		0.757	5.00	1	01/28/2020 23:12	WG1418645	
n-Hexane	U		0.305	5.00	1	01/28/2020 23:12	WG1418645	
Iodomethane	U UJ	J0	0.377	10.0	1	01/28/2020 23:12	WG1418645	
Isopropylbenzene	U		0.126	0.500	1	01/28/2020 23:12	WG1418645	
p-Isopropyltoluene	U		0.138	0.500	1	01/28/2020 23:12	WG1418645	
2-Butanone (MEK)	U		1.28	5.00	1	01/28/2020 23:12	WG1418645	
Methylene Chloride	U		1.07	2.50	1	01/28/2020 23:12	WG1418645	
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	01/28/2020 23:12	WG1418645	
Methyl tert-butyl ether	U		0.102	0.500	1	01/28/2020 23:12	WG1418645	
Naphthalene	U		0.174	2.50	1	01/28/2020 23:12	WG1418645	
n-Propylbenzene	U		0.162	0.500	1	01/28/2020 23:12	WG1418645	
Styrene	U		0.117	0.500	1	01/28/2020 23:12	WG1418645	
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	01/28/2020 23:12	WG1418645	
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	01/28/2020 23:12	WG1418645	
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	01/28/2020 23:12	WG1418645	
Tetrachloroethene	U		0.199	0.500	1	01/28/2020 23:12	WG1418645	
Toluene	U		0.412	0.500	1	01/28/2020 23:12	WG1418645	
1,2,3-Trichlorobenzene	U		0.164	0.500	1	01/28/2020 23:12	WG1418645	
1,2,4-Trichlorobenzene	U		0.355	0.500	1	01/28/2020 23:12	WG1418645	
1,1,1-Trichloroethane	U		0.0940	0.500	1	01/28/2020 23:12	WG1418645	
1,1,2-Trichloroethane	U		0.186	0.500	1	01/28/2020 23:12	WG1418645	
Trichloroethene	U		0.153	0.500	1	01/28/2020 23:12	WG1418645	
Trichlorofluoromethane	U		0.130	2.50	1	01/28/2020 23:12	WG1418645	
1,2,3-Trichloropropane	U		0.247	2.50	1	01/28/2020 23:12	WG1418645	JC 2/14/2020
1,2,4-Trimethylbenzene	U		0.123	0.500	1	01/28/2020 23:12	WG1418645	
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	01/28/2020 23:12	WG1418645	
1,3,5-Trimethylbenzene	U		0.124	0.500	1	01/28/2020 23:12	WG1418645	

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Vinyl acetate	U		0.645	5.00	1	01/28/2020 23:12	WG1418645
Vinyl chloride	U		0.118	0.500	1	01/28/2020 23:12	WG1418645
Xylenes, Total	U		0.316	1.50	1	01/28/2020 23:12	WG1418645
(S) Toluene-d8	*96.6*			*80.0-120*		*01/28/2020 23:12*	WG1418645
(S) 4-Bromofluorobenzene	*96.9*			*77.0-126*		*01/28/2020 23:12*	WG1418645
(S) 1,2-Dichloroethane-d4	*96.7*			*70.0-130*		*01/28/2020 23:12*	WG1418645

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

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Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	586000		2710	20000	1	01/28/2020 20:08	WG1418552

Sample Narrative:

L1183293-05 WG1418552: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	169000		260	5000	5	01/28/2020 17:28	WG1418181
Nitrate	U		22.7	100	1	01/28/2020 17:15	WG1418181
Sulfate	749	U ~~BJ~~	77.4	5000	1	01/28/2020 17:15	WG1418181

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	46400		1020	10000	10	01/31/2020 05:56	WG1419929

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	11400		15.0	100	1	01/29/2020 18:31	WG1418373
Manganese	1870		0.250	5.00	1	01/29/2020 18:31	WG1418373

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	9090	Z, J+	158	500	5	01/28/2020 16:27	WG1418226
(S) a,a,a-Trifluorotoluene(FID)	*96.7*			*78.0-120*		*01/28/2020 16:27*	WG1418226

Sample Narrative:

L1183293-05 WG1418226: No discernable petroleum pattern.

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	17500		2.87	6.78	10	01/31/2020 13:29	WG1420207
Ethane	7.62		0.296	1.29	1	01/30/2020 12:02	WG1419485
Ethene	2370		0.422	1.27	1	01/30/2020 12:02	WG1419485

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U		525	12500	500	01/28/2020 23:51	WG1418645
Acrylonitrile	U		437	2500	500	01/28/2020 23:51	WG1418645
Benzene	U		44.8	250	500	01/28/2020 23:51	WG1418645
Bromobenzene	U		66.5	250	500	01/28/2020 23:51	WG1418645
Bromodichloromethane	U		40.0	250	500	01/28/2020 23:51	WG1418645
Bromochloromethane	U		72.5	250	500	01/28/2020 23:51	WG1418645
Bromoform	U		93.0	250	500	01/28/2020 23:51	WG1418645
Bromomethane	U	~~J4~~	78.5	1250	500	01/28/2020 23:51	WG1418645
n-Butylbenzene	U		71.5	250	500	01/28/2020 23:51	WG1418645
sec-Butylbenzene	U		67.0	250	500	01/28/2020 23:51	WG1418645

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
tert-Butylbenzene	U		91.5	250	500	01/28/2020 23:51	WG1418645
Carbon disulfide	U		50.5	250	500	01/28/2020 23:51	WG1418645
Carbon tetrachloride	U		79.5	250	500	01/28/2020 23:51	WG1418645
Chlorobenzene	U		70.0	250	500	01/28/2020 23:51	WG1418645
Chlorodibromomethane	U		64.0	250	500	01/28/2020 23:51	WG1418645
Chloroethane	U		70.5	1250	500	01/28/2020 23:51	WG1418645
Chloroform	U		43.0	250	500	01/28/2020 23:51	WG1418645
Chloromethane	U		76.5	625	500	01/28/2020 23:51	WG1418645
2-Chlorotoluene	U		55.5	250	500	01/28/2020 23:51	WG1418645
4-Chlorotoluene	U		48.6	250	500	01/28/2020 23:51	WG1418645
1,2-Dibromo-3-Chloropropane	U		163	1250	500	01/28/2020 23:51	WG1418645
1,2-Dibromoethane	U		96.5	250	500	01/28/2020 23:51	WG1418645
Dibromomethane	U		58.5	250	500	01/28/2020 23:51	WG1418645
1,2-Dichlorobenzene	U		50.5	250	500	01/28/2020 23:51	WG1418645
1,3-Dichlorobenzene	U		65.0	250	500	01/28/2020 23:51	WG1418645
1,4-Dichlorobenzene	U		60.5	250	500	01/28/2020 23:51	WG1418645
Dichlorodifluoromethane	U		63.5	1250	500	01/28/2020 23:51	WG1418645
1,1-Dichloroethane	U		57.0	250	500	01/28/2020 23:51	WG1418645
1,2-Dichloroethane	U		54.0	250	500	01/28/2020 23:51	WG1418645
1,1-Dichloroethene	U		94.0	250	500	01/28/2020 23:51	WG1418645
cis-1,2-Dichloroethene	18400		46.7	250	500	01/28/2020 23:51	WG1418645
trans-1,2-Dichloroethene	151	J	76.0	250	500	01/28/2020 23:51	WG1418645
1,2-Dichloropropane	U		95.0	250	500	01/28/2020 23:51	WG1418645
1,1-Dichloropropene	U		64.0	250	500	01/28/2020 23:51	WG1418645
1,3-Dichloropropane	U		73.5	500	500	01/28/2020 23:51	WG1418645
cis-1,3-Dichloropropene	U		48.8	250	500	01/28/2020 23:51	WG1418645
trans-1,3-Dichloropropene	U		111	250	500	01/28/2020 23:51	WG1418645
trans-1,4-Dichloro-2-butene	U		129	2500	500	01/28/2020 23:51	WG1418645
2,2-Dichloropropane	U		46.5	250	500	01/28/2020 23:51	WG1418645
Di-isopropyl ether	U		46.2	250	500	01/28/2020 23:51	WG1418645
Ethylbenzene	U		79.0	250	500	01/28/2020 23:51	WG1418645
Hexachloro-1,3-butadiene	U		78.5	500	500	01/28/2020 23:51	WG1418645
2-Hexanone	U		379	2500	500	01/28/2020 23:51	WG1418645
n-Hexane	U		153	2500	500	01/28/2020 23:51	WG1418645
Iodomethane	U UJ	J0	189	5000	500	01/28/2020 23:51	WG1418645
Isopropylbenzene	U		63.0	250	500	01/28/2020 23:51	WG1418645
p-Isopropyltoluene	U		69.0	250	500	01/28/2020 23:51	WG1418645
2-Butanone (MEK)	U		640	2500	500	01/28/2020 23:51	WG1418645
Methylene Chloride	U		535	1250	500	01/28/2020 23:51	WG1418645
4-Methyl-2-pentanone (MIBK)	U		412	2500	500	01/28/2020 23:51	WG1418645
Methyl tert-butyl ether	U		51.0	250	500	01/28/2020 23:51	WG1418645
Naphthalene	U		87.0	1250	500	01/28/2020 23:51	WG1418645
n-Propylbenzene	U		81.0	250	500	01/28/2020 23:51	WG1418645
Styrene	U		58.5	250	500	01/28/2020 23:51	WG1418645
1,1,1,2-Tetrachloroethane	U		60.0	250	500	01/28/2020 23:51	WG1418645
1,1,2,2-Tetrachloroethane	U		65.0	250	500	01/28/2020 23:51	WG1418645
1,1,2-Trichlorotrifluoroethane	U		82.0	250	500	01/28/2020 23:51	WG1418645
Tetrachloroethene	U		99.5	250	500	01/28/2020 23:51	WG1418645
Toluene	U		206	250	500	01/28/2020 23:51	WG1418645
1,2,3-Trichlorobenzene	U		82.0	250	500	01/28/2020 23:51	WG1418645
1,2,4-Trichlorobenzene	U		178	250	500	01/28/2020 23:51	WG1418645
1,1,1-Trichloroethane	U		47.0	250	500	01/28/2020 23:51	WG1418645
1,1,2-Trichloroethane	U		93.0	250	500	01/28/2020 23:51	WG1418645
Trichloroethene	U		76.5	250	500	01/28/2020 23:51	WG1418645
Trichlorofluoromethane	U		65.0	1250	500	01/28/2020 23:51	WG1418645
1,2,3-Trichloropropane	U		123	1250	500	01/28/2020 23:51	WG1418645

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,2,4-Trimethylbenzene	U		61.5	250	500	01/28/2020 23:51	WG1418645
1,2,3-Trimethylbenzene	U		36.9	250	500	01/28/2020 23:51	WG1418645
1,3,5-Trimethylbenzene	U		62.0	250	500	01/28/2020 23:51	WG1418645
Vinyl acetate	U		322	2500	500	01/28/2020 23:51	WG1418645
Vinyl chloride	9660		59.0	250	500	01/28/2020 23:51	WG1418645
Xylenes, Total	U		158	750	500	01/28/2020 23:51	WG1418645
(S) Toluene-d8	*96.0*			*80.0-120*		*01/28/2020 23:51*	WG1418645
(S) 4-Bromofluorobenzene	*92.1*			*77.0-126*		*01/28/2020 23:51*	WG1418645
(S) 1,2-Dichloroethane-d4	*97.9*			*70.0-130*		*01/28/2020 23:51*	WG1418645

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MEMORANDUM

TO: Project File **DATE:** February 19, 2020

FROM: Jessie Compeau

SUBJECT: Laboratory Data Validation Review

PROJECT: American Linen Data Validation

PROJECT #: 1413.001.02.501E

TASK: EIM Data Validation Level EPA2A for 1st Quarter 2020 – Groundwater Samples

LAB: Pace Sample Delivery Groups (SDGs): L1183332, L1183659, L1183749, and L1184164

Eighteen (18) groundwater samples (including one field duplicate sample) and two trip blanks were collected as part of the Remedial Investigation (RI) first quarter of 2020 groundwater sampling event at the Former American Linen Supply Site, in Seattle, Washington on January 27-29, 2020. The samples were shipped and delivered to Pace Lab Sciences (Pace) of Mount Juliet, TN for laboratory analysis. Selected samples were analyzed for the following:

- Volatile organic compounds (VOCs) by United States Environmental Protection Agency (USEPA) Method 8260D;
- Total petroleum hydrocarbons as gasoline (TPH-Gx) by NWTPH-Gx per analytical method stipulated by Washington State Department of Ecology;
- VOCs (dissolved gases – methane, ethane, and ethene) by EPA SOP RSK 175;
- Alkalinity by Method 2320 B-2011;
- Anions (chloride, nitrate, and sulfate) by USEPA Method 9056A;
- Total Organic Carbon (TOC) by USEPA Method 9060A; and
- Metals (iron and manganese) by USEPA Method 6020B.

Results are reported in multiple SDGs from Pace. Pace SDGs are reviewed in groups (less than 10 SDGs) for each data validation report. Group 4 analytical results are reported in SDGs L1183332, L1183659, L1183749, and L1184164. The quality assurance review of the laboratory data associated with Group 4 is summarized below.

DATA QUALIFICATIONS

Guidelines established by USEPA for a limited data validation review of analytical data along with Pace control limit criteria were used to validate the data. The comments presented in this memorandum refer to the laboratory's performance in meeting the quality control criteria outlined in the USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (USEPA, 2017) and USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Superfund Methods Data Review

(USEPA, 2017). Following Guidelines, non-project-specific laboratory duplicates and matrix spike results were not evaluated as part of this data validation.

DATA VALIDATION

Completeness

All samples were collected and analyzed as requested with the following discussion:

- SDG L1184164: Dates of sample collection are not listed on the chain of custody for three samples and the trip blank (drop down arrow was not included). No action is taken other than to note that the dates of collection are included within the sample identification.

Sample Collection and Preservation

Samples were collected in laboratory-supplied sample containers preserved as appropriate for the individual analyses conducted. The samples were packed on ice in coolers and delivered by courier to the analytical laboratory. The laboratory reported that the coolers were received at a cooler temperature less than the recommended temperature preservation of 6°C. Samples were received in good condition. No data were qualified based upon the sample collection and preservation information.

Holding Times

USEPA Method 8260D:
All samples were analyzed for VOCs within the EPA recommended holding time of fourteen days for preserved waters from the date of collection. All holding time criteria are met.

NWTPH-Gx Method:
All samples were analyzed within the WA State recommended holding time of fourteen days for preserved waters from the date of sample collection. All holding time criteria are met.

Dissolved Gases (Methane, Ethane, and Ethene) by RSK 175:
All samples were analyzed within the WA State recommended holding time of fourteen days for preserved waters from the date of sample collection. All holding time criteria are met.

USEPA Method 6020B:
All samples were analyzed within the USEPA recommended holding time for iron and manganese of 180 days for preserved waters from the date of sample collection. All holding time criteria are met.

General Chemistry (Alkalinity, Chloride, Sulfate, Nitrate, and TOC):
All samples were analyzed within the USEPA recommended holding time for alkalinity (14 days), chloride (28 days), sulfate (28 days), and nitrate (48 hours), and TOC (28 days) for preserved waters from the date of sample collection. All holding time criteria are met.

Initial and Continuing Calibration

Calibration data for this project are not required for this deliverable however Pace's notes indicate the following:

- Multiple SDGs - *USEPA Method 8260D:* Continuing calibration verification (CCV) issues were noted by Pace for multiple compounds associated with analytical batches in each SDG. These compounds are qualified by the laboratory "J0" to indicate that percent difference CCV is outside of laboratory acceptance criteria. **Associated sample results with laboratory qualified (J0) results are estimated and qualified (J/UJ).**

Method Blank Results

USEPA Method 8260D:
Laboratory method blanks were included with the analytical batches per method requirement. The target analytes were not detected in the method blanks at or above the reporting detection limits (RDLs) with the following exceptions:

- SDGs L1183749 and L1184164 – Analytical batch WG1420688: A low level of 1,2,4-trimethylbenzene is detected in the method blank. No action is taken for this compound as it is not detected in the associated samples.

NWTPH-Gx Method:
Laboratory method blanks were included with the analytical batches per method requirement. The target analyte (gasoline) was not detected in the method blanks at or above the RDLs with the following exceptions:

- SDG L1183332 – Analytical batch WG1418226: A low level gasoline concentration is detected in the method blank. **The associated gasoline range organic (GRO) detection in sample MW-183-012720 is below the RDL and qualified as not detected (U) due to method contamination.**

- SDG L1183659 – Analytical batch WG1419920: A low level gasoline concentration is detected in the method blank. **The associated GRO detection in sample MW-176-012820 is below the RDL and qualified as not detected (U) due to method or trip blank contamination.**

- SDG L1183749 – Analytical batch WG1419920: A low level gasoline concentration is detected in the method blank. **The associated GRO detections in samples MW-926-012820, MW-175-012820, MW-161-012820, and MW-167-012820 are below the RDL and qualified as not detected (U) due to method blank contamination.**

- SDG L1184164 – Analytical batch WG1419920: A low level gasoline concentration is detected in the method blank. **The associated GRO detections in samples MW-187-012920, MW-160-012920, and MW-188-012920 are below the RDL and qualified as not detected (U) due to method or trip blank contamination.**

Dissolved Gases (Methane, Ethane, and Ethene) by RSK 175:
Laboratory method blanks were included with the analytical batches per method requirement. The target analytes (dissolved gases) are not detected in the method blanks at or above the RDLs.

USEPA Method 6020B and General Chemistry (Alkalinity, Chloride, Sulfate, Nitrate, and TOC):
Laboratory method blanks were included with the analytical batches per method requirement. The target analytes were detected in the method blanks below the RDLs. Per Guidance, no action is taken for blank detections less than the RDL when associated sample detections are greater than the RDL. General chemistry and metal blank detections are shown below:

SDG	Batch	Method	Analyte	Method Blank Result	Qualifier	RDL	Units	Associated Result(s) Qualified
L1183332	WG1418552	SM2320B	Alkalinity as CaCO3, Total	6840	J	20000	µg/L	NO
L1183332	WG1418181	9056A	Chloride	417	J	1000	µg/L	NO
L1183332	WG1418181	9056A	Sulfate	569	J	5000	µg/L	**YES**
L1183332	WG1419929	9060A	TOC	356	J	1000	µg/L	NO
L1183659	WG1419044	SM2320B	Alkalinity as CaCO3, Total	3870	J	20000	µg/L	NO
L1183659	WG1420575	9060A	TOC	488	J	1000	µg/L	NO
L1183749	WG1419044	SM2320B	Alkalinity as CaCO3, Total	3870	J	20000	µg/L	NO
L1183749	WG1420575	9060A	TOC	488	J	1000	µg/L	NO
L1184164	WG1419673	SM2320B	Alkalinity as CaCO3, Total	4030	J	20000	µg/L	NO
L1184164	WG1421496	9060A	TOC	361	J	1000	µg/L	NO
L1184164	WG1419838	6020B	Manganese	0.279	J	5.00	µg/L	NO

Target analytes were detected in method blanks at low levels with no impact to the associated samples with the following exception:

- SDG L1183332 – Analytical batch WG1418181: A low level of sulfate is detected in the method blank. **Sample MW-183-012720 sulfate detection is below the RDL and is qualified as not detected (U).**

Trip Blank Results

USEPA Method 8260D and NWTPH-Gx:
Two trip blanks were collected and analyzed. The target analytes (gasoline and VOCs) were not detected in the trip blanks at or above the RDLs with the following exceptions:

- SDG L1183659: Low levels of gasoline and acetone are detected in the trip blank (TB-012820). **A low level of acetone is detected in the associated sample MW-173-012820 and is qualified as not detected (U) due to trip blank contamination. The associated GRO detection in sample MW-176-012820 is below the RDL and qualified as not detected (U) due to method or trip blank contamination.**

- SDG L1184164 – Analytical batch WG1419920: A low level gasoline concentration is detected in the trip and associated method blank. **The associated GRO detections in**

samples MW-187-012920, MW-160-012920, and MW-188-012920 are below the RDL and qualified as not detected (U) due to method or trip blank contamination.

Field, Rinsate, or Equipment Blank Results

All Analytical Methods:
A field, rinsate, or equipment blank was not collected.

Field Duplicate Analyses

Field duplicate sample pair is identified as follows:

- Samples MW-176-012820 (SDG L1183659) and MW-926-012820 (SDG L1183749)

Target analyte results are comparable and within a relative percent difference (RPD) of 30% (± 1x RDL for groundwater results <5X the RDL) for the field duplicate pair.

Laboratory Duplicate Analyses

USEPA Method 8260D:
Laboratory duplicate samples were not analyzed. Refer to laboratory control sample/sample duplicate (LCS/LCSD) results for precision data.

NWTPH-Gx Method:
Laboratory duplicate samples were not analyzed. Refer to field duplicate results for precision data.

Dissolved Gases (Methane, Ethane, and Ethene) by RSK 175:
Laboratory duplicate sample analyses were performed on client and non-client samples within the analytical batches. The primary/duplicate RPDs for dissolved gas analyses are within the laboratory control limit of 20%.

USEPA Method 6020B:
Laboratory duplicate samples were not analyzed. Refer to LCS/LCSD or MS/MSD results for precision data.

General Chemistry (Alkalinity, Chloride, Sulfate, Nitrate, and TOC):
Laboratory duplicate sample analyses were performed on client samples and/or on non-client samples. The primary/duplicate RPDs for general chemistry parameters are within the laboratory control RPD limits or ± 1x RDL for groundwater results <5X the RDL.

Surrogate Recoveries

USEPA Method 8260D:
The surrogate recovery results for the samples, laboratory control samples, and the blanks are within the laboratory surrogate control limits for all the analyses.

NWTPH-Gx Method:

The surrogate recovery results for the samples, laboratory control samples, and the blanks are within the laboratory surrogate control limits for all analyses.

Laboratory Control Samples

USEPA Method 8260D:
Laboratory control sample/laboratory control sample duplicate (LCS/LCSD) or laboratory control sample (LCS) were analyzed by USEPA Method 8260D method. The LCS % Rs or LCS/LCSD % Rs and RPDs for the all target compounds are within the laboratory control criteria for waters with the following discussion:

- SDG L1183332 - Analytical batch WG1418843: LCS/LCSD % recoveries for iodomethane are within laboratory acceptance criteria but were recovered wide with an elevated RPD and laboratory qualified (J3). No action is taken other than to note that the recoveries are within criteria.

- SDGs L1183749 and L1184164 - Analytical batch WG1420688: LCS % recovery for carbon tetrachloride, 1,2-dibromo-3-chloropropane, hexachloro-1,3-butadiene, naphthalene, and 1,1,1-trichloroethane are above laboratory acceptance criteria and laboratory qualified (J4). No action is needed because these compounds are not detected in the associated samples.

NWTPH-Gx Method:
The LCS % Rs for the target compound (gasoline) are within the laboratory control criteria for waters. Precision data are not provided for SDGs L1183332, L1183659, L1183749, and L1184164. Refer to field duplicate results for precision data.

Dissolved Gases (Methane, Ethane, and Ethene) by RSK 175:
The LCS/LCSD % Rs and RPDs for the target compound (dissolved gases) are within the laboratory control criteria for waters.

USEPA Method 6020B:
The LCS/LCSD % Rs and RPDs for the target compound (iron and manganese) are within the laboratory control criteria for waters.

General Chemistry (Alkalinity, Chloride, Sulfate, Nitrate, and TOC):
The LCS % Rs for general chemistry parameters are within the laboratory control criteria for waters.

Matrix Spike/Matrix Spike Duplicates

USEPA Method 8260D:
Matrix spike/matrix spike duplicate (MS/MSD) analyses were not performed. Refer to LCS/LCSD results for accuracy and precision data.

NWTPH-Gx Method:
MS/MSD analyses were not performed. Refer to LCS and field duplicate results for accuracy and precision data.

Dissolved Gases (Methane, Ethane, and Ethene) by RSK 175:
MS/MSD analyses were not performed. Refer to LCS/LCSD results and field duplicate sample for accuracy and precision data.

USEPA Method 6020B:
MS/MSD analyses were performed on client and/or non-client samples within the analytical batches. The MS/MSD % Rs and RPD were acceptable and within laboratory control limit criteria for water samples with the following discussion:

- SDG L1184164: Manganese spike analysis was performed on a non-client sample within the analytical batch. MS/MSD recoveries are laboratory qualified (V) because the sample amount is greater than four times the spiked amount. Per Guidance, no action is needed. Refer to laboratory duplicate and laboratory control sample results for precision and accuracy data.

General Chemistry (Alkalinity, Chloride, Sulfate, Nitrate, and TOC):
MS or MS/MSD analyses were performed on client and/or non-client samples within the analytical batches. In cases where MS/MSD spike analyses are not performed refer to LCS/LCSD or laboratory duplicate data for accuracy and precision data. The MS/MSD % Rs and RPDs are acceptable and within laboratory control limit criteria for water samples with the following discussions:

- SDG L1183332: Sulfate spike analysis was performed on client sample W-MW-01-012720. MS/MSD recoveries are laboratory qualified (E) because the spiked amount exceeded the upper limit of the calibration limit. No action is taken other than to note this. Refer to laboratory duplicate and laboratory control sample results for precision and accuracy data.

- SDG L1184164: Sulfate spike analysis was performed on a non-client sample within the analytical batch. MS/MSD recoveries are laboratory qualified (E, J6) because the spiked amount exceeded the upper limit of the calibration limit and sample matrix interference. No action is taken other than to note that this is a non-client sample. Refer to laboratory duplicate and laboratory control sample results for precision and accuracy data.

Other Quality Control Issues

No laboratory quality control issues were identified in the laboratory report with the following discussions:

- Multiple SDGs: Selected sample narratives for alkalinity results indicate that several sample containers had some headspace and exposure to air may have impacted the reported results. No action was taken other than to note this.

- Electronic data deliverables (EDDs) for these SDGs were provided by the laboratory and data validator qualifiers were entered. In some cases, different chemical synonyms are used between the EDD and the hardcopy however associated Chemical Abstracts Service (CAS) numbers are provided in the EDD to confirm chemical identifications.

Compound Identification and Quantitation Limits

Results of the analyses were reported based on laboratory RDLs for all compounds. RDLs for selected compounds are elevated due to method-required dilutions. No action is taken other than to note this.

Gasoline and gasoline range organics are analyzed for via Volatile Organic Compounds (GC) by Washington State Method NWTPHGx (using a gas chromatograph/flame ionization detector (GC/FID)) and Pace reported gasoline range organic-NWTPH results. Several chlorinated VOC compounds (including cis-1,2-dichloroethene, trans-1,2-dichloroethene, trichloroethene, tetrachloroethene, and vinyl chloride) elute within the gasoline range organics (GRO) retention time range as specified by Washington State (detections falling between the toluene and dodecane range).

Non-petroleum organics (e.g. chlorinated VOC compounds) eluting within the gasoline range contribute to the GRO result and GRO results are likely biased high (J+). PES requested that Pace evaluate chromatograms associated with positive sample detections to confirm the potential presence of gasoline. Per PES's request Pace reviewed selected sample chromatograms against the gasoline standard chromatograms and assigned "no discernible petroleum pattern" to GRO results associated with this Task. PES assigned an additional project level qualifier (Z) to GRO results when the chromatogram for the sample does not match a discernible petroleum pattern. Associated chromatograms and qualified samples for this Task are as follows:

Sample ID	Laboratory Identification	Gasoline Range Organic Result (µg/L)	DV Qualifier	Data Validation Comments	Pace Chromatogram Review Notes
MW-179-012720	L1183332-01	501	Z, J+	Elevated chlorinated VOCs detected within the GRO elution range.	No discernible petroleum pattern
MW-184-012720	L1183332-04	462	Z, J+	Elevated chlorinated VOCs detected within the GRO elution range	No discernible petroleum pattern
MW107-012820	L1183749-03	1,890	Z, J+	Elevated chlorinated VOCs detected within the GRO elution range	No discernible petroleum pattern
MW-174-012820	L1183749-04	531	Z, J+	Chlorinated VOCs detected within the GRO elution range	No discernible petroleum pattern

Project level qualifiers have been included to the PES's project database (Epiphany) as (ZJ+). Washington State EIM valid values were reviewed. In this case no Washington State EIM valid value descriptor is ideal and the default estimated value (J) has been selected as the best match to qualify GRO (ZJ+) data.

Data Assessment

The laboratory data reported for this project were reviewed based on the criteria outlined in:

- USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (USEPA, 2017); and
- USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Superfund Methods Data Review (USEPA, 2017).

Data qualifiers are assigned and laboratory report pages with qualifiers are attached. All data, including qualified data, are judged to be acceptable for their intended use.

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

Wet Chemistry by Method 2320 B-2011

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Alkalinity	1270000		2710	20000	1	01/28/2020 20:56	WG1418552

Sample Narrative:

L1183332-01 WG1418552: Endpoint pH 4.5

Wet Chemistry by Method 9056A

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Chloride	121000		260	5000	5	01/28/2020 20:05	WG1418181
Nitrate	U		22.7	100	1	01/28/2020 19:52	WG1418181
Sulfate	8170		77.4	5000	1	01/28/2020 19:52	WG1418181

Wet Chemistry by Method 9060A

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
TOC (Total Organic Carbon)	118000		510	5000	5	01/31/2020 06:14	WG1419929

Metals (ICPMS) by Method 6020B

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Iron	47600		15.0	100	1	01/29/2020 18:35	WG1418373
Manganese	10200		0.250	5.00	1	01/29/2020 18:35	WG1418373

Volatile Organic Compounds (GC) by Method NWTPHGX

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Gasoline Range Organics-NWTPH	501	Z, J+	31.6	100	1	01/28/2020 17:10	WG1418226
(S) a,a,a-Trifluorotoluene(FID)	*97.0*			*78.0-120*		*01/28/2020 17:10*	WG1418226

Sample Narrative:

L1183332-01 WG1418226: No discernable petroleum pattern.

Volatile Organic Compounds (GC) by Method RSK175

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Methane	30100		2.87	6.78	10	01/31/2020 13:32	WG1420207
Ethane	U		0.296	1.29	1	01/30/2020 13:06	WG1419485
Ethene	88.0		0.422	1.27	1	01/30/2020 13:06	WG1419485

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

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Acetone	18.0	J	1.05	25.0	1	01/29/2020 12:28	WG1418843
Acrylonitrile	U		0.873	5.00	1	01/29/2020 12:28	WG1418843
Benzene	U		0.0896	0.500	1	01/29/2020 12:28	WG1418843
Bromobenzene	U		0.133	0.500	1	01/29/2020 12:28	WG1418843
Bromodichloromethane	U		0.0800	0.500	1	01/29/2020 12:28	WG1418843
Bromochloromethane	U		0.145	0.500	1	01/29/2020 12:28	WG1418843
Bromoform	U		0.186	0.500	1	01/29/2020 12:28	WG1418843
Bromomethane	U		0.157	2.50	1	01/29/2020 12:28	WG1418843
n-Butylbenzene	U		0.143	0.500	1	01/29/2020 12:28	WG1418843
sec-Butylbenzene	U		0.134	0.500	1	01/29/2020 12:28	WG1418843

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
tert-Butylbenzene	U		0.183	0.500	1	01/29/2020 12:28	WG1418843
Carbon disulfide	0.289	J	0.101	0.500	1	01/29/2020 12:28	WG1418843
Carbon tetrachloride	U		0.159	0.500	1	01/29/2020 12:28	WG1418843
Chlorobenzene	U		0.140	0.500	1	01/29/2020 12:28	WG1418843
Chlorodibromomethane	U		0.128	0.500	1	01/29/2020 12:28	WG1418843
Chloroethane	4.62		0.141	2.50	1	01/29/2020 12:28	WG1418843
Chloroform	U		0.0860	0.500	1	01/29/2020 12:28	WG1418843
Chloromethane	U		0.153	1.25	1	01/29/2020 12:28	WG1418843
2-Chlorotoluene	U		0.111	0.500	1	01/29/2020 12:28	WG1418843
4-Chlorotoluene	U		0.0972	0.500	1	01/29/2020 12:28	WG1418843
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	01/29/2020 12:28	WG1418843
1,2-Dibromoethane	U		0.193	0.500	1	01/29/2020 12:28	WG1418843
Dibromomethane	U		0.117	0.500	1	01/29/2020 12:28	WG1418843
1,2-Dichlorobenzene	U		0.101	0.500	1	01/29/2020 12:28	WG1418843
1,3-Dichlorobenzene	U		0.130	0.500	1	01/29/2020 12:28	WG1418843
1,4-Dichlorobenzene	U		0.121	0.500	1	01/29/2020 12:28	WG1418843
Dichlorodifluoromethane	U		0.127	2.50	1	01/29/2020 12:28	WG1418843
1,1-Dichloroethane	U		0.114	0.500	1	01/29/2020 12:28	WG1418843
1,2-Dichloroethane	U		0.108	0.500	1	01/29/2020 12:28	WG1418843
1,1-Dichloroethene	2.51		0.188	0.500	1	01/29/2020 12:28	WG1418843
cis-1,2-Dichloroethene	941		1.87	10.0	20	02/04/2020 12:11	WG1421709
trans-1,2-Dichloroethene	7.07		0.152	0.500	1	01/29/2020 12:28	WG1418843
1,2-Dichloropropane	U		0.190	0.500	1	01/29/2020 12:28	WG1418843
1,1-Dichloropropene	U		0.128	0.500	1	01/29/2020 12:28	WG1418843
1,3-Dichloropropane	U		0.147	1.00	1	01/29/2020 12:28	WG1418843
cis-1,3-Dichloropropene	U		0.0976	0.500	1	01/29/2020 12:28	WG1418843
trans-1,3-Dichloropropene	U		0.222	0.500	1	01/29/2020 12:28	WG1418843
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	01/29/2020 12:28	WG1418843
2,2-Dichloropropane	U		0.0929	0.500	1	01/29/2020 12:28	WG1418843
Di-isopropyl ether	U		0.0924	0.500	1	01/29/2020 12:28	WG1418843
Ethylbenzene	0.198	J	0.158	0.500	1	01/29/2020 12:28	WG1418843
Hexachloro-1,3-butadiene	U		0.157	1.00	1	01/29/2020 12:28	WG1418843
2-Hexanone	U		0.757	5.00	1	01/29/2020 12:28	WG1418843
n-Hexane	U		0.305	5.00	1	01/29/2020 12:28	WG1418843
Iodomethane	U UJ	J0 ~~J3~~	0.377	10.0	1	01/29/2020 12:28	WG1418843
Isopropylbenzene	U		0.126	0.500	1	01/29/2020 12:28	WG1418843
p-Isopropyltoluene	U		0.138	0.500	1	01/29/2020 12:28	WG1418843
2-Butanone (MEK)	22.2		1.28	5.00	1	01/29/2020 12:28	WG1418843
Methylene Chloride	U		1.07	2.50	1	01/29/2020 12:28	WG1418843
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	01/29/2020 12:28	WG1418843
Methyl tert-butyl ether	U		0.102	0.500	1	01/29/2020 12:28	WG1418843
Naphthalene	U		0.174	2.50	1	01/29/2020 12:28	WG1418843
n-Propylbenzene	U		0.162	0.500	1	01/29/2020 12:28	WG1418843
Styrene	U		0.117	0.500	1	01/29/2020 12:28	WG1418843
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	01/29/2020 12:28	WG1418843
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	01/29/2020 12:28	WG1418843
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	01/29/2020 12:28	WG1418843
Tetrachloroethene	38.8		0.199	0.500	1	01/29/2020 12:28	WG1418843
Toluene	U		0.412	0.500	1	01/29/2020 12:28	WG1418843
1,2,3-Trichlorobenzene	U		0.164	0.500	1	01/29/2020 12:28	WG1418843
1,2,4-Trichlorobenzene	U		0.355	0.500	1	01/29/2020 12:28	WG1418843
1,1,1-Trichloroethane	U		0.0940	0.500	1	01/29/2020 12:28	WG1418843
1,1,2-Trichloroethane	U		0.186	0.500	1	01/29/2020 12:28	WG1418843
Trichloroethene	33.3		0.153	0.500	1	01/29/2020 12:28	WG1418843
Trichlorofluoromethane	U		0.130	2.50	1	01/29/2020 12:28	WG1418843
1,2,3-Trichloropropane	U		0.247	2.50	1	01/29/2020 12:28	WG1418843

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,2,4-Trimethylbenzene	U		0.123	0.500	1	01/29/2020 12:28	WG1418843
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	01/29/2020 12:28	WG1418843
1,3,5-Trimethylbenzene	U		0.124	0.500	1	01/29/2020 12:28	WG1418843
Vinyl acetate	U		0.645	5.00	1	01/29/2020 12:28	WG1418843
Vinyl chloride	156		0.118	0.500	1	01/29/2020 12:28	WG1418843
Xylenes, Total	U		0.316	1.50	1	01/29/2020 12:28	WG1418843
(S) Toluene-d8	*96.4*			*80.0-120*		*01/29/2020 12:28*	WG1418843
(S) Toluene-d8	*102*			*80.0-120*		*02/04/2020 12:11*	WG1421709
(S) 4-Bromofluorobenzene	*91.9*			*77.0-126*		*01/29/2020 12:28*	WG1418843
(S) 4-Bromofluorobenzene	*102*			*77.0-126*		*02/04/2020 12:11*	WG1421709
(S) 1,2-Dichloroethane-d4	*101*			*70.0-130*		*01/29/2020 12:28*	WG1418843
(S) 1,2-Dichloroethane-d4	*99.5*			*70.0-130*		*02/04/2020 12:11*	WG1421709

JC 2/18/2020

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

Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	216000		2710	20000	1	01/28/2020 21:05	WG1418552

Sample Narrative:

L1183332-02 WG1418552: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	27600		51.9	1000	1	01/28/2020 20:18	WG1418181
Nitrate	U		22.7	100	1	01/28/2020 20:18	WG1418181
Sulfate	66400		77.4	5000	1	01/28/2020 20:18	WG1418181

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	2310	~~B~~	102	1000	1	01/31/2020 06:27	WG1419929

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	990		15.0	100	1	01/29/2020 18:38	WG1418373
Manganese	380		0.250	5.00	1	01/29/2020 18:38	WG1418373

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	U		31.6	100	1	01/28/2020 17:32	WG1418226
(S) a,a,a-Trifluorotoluene(FID)	*96.9*			*78.0-120*		*01/28/2020 17:32*	WG1418226

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	292		0.287	0.678	1	01/30/2020 13:09	WG1419485
Ethane	U		0.296	1.29	1	01/30/2020 13:09	WG1419485
Ethene	U		0.422	1.27	1	01/30/2020 13:09	WG1419485

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	1.65	J	1.05	25.0	1	01/29/2020 12:48	WG1418843
Acrylonitrile	U		0.873	5.00	1	01/29/2020 12:48	WG1418843
Benzene	U		0.0896	0.500	1	01/29/2020 12:48	WG1418843
Bromobenzene	U		0.133	0.500	1	01/29/2020 12:48	WG1418843
Bromodichloromethane	U		0.0800	0.500	1	01/29/2020 12:48	WG1418843
Bromochloromethane	U		0.145	0.500	1	01/29/2020 12:48	WG1418843
Bromoform	U		0.186	0.500	1	01/29/2020 12:48	WG1418843
Bromomethane	U		0.157	2.50	1	01/29/2020 12:48	WG1418843
n-Butylbenzene	U		0.143	0.500	1	01/29/2020 12:48	WG1418843
sec-Butylbenzene	U		0.134	0.500	1	01/29/2020 12:48	WG1418843
tert-Butylbenzene	U		0.183	0.500	1	01/29/2020 12:48	WG1418843
Carbon disulfide	U		0.101	0.500	1	01/29/2020 12:48	WG1418843
Carbon tetrachloride	U		0.159	0.500	1	01/29/2020 12:48	WG1418843

JC 2/18/2020

W-MW-01-012720
Collected date/time: 01/27/20 14:40

SAMPLE RESULTS - 02

L1183332

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chlorobenzene	U		0.140	0.500	1	01/29/2020 12:48	WG1418843
Chlorodibromomethane	U		0.128	0.500	1	01/29/2020 12:48	WG1418843
Chloroethane	U		0.141	2.50	1	01/29/2020 12:48	WG1418843
Chloroform	U		0.0860	0.500	1	01/29/2020 12:48	WG1418843
Chloromethane	U		0.153	1.25	1	01/29/2020 12:48	WG1418843
2-Chlorotoluene	U		0.111	0.500	1	01/29/2020 12:48	WG1418843
4-Chlorotoluene	U		0.0972	0.500	1	01/29/2020 12:48	WG1418843
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	01/29/2020 12:48	WG1418843
1,2-Dibromoethane	U		0.193	0.500	1	01/29/2020 12:48	WG1418843
Dibromomethane	U		0.117	0.500	1	01/29/2020 12:48	WG1418843
1,2-Dichlorobenzene	U		0.101	0.500	1	01/29/2020 12:48	WG1418843
1,3-Dichlorobenzene	U		0.130	0.500	1	01/29/2020 12:48	WG1418843
1,4-Dichlorobenzene	U		0.121	0.500	1	01/29/2020 12:48	WG1418843
Dichlorodifluoromethane	U		0.127	2.50	1	01/29/2020 12:48	WG1418843
1,1-Dichloroethane	U		0.114	0.500	1	01/29/2020 12:48	WG1418843
1,2-Dichloroethane	U		0.108	0.500	1	01/29/2020 12:48	WG1418843
1,1-Dichloroethene	U		0.188	0.500	1	01/29/2020 12:48	WG1418843
cis-1,2-Dichloroethene	0.553		0.0933	0.500	1	02/04/2020 12:32	WG1421709
trans-1,2-Dichloroethene	U		0.152	0.500	1	01/29/2020 12:48	WG1418843
1,2-Dichloropropane	U		0.190	0.500	1	01/29/2020 12:48	WG1418843
1,1-Dichloropropene	U		0.128	0.500	1	01/29/2020 12:48	WG1418843
1,3-Dichloropropane	U		0.147	1.00	1	01/29/2020 12:48	WG1418843
cis-1,3-Dichloropropene	U		0.0976	0.500	1	01/29/2020 12:48	WG1418843
trans-1,3-Dichloropropene	U		0.222	0.500	1	01/29/2020 12:48	WG1418843
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	01/29/2020 12:48	WG1418843
2,2-Dichloropropane	U		0.0929	0.500	1	01/29/2020 12:48	WG1418843
Di-isopropyl ether	U		0.0924	0.500	1	01/29/2020 12:48	WG1418843
Ethylbenzene	U		0.158	0.500	1	01/29/2020 12:48	WG1418843
Hexachloro-1,3-butadiene	U		0.157	1.00	1	01/29/2020 12:48	WG1418843
2-Hexanone	U		0.757	5.00	1	01/29/2020 12:48	WG1418843
n-Hexane	U		0.305	5.00	1	01/29/2020 12:48	WG1418843
Iodomethane	U UJ	J0 ~~J3~~	0.377	10.0	1	01/29/2020 12:48	WG1418843
Isopropylbenzene	U		0.126	0.500	1	01/29/2020 12:48	WG1418843
p-Isopropyltoluene	U		0.138	0.500	1	01/29/2020 12:48	WG1418843
2-Butanone (MEK)	U		1.28	5.00	1	01/29/2020 12:48	WG1418843
Methylene Chloride	U		1.07	2.50	1	01/29/2020 12:48	WG1418843
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	01/29/2020 12:48	WG1418843
Methyl tert-butyl ether	U		0.102	0.500	1	01/29/2020 12:48	WG1418843
Naphthalene	U		0.174	2.50	1	01/29/2020 12:48	WG1418843
n-Propylbenzene	U		0.162	0.500	1	01/29/2020 12:48	WG1418843
Styrene	U		0.117	0.500	1	01/29/2020 12:48	WG1418843
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	01/29/2020 12:48	WG1418843
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	01/29/2020 12:48	WG1418843
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	01/29/2020 12:48	WG1418843
Tetrachloroethene	U		0.199	0.500	1	01/29/2020 12:48	WG1418843
Toluene	U		0.412	0.500	1	01/29/2020 12:48	WG1418843
1,2,3-Trichlorobenzene	U		0.164	0.500	1	01/29/2020 12:48	WG1418843
1,2,4-Trichlorobenzene	U		0.355	0.500	1	01/29/2020 12:48	WG1418843
1,1,1-Trichloroethane	U		0.0940	0.500	1	01/29/2020 12:48	WG1418843
1,1,2-Trichloroethane	U		0.186	0.500	1	01/29/2020 12:48	WG1418843
Trichloroethene	0.349	J	0.153	0.500	1	01/29/2020 12:48	WG1418843
Trichlorofluoromethane	U		0.130	2.50	1	01/29/2020 12:48	WG1418843
1,2,3-Trichloropropane	U		0.247	2.50	1	01/29/2020 12:48	WG1418843
1,2,4-Trimethylbenzene	U		0.123	0.500	1	01/29/2020 12:48	WG1418843
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	01/29/2020 12:48	WG1418843
1,3,5-Trimethylbenzene	U		0.124	0.500	1	01/29/2020 12:48	WG1418843

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Vinyl acetate	U		0.645	5.00	1	01/29/2020 12:48	WG1418843
Vinyl chloride	5.16		0.118	0.500	1	01/29/2020 12:48	WG1418843
Xylenes, Total	U		0.316	1.50	1	01/29/2020 12:48	WG1418843
(S) Toluene-d8	*96.6*			*80.0-120*		*01/29/2020 12:48*	WG1418843
(S) Toluene-d8	*102*			*80.0-120*		*02/04/2020 12:32*	WG1421709
(S) 4-Bromofluorobenzene	*92.9*			*77.0-126*		*01/29/2020 12:48*	WG1418843
(S) 4-Bromofluorobenzene	*102*			*77.0-126*		*02/04/2020 12:32*	WG1421709
(S) 1,2-Dichloroethane-d4	*98.6*			*70.0-130*		*01/29/2020 12:48*	WG1418843
(S) 1,2-Dichloroethane-d4	*98.5*			*70.0-130*		*02/04/2020 12:32*	WG1421709

JC 2/18/2020

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

Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	151000		2710	20000	1	01/28/2020 21:15	WG1418552

Sample Narrative:

L1183332-03 WG1418552: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	13300		51.9	1000	1	01/28/2020 20:44	WG1418181
Nitrate	69.3	J	22.7	100	1	01/28/2020 20:44	WG1418181
Sulfate	612 U	~~B J~~	77.4	5000	1	01/28/2020 20:44	WG1418181

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	10400		102	1000	1	01/31/2020 06:44	WG1419929

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	2140		15.0	100	1	01/29/2020 18:41	WG1418373
Manganese	114		0.250	5.00	1	01/29/2020 18:41	WG1418373

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	41.5 U	~~B J~~	31.6	100	1	01/28/2020 17:53	WG1418226
(S) a,a,a-Trifluorotoluene(FID)	*97.1*			*78.0-120*		*01/28/2020 17:53*	WG1418226

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	2470		0.287	0.678	1	01/30/2020 13:12	WG1419485
Ethane	U		0.296	1.29	1	01/30/2020 13:12	WG1419485
Ethene	15.2		0.422	1.27	1	01/30/2020 13:12	WG1419485

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	75.8		1.05	25.0	1	01/29/2020 13:07	WG1418843
Acrylonitrile	U		0.873	5.00	1	01/29/2020 13:07	WG1418843
Benzene	U		0.0896	0.500	1	01/29/2020 13:07	WG1418843
Bromobenzene	U		0.133	0.500	1	01/29/2020 13:07	WG1418843
Bromodichloromethane	U		0.0800	0.500	1	01/29/2020 13:07	WG1418843
Bromochloromethane	U		0.145	0.500	1	01/29/2020 13:07	WG1418843
Bromoform	U		0.186	0.500	1	01/29/2020 13:07	WG1418843
Bromomethane	U		0.157	2.50	1	01/29/2020 13:07	WG1418843
n-Butylbenzene	U		0.143	0.500	1	01/29/2020 13:07	WG1418843
sec-Butylbenzene	U		0.134	0.500	1	01/29/2020 13:07	WG1418843
tert-Butylbenzene	U		0.183	0.500	1	01/29/2020 13:07	WG1418843
Carbon disulfide	0.304	J	0.101	0.500	1	01/29/2020 13:07	WG1418843
Carbon tetrachloride	U		0.159	0.500	1	01/29/2020 13:07	WG1418843

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chlorobenzene	U		0.140	0.500	1	01/29/2020 13:07	WG1418843
Chlorodibromomethane	U		0.128	0.500	1	01/29/2020 13:07	WG1418843
Chloroethane	U		0.141	2.50	1	01/29/2020 13:07	WG1418843
Chloroform	U		0.0860	0.500	1	01/29/2020 13:07	WG1418843
Chloromethane	U		0.153	1.25	1	01/29/2020 13:07	WG1418843
2-Chlorotoluene	U		0.111	0.500	1	01/29/2020 13:07	WG1418843
4-Chlorotoluene	U		0.0972	0.500	1	01/29/2020 13:07	WG1418843
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	01/29/2020 13:07	WG1418843
1,2-Dibromoethane	U		0.193	0.500	1	01/29/2020 13:07	WG1418843
Dibromomethane	U		0.117	0.500	1	01/29/2020 13:07	WG1418843
1,2-Dichlorobenzene	U		0.101	0.500	1	01/29/2020 13:07	WG1418843
1,3-Dichlorobenzene	U		0.130	0.500	1	01/29/2020 13:07	WG1418843
1,4-Dichlorobenzene	U		0.121	0.500	1	01/29/2020 13:07	WG1418843
Dichlorodifluoromethane	U		0.127	2.50	1	01/29/2020 13:07	WG1418843
1,1-Dichloroethane	U		0.114	0.500	1	01/29/2020 13:07	WG1418843
1,2-Dichloroethane	U		0.108	0.500	1	01/29/2020 13:07	WG1418843
1,1-Dichloroethene	U		0.188	0.500	1	01/29/2020 13:07	WG1418843
cis-1,2-Dichloroethene	21.8		0.0933	0.500	1	01/29/2020 13:07	WG1418843
trans-1,2-Dichloroethene	U		0.152	0.500	1	01/29/2020 13:07	WG1418843
1,2-Dichloropropane	U		0.190	0.500	1	01/29/2020 13:07	WG1418843
1,1-Dichloropropene	U		0.128	0.500	1	01/29/2020 13:07	WG1418843
1,3-Dichloropropane	U		0.147	1.00	1	01/29/2020 13:07	WG1418843
cis-1,3-Dichloropropene	U		0.0976	0.500	1	01/29/2020 13:07	WG1418843
trans-1,3-Dichloropropene	U		0.222	0.500	1	01/29/2020 13:07	WG1418843
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	01/29/2020 13:07	WG1418843
2,2-Dichloropropane	U		0.0929	0.500	1	01/29/2020 13:07	WG1418843
Di-isopropyl ether	U		0.0924	0.500	1	01/29/2020 13:07	WG1418843
Ethylbenzene	U		0.158	0.500	1	01/29/2020 13:07	WG1418843
Hexachloro-1,3-butadiene	U		0.157	1.00	1	01/29/2020 13:07	WG1418843
2-Hexanone	U		0.757	5.00	1	01/29/2020 13:07	WG1418843
n-Hexane	U		0.305	5.00	1	01/29/2020 13:07	WG1418843
Iodomethane	U UJ	J0 ~~J3~~	0.377	10.0	1	01/29/2020 13:07	WG1418843
Isopropylbenzene	U		0.126	0.500	1	01/29/2020 13:07	WG1418843
p-Isopropyltoluene	U		0.138	0.500	1	01/29/2020 13:07	WG1418843
2-Butanone (MEK)	U		1.28	5.00	1	01/29/2020 13:07	WG1418843
Methylene Chloride	U		1.07	2.50	1	01/29/2020 13:07	WG1418843
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	01/29/2020 13:07	WG1418843
Methyl tert-butyl ether	U		0.102	0.500	1	01/29/2020 13:07	WG1418843
Naphthalene	U		0.174	2.50	1	01/29/2020 13:07	WG1418843
n-Propylbenzene	U		0.162	0.500	1	01/29/2020 13:07	WG1418843
Styrene	U		0.117	0.500	1	01/29/2020 13:07	WG1418843
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	01/29/2020 13:07	WG1418843
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	01/29/2020 13:07	WG1418843
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	01/29/2020 13:07	WG1418843
Tetrachloroethene	0.237	J	0.199	0.500	1	01/29/2020 13:07	WG1418843
Toluene	U		0.412	0.500	1	01/29/2020 13:07	WG1418843
1,2,3-Trichlorobenzene	U		0.164	0.500	1	01/29/2020 13:07	WG1418843
1,2,4-Trichlorobenzene	U		0.355	0.500	1	01/29/2020 13:07	WG1418843
1,1,1-Trichloroethane	U		0.0940	0.500	1	01/29/2020 13:07	WG1418843
1,1,2-Trichloroethane	U		0.186	0.500	1	01/29/2020 13:07	WG1418843
Trichloroethene	U		0.153	0.500	1	01/29/2020 13:07	WG1418843
Trichlorofluoromethane	U		0.130	2.50	1	01/29/2020 13:07	WG1418843
1,2,3-Trichloropropane	U		0.247	2.50	1	01/29/2020 13:07	WG1418843
1,2,4-Trimethylbenzene	U		0.123	0.500	1	01/29/2020 13:07	WG1418843
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	01/29/2020 13:07	WG1418843
1,3,5-Trimethylbenzene	U		0.124	0.500	1	01/29/2020 13:07	WG1418843

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Vinyl acetate	U		0.645	5.00	1	01/29/2020 13:07	WG1418843
Vinyl chloride	15.5		0.118	0.500	1	01/29/2020 13:07	WG1418843
Xylenes, Total	0.369	J	0.316	1.50	1	01/29/2020 13:07	WG1418843
(S) Toluene-d8	*96.4*			*80.0-120*		*01/29/2020 13:07*	WG1418843
(S) 4-Bromofluorobenzene	*92.3*			*77.0-126*		*01/29/2020 13:07*	WG1418843
(S) 1,2-Dichloroethane-d4	*97.6*			*70.0-130*		*01/29/2020 13:07*	WG1418843

JC 2/18/2020

Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	141000		2710	20000	1	01/28/2020 21:24	WG1418552

Sample Narrative:

L1183332-04 WG1418552: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	8940		51.9	1000	1	01/28/2020 20:57	WG1418181
Nitrate	65.0	J	22.7	100	1	01/28/2020 20:57	WG1418181
Sulfate	13400		77.4	5000	1	01/28/2020 20:57	WG1418181

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	1350	B	102	1000	1	01/31/2020 08:26	WG1419929

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	256		15.0	100	1	01/29/2020 18:44	WG1418373
Manganese	332		0.250	5.00	1	01/29/2020 18:44	WG1418373

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	462	Z, J+	31.6	100	1	01/28/2020 18:15	WG1418226
(S) a,a,a-Trifluorotoluene(FID)	*97.4*			*78.0-120*		*01/28/2020 18:15*	WG1418226

Sample Narrative:

L1183332-04 WG1418226: No discernable petroleum pattern.

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	U		0.287	0.678	1	01/30/2020 13:19	WG1419485
Ethane	U		0.296	1.29	1	01/30/2020 13:19	WG1419485
Ethene	U		0.422	1.27	1	01/30/2020 13:19	WG1419485

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	3.31	J	1.05	25.0	1	01/29/2020 13:27	WG1418843
Acrylonitrile	U		0.873	5.00	1	01/29/2020 13:27	WG1418843
Benzene	U		0.0896	0.500	1	01/29/2020 13:27	WG1418843
Bromobenzene	U		0.133	0.500	1	01/29/2020 13:27	WG1418843
Bromodichloromethane	U		0.0800	0.500	1	01/29/2020 13:27	WG1418843
Bromochloromethane	U		0.145	0.500	1	01/29/2020 13:27	WG1418843
Bromoform	U		0.186	0.500	1	01/29/2020 13:27	WG1418843
Bromomethane	U		0.157	2.50	1	01/29/2020 13:27	WG1418843
n-Butylbenzene	U		0.143	0.500	1	01/29/2020 13:27	WG1418843
sec-Butylbenzene	U		0.134	0.500	1	01/29/2020 13:27	WG1418843

JC 2/18/2020

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

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

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
tert-Butylbenzene	U		0.183	0.500	1	01/29/2020 13:27	WG1418843
Carbon disulfide	U		0.101	0.500	1	01/29/2020 13:27	WG1418843
Carbon tetrachloride	U		0.159	0.500	1	01/29/2020 13:27	WG1418843
Chlorobenzene	U		0.140	0.500	1	01/29/2020 13:27	WG1418843
Chlorodibromomethane	U		0.128	0.500	1	01/29/2020 13:27	WG1418843
Chloroethane	U		0.141	2.50	1	01/29/2020 13:27	WG1418843
Chloroform	U		0.0860	0.500	1	01/29/2020 13:27	WG1418843
Chloromethane	U		0.153	1.25	1	01/29/2020 13:27	WG1418843
2-Chlorotoluene	U		0.111	0.500	1	01/29/2020 13:27	WG1418843
4-Chlorotoluene	U		0.0972	0.500	1	01/29/2020 13:27	WG1418843
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	01/29/2020 13:27	WG1418843
1,2-Dibromoethane	U		0.193	0.500	1	01/29/2020 13:27	WG1418843
Dibromomethane	U		0.117	0.500	1	01/29/2020 13:27	WG1418843
1,2-Dichlorobenzene	U		0.101	0.500	1	01/29/2020 13:27	WG1418843
1,3-Dichlorobenzene	U		0.130	0.500	1	01/29/2020 13:27	WG1418843
1,4-Dichlorobenzene	U		0.121	0.500	1	01/29/2020 13:27	WG1418843
Dichlorodifluoromethane	U		0.127	2.50	1	01/29/2020 13:27	WG1418843
1,1-Dichloroethane	U		0.114	0.500	1	01/29/2020 13:27	WG1418843
1,2-Dichloroethane	U		0.108	0.500	1	01/29/2020 13:27	WG1418843
1,1-Dichloroethene	6.84		0.188	0.500	1	01/29/2020 13:27	WG1418843
cis-1,2-Dichloroethene	22.3		0.0933	0.500	1	01/29/2020 13:27	WG1418843
trans-1,2-Dichloroethene	1.65		0.152	0.500	1	01/29/2020 13:27	WG1418843
1,2-Dichloropropane	U		0.190	0.500	1	01/29/2020 13:27	WG1418843
1,1-Dichloropropene	U		0.128	0.500	1	01/29/2020 13:27	WG1418843
1,3-Dichloropropane	U		0.147	1.00	1	01/29/2020 13:27	WG1418843
cis-1,3-Dichloropropene	U		0.0976	0.500	1	01/29/2020 13:27	WG1418843
trans-1,3-Dichloropropene	U		0.222	0.500	1	01/29/2020 13:27	WG1418843
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	01/29/2020 13:27	WG1418843
2,2-Dichloropropane	U		0.0929	0.500	1	01/29/2020 13:27	WG1418843
Di-isopropyl ether	U		0.0924	0.500	1	01/29/2020 13:27	WG1418843
Ethylbenzene	U		0.158	0.500	1	01/29/2020 13:27	WG1418843
Hexachloro-1,3-butadiene	U		0.157	1.00	1	01/29/2020 13:27	WG1418843
2-Hexanone	U		0.757	5.00	1	01/29/2020 13:27	WG1418843
n-Hexane	U		0.305	5.00	1	01/29/2020 13:27	WG1418843
Iodomethane	U UJ	J0 ~~J3~~	0.377	10.0	1	01/29/2020 13:27	WG1418843
Isopropylbenzene	U		0.126	0.500	1	01/29/2020 13:27	WG1418843
p-Isopropyltoluene	U		0.138	0.500	1	01/29/2020 13:27	WG1418843
2-Butanone (MEK)	U		1.28	5.00	1	01/29/2020 13:27	WG1418843
Methylene Chloride	U		1.07	2.50	1	01/29/2020 13:27	WG1418843
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	01/29/2020 13:27	WG1418843
Methyl tert-butyl ether	U		0.102	0.500	1	01/29/2020 13:27	WG1418843
Naphthalene	U		0.174	2.50	1	01/29/2020 13:27	WG1418843
n-Propylbenzene	U		0.162	0.500	1	01/29/2020 13:27	WG1418843
Styrene	U		0.117	0.500	1	01/29/2020 13:27	WG1418843
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	01/29/2020 13:27	WG1418843
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	01/29/2020 13:27	WG1418843
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	01/29/2020 13:27	WG1418843
Tetrachloroethene	886		4.98	12.5	25	02/04/2020 12:52	WG1421709
Toluene	U		0.412	0.500	1	01/29/2020 13:27	WG1418843
1,2,3-Trichlorobenzene	U		0.164	0.500	1	01/29/2020 13:27	WG1418843
1,2,4-Trichlorobenzene	U		0.355	0.500	1	01/29/2020 13:27	WG1418843
1,1,1-Trichloroethane	U		0.0940	0.500	1	01/29/2020 13:27	WG1418843
1,1,2-Trichloroethane	U		0.186	0.500	1	01/29/2020 13:27	WG1418843
Trichloroethene	325		3.83	12.5	25	02/04/2020 12:52	WG1421709
Trichlorofluoromethane	U		0.130	2.50	1	01/29/2020 13:27	WG1418843
1,2,3-Trichloropropane	U		0.247	2.50	1	01/29/2020 13:27	WG1418843

JC 2/18/2020

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,2,4-Trimethylbenzene	U		0.123	0.500	1	01/29/2020 13:27	WG1418843
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	01/29/2020 13:27	WG1418843
1,3,5-Trimethylbenzene	U		0.124	0.500	1	01/29/2020 13:27	WG1418843
Vinyl acetate	U		0.645	5.00	1	01/29/2020 13:27	WG1418843
Vinyl chloride	0.287	J	0.118	0.500	1	01/29/2020 13:27	WG1418843
Xylenes, Total	U		0.316	1.50	1	01/29/2020 13:27	WG1418843
(S) Toluene-d8	*92.8*			*80.0-120*		*01/29/2020 13:27*	WG1418843
(S) Toluene-d8	*102*			*80.0-120*		*02/04/2020 12:52*	WG1421709
(S) 4-Bromofluorobenzene	*90.4*			*77.0-126*		*01/29/2020 13:27*	WG1418843
(S) 4-Bromofluorobenzene	*99.2*			*77.0-126*		*02/04/2020 12:52*	WG1421709
(S) 1,2-Dichloroethane-d4	*97.1*			*70.0-130*		*01/29/2020 13:27*	WG1418843
(S) 1,2-Dichloroethane-d4	*99.1*			*70.0-130*		*02/04/2020 12:52*	WG1421709

JC 2/18/2020

Wet Chemistry by Method 2320 B-2011

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Alkalinity	442000		2710	20000	1	01/29/2020 14:29	WG1419044

Sample Narrative:

L1183659-01 WG1419044: Endpoint pH 4.5 HEADSPACE

Wet Chemistry by Method 9056A

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Chloride	38900		51.9	1000	1	01/29/2020 16:53	WG1418892
Nitrate	U		22.7	100	1	01/29/2020 16:53	WG1418892
Sulfate	36000		77.4	5000	1	01/29/2020 16:53	WG1418892

Wet Chemistry by Method 9060A

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
TOC (Total Organic Carbon)	16400		204	2000	2	02/01/2020 21:32	WG1420575

Metals (ICPMS) by Method 6020B

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Iron	3080		15.0	100	1	01/29/2020 20:51	WG1418980
Manganese	685		0.250	5.00	1	01/29/2020 20:51	WG1418980

Volatile Organic Compounds (GC) by Method NWTPHGX

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Gasoline Range Organics-NWTPH	U		31.6	100	1	02/04/2020 11:55	WG1421821
(S) a,a,a-Trifluorotoluene(FID)	*107*			*78.0-120*		*02/04/2020 11:55*	WG1421821

Volatile Organic Compounds (GC) by Method RSK175

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Methane	22.2		2.87	6.78	10	01/31/2020 11:43	WG1420207
Ethane	65.1		0.296	1.29	1	01/30/2020 15:06	WG1419486
Ethene	126		0.422	1.27	1	01/30/2020 15:06	WG1419486

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

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Acetone	2.88 U	~~J~~	1.05	25.0	1	01/30/2020 00:53	WG1419321
Acrylonitrile	U		0.873	5.00	1	01/30/2020 00:53	WG1419321
Benzene	U		0.0896	0.500	1	01/30/2020 00:53	WG1419321
Bromobenzene	U		0.133	0.500	1	01/30/2020 00:53	WG1419321
Bromodichloromethane	U		0.0800	0.500	1	01/30/2020 00:53	WG1419321
Bromochloromethane	U		0.145	0.500	1	01/30/2020 00:53	WG1419321
Bromoform	U		0.186	0.500	1	01/30/2020 00:53	WG1419321
Bromomethane	U		0.157	2.50	1	01/30/2020 00:53	WG1419321
n-Butylbenzene	U		0.143	0.500	1	01/30/2020 00:53	WG1419321
sec-Butylbenzene	U		0.134	0.500	1	01/30/2020 00:53	WG1419321
tert-Butylbenzene	U		0.183	0.500	1	01/30/2020 00:53	WG1419321
Carbon disulfide	U		0.101	0.500	1	01/30/2020 00:53	WG1419321
Carbon tetrachloride	U		0.159	0.500	1	01/30/2020 00:53	WG1419321

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chlorobenzene	U		0.140	0.500	1	01/30/2020 00:53	WG1419321
Chlorodibromomethane	U		0.128	0.500	1	01/30/2020 00:53	WG1419321
Chloroethane	U		0.141	2.50	1	01/30/2020 00:53	WG1419321
Chloroform	U		0.0860	0.500	1	01/30/2020 00:53	WG1419321
Chloromethane	U		0.153	1.25	1	01/30/2020 00:53	WG1419321
2-Chlorotoluene	U		0.111	0.500	1	01/30/2020 00:53	WG1419321
4-Chlorotoluene	U		0.0972	0.500	1	01/30/2020 00:53	WG1419321
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	01/30/2020 00:53	WG1419321
1,2-Dibromoethane	U		0.193	0.500	1	01/30/2020 00:53	WG1419321
Dibromomethane	U		0.117	0.500	1	01/30/2020 00:53	WG1419321
1,2-Dichlorobenzene	U		0.101	0.500	1	01/30/2020 00:53	WG1419321
1,3-Dichlorobenzene	U		0.130	0.500	1	01/30/2020 00:53	WG1419321
1,4-Dichlorobenzene	U		0.121	0.500	1	01/30/2020 00:53	WG1419321
Dichlorodifluoromethane	U		0.127	2.50	1	01/30/2020 00:53	WG1419321
1,1-Dichloroethane	U		0.114	0.500	1	01/30/2020 00:53	WG1419321
1,2-Dichloroethane	U		0.108	0.500	1	01/30/2020 00:53	WG1419321
1,1-Dichloroethene	U		0.188	0.500	1	01/30/2020 00:53	WG1419321
cis-1,2-Dichloroethene	5.48		0.0933	0.500	1	01/30/2020 00:53	WG1419321
trans-1,2-Dichloroethene	2.43		0.152	0.500	1	01/30/2020 00:53	WG1419321
1,2-Dichloropropane	U		0.190	0.500	1	01/30/2020 00:53	WG1419321
1,1-Dichloropropene	U		0.128	0.500	1	01/30/2020 00:53	WG1419321
1,3-Dichloropropane	U		0.147	1.00	1	01/30/2020 00:53	WG1419321
cis-1,3-Dichloropropene	U		0.0976	0.500	1	01/30/2020 00:53	WG1419321
trans-1,3-Dichloropropene	U		0.222	0.500	1	01/30/2020 00:53	WG1419321
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	01/30/2020 00:53	WG1419321
2,2-Dichloropropane	U		0.0929	0.500	1	01/30/2020 00:53	WG1419321
Di-isopropyl ether	U		0.0924	0.500	1	01/30/2020 00:53	WG1419321
Ethylbenzene	U		0.158	0.500	1	01/30/2020 00:53	WG1419321
Hexachloro-1,3-butadiene	U		0.157	1.00	1	01/30/2020 00:53	WG1419321
2-Hexanone	U		0.757	5.00	1	01/30/2020 00:53	WG1419321
n-Hexane	U		0.305	5.00	1	01/30/2020 00:53	WG1419321
Iodomethane	U UJ	J0	0.377	10.0	1	01/30/2020 00:53	WG1419321
Isopropylbenzene	U		0.126	0.500	1	01/30/2020 00:53	WG1419321
p-Isopropyltoluene	U		0.138	0.500	1	01/30/2020 00:53	WG1419321
2-Butanone (MEK)	U		1.28	5.00	1	01/30/2020 00:53	WG1419321
Methylene Chloride	U		1.07	2.50	1	01/30/2020 00:53	WG1419321
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	01/30/2020 00:53	WG1419321
Methyl tert-butyl ether	U		0.102	0.500	1	01/30/2020 00:53	WG1419321
Naphthalene	U		0.174	2.50	1	01/30/2020 00:53	WG1419321
n-Propylbenzene	U		0.162	0.500	1	01/30/2020 00:53	WG1419321
Styrene	U		0.117	0.500	1	01/30/2020 00:53	WG1419321
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	01/30/2020 00:53	WG1419321
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	01/30/2020 00:53	WG1419321
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	01/30/2020 00:53	WG1419321
Tetrachloroethene	U		0.199	0.500	1	01/30/2020 00:53	WG1419321
Toluene	U		0.412	0.500	1	01/30/2020 00:53	WG1419321
1,2,3-Trichlorobenzene	U		0.164	0.500	1	01/30/2020 00:53	WG1419321
1,2,4-Trichlorobenzene	U		0.355	0.500	1	01/30/2020 00:53	WG1419321
1,1,1-Trichloroethane	U		0.0940	0.500	1	01/30/2020 00:53	WG1419321
1,1,2-Trichloroethane	U		0.186	0.500	1	01/30/2020 00:53	WG1419321
Trichloroethene	0.302	J	0.153	0.500	1	01/30/2020 00:53	WG1419321
Trichlorofluoromethane	U		0.130	2.50	1	01/30/2020 00:53	WG1419321
1,2,3-Trichloropropane	U		0.247	2.50	1	01/30/2020 00:53	WG1419321
1,2,4-Trimethylbenzene	U		0.123	0.500	1	01/30/2020 00:53	WG1419321
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	01/30/2020 00:53	WG1419321
1,3,5-Trimethylbenzene	U		0.124	0.500	1	01/30/2020 00:53	WG1419321

JC 2/18/20

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Vinyl acetate	U		0.645	5.00	1	01/30/2020 00:53	WG1419321
Vinyl chloride	116		0.118	0.500	1	01/30/2020 00:53	WG1419321
Xylenes, Total	U		0.316	1.50	1	01/30/2020 00:53	WG1419321
(S) Toluene-d8	*96.3*			*80.0-120*		*01/30/2020 00:53*	WG1419321
(S) 4-Bromofluorobenzene	*92.8*			*77.0-126*		*01/30/2020 00:53*	WG1419321
(S) 1,2-Dichloroethane-d4	*97.8*			*70.0-130*		*01/30/2020 00:53*	WG1419321

JC 2/18/20

Wet Chemistry by Method 2320 B-2011

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Alkalinity	1160000		2710	20000	1	01/29/2020 14:38	WG1419044

Sample Narrative:

L1183659-02 WG1419044: Endpoint pH 4.5

Wet Chemistry by Method 9056A

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Chloride	89700		51.9	1000	1	01/29/2020 17:20	WG1418892
Nitrate	U		22.7	100	1	01/29/2020 17:20	WG1418892
Sulfate	U		77.4	5000	1	01/29/2020 17:20	WG1418892

Wet Chemistry by Method 9060A

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
TOC (Total Organic Carbon)	34300		102	1000	1	02/01/2020 21:52	WG1420575

Metals (ICPMS) by Method 6020B

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Iron	21900		15.0	100	1	01/29/2020 20:54	WG1418980
Manganese	3760		0.250	5.00	1	01/29/2020 20:54	WG1418980

Volatile Organic Compounds (GC) by Method NWTPHGX

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Gasoline Range Organics-NWTPH	U		31.6	100	1	02/04/2020 12:19	WG1421821
(S) a,a,a-Trifluorotoluene(FID)	*108*			*78.0-120*		*02/04/2020 12:19*	WG1421821

Volatile Organic Compounds (GC) by Method RSK175

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Methane	19900		2.87	6.78	10	01/31/2020 11:48	WG1420207
Ethane	87.0		0.296	1.29	1	01/30/2020 15:08	WG1419486
Ethene	U		0.422	1.27	1	01/30/2020 15:08	WG1419486

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

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Acetone	U		1.05	25.0	1	01/30/2020 01:13	WG1419321
Acrylonitrile	U		0.873	5.00	1	01/30/2020 01:13	WG1419321
Benzene	U		0.0896	0.500	1	01/30/2020 01:13	WG1419321
Bromobenzene	U		0.133	0.500	1	01/30/2020 01:13	WG1419321
Bromodichloromethane	U		0.0800	0.500	1	01/30/2020 01:13	WG1419321
Bromochloromethane	U		0.145	0.500	1	01/30/2020 01:13	WG1419321
Bromoform	U		0.186	0.500	1	01/30/2020 01:13	WG1419321
Bromomethane	U		0.157	2.50	1	01/30/2020 01:13	WG1419321
n-Butylbenzene	U		0.143	0.500	1	01/30/2020 01:13	WG1419321
sec-Butylbenzene	U		0.134	0.500	1	01/30/2020 01:13	WG1419321
tert-Butylbenzene	U		0.183	0.500	1	01/30/2020 01:13	WG1419321
Carbon disulfide	0.195	J	0.101	0.500	1	01/30/2020 01:13	WG1419321
Carbon tetrachloride	U		0.159	0.500	1	01/30/2020 01:13	WG1419321

JC 2/18/20

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

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chlorobenzene	U		0.140	0.500	1	01/30/2020 01:13	WG1419321
Chlorodibromomethane	U		0.128	0.500	1	01/30/2020 01:13	WG1419321
Chloroethane	U		0.141	2.50	1	01/30/2020 01:13	WG1419321
Chloroform	U		0.0860	0.500	1	01/30/2020 01:13	WG1419321
Chloromethane	U		0.153	1.25	1	01/30/2020 01:13	WG1419321
2-Chlorotoluene	U		0.111	0.500	1	01/30/2020 01:13	WG1419321
4-Chlorotoluene	U		0.0972	0.500	1	01/30/2020 01:13	WG1419321
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	01/30/2020 01:13	WG1419321
1,2-Dibromoethane	U		0.193	0.500	1	01/30/2020 01:13	WG1419321
Dibromomethane	U		0.117	0.500	1	01/30/2020 01:13	WG1419321
1,2-Dichlorobenzene	U		0.101	0.500	1	01/30/2020 01:13	WG1419321
1,3-Dichlorobenzene	U		0.130	0.500	1	01/30/2020 01:13	WG1419321
1,4-Dichlorobenzene	U		0.121	0.500	1	01/30/2020 01:13	WG1419321
Dichlorodifluoromethane	U		0.127	2.50	1	01/30/2020 01:13	WG1419321
1,1-Dichloroethane	U		0.114	0.500	1	01/30/2020 01:13	WG1419321
1,2-Dichloroethane	U		0.108	0.500	1	01/30/2020 01:13	WG1419321
1,1-Dichloroethene	U		0.188	0.500	1	01/30/2020 01:13	WG1419321
cis-1,2-Dichloroethene	1.52		0.0933	0.500	1	01/30/2020 01:13	WG1419321
trans-1,2-Dichloroethene	0.252	J	0.152	0.500	1	01/30/2020 01:13	WG1419321
1,2-Dichloropropane	U		0.190	0.500	1	01/30/2020 01:13	WG1419321
1,1-Dichloropropene	U		0.128	0.500	1	01/30/2020 01:13	WG1419321
1,3-Dichloropropane	U		0.147	1.00	1	01/30/2020 01:13	WG1419321
cis-1,3-Dichloropropene	U		0.0976	0.500	1	01/30/2020 01:13	WG1419321
trans-1,3-Dichloropropene	U		0.222	0.500	1	01/30/2020 01:13	WG1419321
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	01/30/2020 01:13	WG1419321
2,2-Dichloropropane	U		0.0929	0.500	1	01/30/2020 01:13	WG1419321
Di-isopropyl ether	U		0.0924	0.500	1	01/30/2020 01:13	WG1419321
Ethylbenzene	U		0.158	0.500	1	01/30/2020 01:13	WG1419321
Hexachloro-1,3-butadiene	U		0.157	1.00	1	01/30/2020 01:13	WG1419321
2-Hexanone	U		0.757	5.00	1	01/30/2020 01:13	WG1419321
n-Hexane	U		0.305	5.00	1	01/30/2020 01:13	WG1419321
Iodomethane	U UJ	J0	0.377	10.0	1	01/30/2020 01:13	WG1419321
Isopropylbenzene	U		0.126	0.500	1	01/30/2020 01:13	WG1419321
p-Isopropyltoluene	U		0.138	0.500	1	01/30/2020 01:13	WG1419321
2-Butanone (MEK)	U		1.28	5.00	1	01/30/2020 01:13	WG1419321
Methylene Chloride	U		1.07	2.50	1	01/30/2020 01:13	WG1419321
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	01/30/2020 01:13	WG1419321
Methyl tert-butyl ether	U		0.102	0.500	1	01/30/2020 01:13	WG1419321
Naphthalene	U		0.174	2.50	1	01/30/2020 01:13	WG1419321
n-Propylbenzene	U		0.162	0.500	1	01/30/2020 01:13	WG1419321
Styrene	U		0.117	0.500	1	01/30/2020 01:13	WG1419321
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	01/30/2020 01:13	WG1419321
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	01/30/2020 01:13	WG1419321
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	01/30/2020 01:13	WG1419321
Tetrachloroethene	U		0.199	0.500	1	01/30/2020 01:13	WG1419321
Toluene	2.93		0.412	0.500	1	01/30/2020 01:13	WG1419321
1,2,3-Trichlorobenzene	U		0.164	0.500	1	01/30/2020 01:13	WG1419321
1,2,4-Trichlorobenzene	U		0.355	0.500	1	01/30/2020 01:13	WG1419321
1,1,1-Trichloroethane	U		0.0940	0.500	1	01/30/2020 01:13	WG1419321
1,1,2-Trichloroethane	U		0.186	0.500	1	01/30/2020 01:13	WG1419321
Trichloroethene	U		0.153	0.500	1	01/30/2020 01:13	WG1419321
Trichlorofluoromethane	U		0.130	2.50	1	01/30/2020 01:13	WG1419321
1,2,3-Trichloropropane	U		0.247	2.50	1	01/30/2020 01:13	WG1419321
1,2,4-Trimethylbenzene	U		0.123	0.500	1	01/30/2020 01:13	WG1419321
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	01/30/2020 01:13	WG1419321
1,3,5-Trimethylbenzene	U		0.124	0.500	1	01/30/2020 01:13	WG1419321

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Vinyl acetate	U		0.645	5.00	1	01/30/2020 01:13	WG1419321
Vinyl chloride	1.70		0.118	0.500	1	01/30/2020 01:13	WG1419321
Xylenes, Total	U		0.316	1.50	1	01/30/2020 01:13	WG1419321
(S) Toluene-d8	*95.9*			*80.0-120*		*01/30/2020 01:13*	WG1419321
(S) 4-Bromofluorobenzene	*93.0*			*77.0-126*		*01/30/2020 01:13*	WG1419321
(S) 1,2-Dichloroethane-d4	*94.2*			*70.0-130*		*01/30/2020 01:13*	WG1419321

JC 2/18/20

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

Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	186000		2710	20000	1	01/29/2020 14:46	WG1419044

Sample Narrative:

L1183659-03 WG1419044: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	11500		51.9	1000	1	01/29/2020 17:33	WG1418892
Nitrate	U		22.7	100	1	01/29/2020 17:33	WG1418892
Sulfate	14400		77.4	5000	1	01/29/2020 17:33	WG1418892

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	1550	~~B~~	102	1000	1	02/01/2020 22:04	WG1420575

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	256		15.0	100	1	01/29/2020 20:38	WG1418980
Manganese	310		0.250	5.00	1	01/29/2020 20:38	WG1418980

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	48.0 U	~~B J~~	31.6	100	1	02/01/2020 01:32	WG1419920
(S) a,a,a-Trifluorotoluene(FID)	*97.2*			*78.0-120*		*02/01/2020 01:32*	WG1419920

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	21.7		0.287	0.678	1	01/30/2020 15:11	WG1419486
Ethane	U		0.296	1.29	1	01/30/2020 15:11	WG1419486
Ethene	U		0.422	1.27	1	01/30/2020 15:11	WG1419486

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U		1.05	25.0	1	01/30/2020 01:33	WG1419321
Acrylonitrile	U		0.873	5.00	1	01/30/2020 01:33	WG1419321
Benzene	U		0.0896	0.500	1	01/30/2020 01:33	WG1419321
Bromobenzene	U		0.133	0.500	1	01/30/2020 01:33	WG1419321
Bromodichloromethane	U		0.0800	0.500	1	01/30/2020 01:33	WG1419321
Bromochloromethane	U		0.145	0.500	1	01/30/2020 01:33	WG1419321
Bromoform	U		0.186	0.500	1	01/30/2020 01:33	WG1419321
Bromomethane	U		0.157	2.50	1	01/30/2020 01:33	WG1419321
n-Butylbenzene	U		0.143	0.500	1	01/30/2020 01:33	WG1419321
sec-Butylbenzene	U		0.134	0.500	1	01/30/2020 01:33	WG1419321
tert-Butylbenzene	U		0.183	0.500	1	01/30/2020 01:33	WG1419321
Carbon disulfide	0.247	J	0.101	0.500	1	01/30/2020 01:33	WG1419321
Carbon tetrachloride	U		0.159	0.500	1	01/30/2020 01:33	WG1419321

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

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Chlorobenzene	U		0.140	0.500	1	01/30/2020 01:33	WG1419321
Chlorodibromomethane	U		0.128	0.500	1	01/30/2020 01:33	WG1419321
Chloroethane	U		0.141	2.50	1	01/30/2020 01:33	WG1419321
Chloroform	U		0.0860	0.500	1	01/30/2020 01:33	WG1419321
Chloromethane	U		0.153	1.25	1	01/30/2020 01:33	WG1419321
2-Chlorotoluene	U		0.111	0.500	1	01/30/2020 01:33	WG1419321
4-Chlorotoluene	U		0.0972	0.500	1	01/30/2020 01:33	WG1419321
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	01/30/2020 01:33	WG1419321
1,2-Dibromoethane	U		0.193	0.500	1	01/30/2020 01:33	WG1419321
Dibromomethane	U		0.117	0.500	1	01/30/2020 01:33	WG1419321
1,2-Dichlorobenzene	U		0.101	0.500	1	01/30/2020 01:33	WG1419321
1,3-Dichlorobenzene	U		0.130	0.500	1	01/30/2020 01:33	WG1419321
1,4-Dichlorobenzene	U		0.121	0.500	1	01/30/2020 01:33	WG1419321
Dichlorodifluoromethane	U		0.127	2.50	1	01/30/2020 01:33	WG1419321
1,1-Dichloroethane	U		0.114	0.500	1	01/30/2020 01:33	WG1419321
1,2-Dichloroethane	U		0.108	0.500	1	01/30/2020 01:33	WG1419321
1,1-Dichloroethene	U		0.188	0.500	1	01/30/2020 01:33	WG1419321
cis-1,2-Dichloroethene	U		0.0933	0.500	1	01/30/2020 01:33	WG1419321
trans-1,2-Dichloroethene	U		0.152	0.500	1	01/30/2020 01:33	WG1419321
1,2-Dichloropropane	U		0.190	0.500	1	01/30/2020 01:33	WG1419321
1,1-Dichloropropene	U		0.128	0.500	1	01/30/2020 01:33	WG1419321
1,3-Dichloropropane	U		0.147	1.00	1	01/30/2020 01:33	WG1419321
cis-1,3-Dichloropropene	U		0.0976	0.500	1	01/30/2020 01:33	WG1419321
trans-1,3-Dichloropropene	U		0.222	0.500	1	01/30/2020 01:33	WG1419321
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	01/30/2020 01:33	WG1419321
2,2-Dichloropropane	U		0.0929	0.500	1	01/30/2020 01:33	WG1419321
Di-isopropyl ether	U		0.0924	0.500	1	01/30/2020 01:33	WG1419321
Ethylbenzene	U		0.158	0.500	1	01/30/2020 01:33	WG1419321
Hexachloro-1,3-butadiene	U		0.157	1.00	1	01/30/2020 01:33	WG1419321
2-Hexanone	U		0.757	5.00	1	01/30/2020 01:33	WG1419321
n-Hexane	U		0.305	5.00	1	01/30/2020 01:33	WG1419321
Iodomethane	U	UJ J0	0.377	10.0	1	01/30/2020 01:33	WG1419321
Isopropylbenzene	U		0.126	0.500	1	01/30/2020 01:33	WG1419321
p-Isopropyltoluene	U		0.138	0.500	1	01/30/2020 01:33	WG1419321
2-Butanone (MEK)	U		1.28	5.00	1	01/30/2020 01:33	WG1419321
Methylene Chloride	U		1.07	2.50	1	01/30/2020 01:33	WG1419321
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	01/30/2020 01:33	WG1419321
Methyl tert-butyl ether	U		0.102	0.500	1	01/30/2020 01:33	WG1419321
Naphthalene	U		0.174	2.50	1	01/30/2020 01:33	WG1419321
n-Propylbenzene	U		0.162	0.500	1	01/30/2020 01:33	WG1419321
Styrene	U		0.117	0.500	1	01/30/2020 01:33	WG1419321
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	01/30/2020 01:33	WG1419321
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	01/30/2020 01:33	WG1419321
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	01/30/2020 01:33	WG1419321
Tetrachloroethene	U		0.199	0.500	1	01/30/2020 01:33	WG1419321
Toluene	U		0.412	0.500	1	01/30/2020 01:33	WG1419321
1,2,3-Trichlorobenzene	U		0.164	0.500	1	01/30/2020 01:33	WG1419321
1,2,4-Trichlorobenzene	U		0.355	0.500	1	01/30/2020 01:33	WG1419321
1,1,1-Trichloroethane	U		0.0940	0.500	1	01/30/2020 01:33	WG1419321
1,1,2-Trichloroethane	U		0.186	0.500	1	01/30/2020 01:33	WG1419321
Trichloroethene	U		0.153	0.500	1	01/30/2020 01:33	WG1419321
Trichlorofluoromethane	U		0.130	2.50	1	01/30/2020 01:33	WG1419321
1,2,3-Trichloropropane	U		0.247	2.50	1	01/30/2020 01:33	WG1419321
1,2,4-Trimethylbenzene	U		0.123	0.500	1	01/30/2020 01:33	WG1419321
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	01/30/2020 01:33	WG1419321
1,3,5-Trimethylbenzene	U		0.124	0.500	1	01/30/2020 01:33	WG1419321

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Vinyl acetate	U		0.645	5.00	1	01/30/2020 01:33	WG1419321
Vinyl chloride	U		0.118	0.500	1	01/30/2020 01:33	WG1419321
Xylenes, Total	U		0.316	1.50	1	01/30/2020 01:33	WG1419321
(S) Toluene-d8	*96.3*			*80.0-120*		*01/30/2020 01:33*	WG1419321
(S) 4-Bromofluorobenzene	*90.3*			*77.0-126*		*01/30/2020 01:33*	WG1419321
(S) 1,2-Dichloroethane-d4	*97.4*			*70.0-130*		*01/30/2020 01:33*	WG1419321

JC 2/18/20

Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	184000		2710	20000	1	01/29/2020 15:27	WG1419044

Sample Narrative:

L1183749-01 WG1419044: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	11400		51.9	1000	1	01/29/2020 22:20	WG1418892
Nitrate	U		22.7	100	1	01/29/2020 22:20	WG1418892
Sulfate	14700		77.4	5000	1	01/29/2020 22:20	WG1418892

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	1620	~~B~~	102	1000	1	02/02/2020 01:04	WG1420575

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	258		15.0	100	1	01/29/2020 20:58	WG1418980
Manganese	301		0.250	5.00	1	01/29/2020 20:58	WG1418980

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	74.7 U	~~B J~~	31.6	100	1	02/01/2020 01:53	WG1419920
(S) a,a,a-Trifluorotoluene(FID)	*96.9*			*78.0-120*		*02/01/2020 01:53*	WG1419920

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	18.8		0.287	0.678	1	01/31/2020 14:04	WG1420207
Ethane	U		0.296	1.29	1	01/31/2020 14:04	WG1420207
Ethene	U		0.422	1.27	1	01/31/2020 14:04	WG1420207

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U		1.05	25.0	1	01/31/2020 19:51	WG1420688
Acrylonitrile	U		0.873	5.00	1	01/31/2020 19:51	WG1420688
Benzene	U		0.0896	0.500	1	01/31/2020 19:51	WG1420688
Bromobenzene	U		0.133	0.500	1	01/31/2020 19:51	WG1420688
Bromodichloromethane	U		0.0800	0.500	1	01/31/2020 19:51	WG1420688
Bromochloromethane	U		0.145	0.500	1	01/31/2020 19:51	WG1420688
Bromoform	U		0.186	0.500	1	01/31/2020 19:51	WG1420688
Bromomethane	U		0.157	2.50	1	01/31/2020 19:51	WG1420688
n-Butylbenzene	U		0.143	0.500	1	01/31/2020 19:51	WG1420688
sec-Butylbenzene	U		0.134	0.500	1	01/31/2020 19:51	WG1420688
tert-Butylbenzene	U		0.183	0.500	1	01/31/2020 19:51	WG1420688
Carbon disulfide	0.158	J	0.101	0.500	1	01/31/2020 19:51	WG1420688
Carbon tetrachloride	U	~~J4~~	0.159	0.500	1	01/31/2020 19:51	WG1420688

JC 2/18/2020

MW-926-012820

Collected date/time: 01/28/20 07:00

SAMPLE RESULTS - 01

L1183749

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chlorobenzene	U		0.140	0.500	1	01/31/2020 19:51	WG1420688
Chlorodibromomethane	U		0.128	0.500	1	01/31/2020 19:51	WG1420688
Chloroethane	U		0.141	2.50	1	01/31/2020 19:51	WG1420688
Chloroform	U		0.0860	0.500	1	01/31/2020 19:51	WG1420688
Chloromethane	U		0.153	1.25	1	01/31/2020 19:51	WG1420688
2-Chlorotoluene	U		0.111	0.500	1	01/31/2020 19:51	WG1420688
4-Chlorotoluene	U		0.0972	0.500	1	01/31/2020 19:51	WG1420688
1,2-Dibromo-3-Chloropropane	U	~~J4~~	0.325	2.50	1	01/31/2020 19:51	WG1420688
1,2-Dibromoethane	U		0.193	0.500	1	01/31/2020 19:51	WG1420688
Dibromomethane	U		0.117	0.500	1	01/31/2020 19:51	WG1420688
1,2-Dichlorobenzene	U		0.101	0.500	1	01/31/2020 19:51	WG1420688
1,3-Dichlorobenzene	U		0.130	0.500	1	01/31/2020 19:51	WG1420688
1,4-Dichlorobenzene	U		0.121	0.500	1	01/31/2020 19:51	WG1420688
Dichlorodifluoromethane	U		0.127	2.50	1	01/31/2020 19:51	WG1420688
1,1-Dichloroethane	U		0.114	0.500	1	01/31/2020 19:51	WG1420688
1,2-Dichloroethane	U		0.108	0.500	1	01/31/2020 19:51	WG1420688
1,1-Dichloroethene	U		0.188	0.500	1	01/31/2020 19:51	WG1420688
cis-1,2-Dichloroethene	U		0.0933	0.500	1	01/31/2020 19:51	WG1420688
trans-1,2-Dichloroethene	U		0.152	0.500	1	01/31/2020 19:51	WG1420688
1,2-Dichloropropane	U		0.190	0.500	1	01/31/2020 19:51	WG1420688
1,1-Dichloropropene	U		0.128	0.500	1	01/31/2020 19:51	WG1420688
1,3-Dichloropropane	U		0.147	1.00	1	01/31/2020 19:51	WG1420688
cis-1,3-Dichloropropene	U		0.0976	0.500	1	01/31/2020 19:51	WG1420688
trans-1,3-Dichloropropene	U		0.222	0.500	1	01/31/2020 19:51	WG1420688
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	01/31/2020 19:51	WG1420688
2,2-Dichloropropane	U		0.0929	0.500	1	01/31/2020 19:51	WG1420688
Di-isopropyl ether	U		0.0924	0.500	1	01/31/2020 19:51	WG1420688
Ethylbenzene	U		0.158	0.500	1	01/31/2020 19:51	WG1420688
Hexachloro-1,3-butadiene	U	~~J4~~	0.157	1.00	1	01/31/2020 19:51	WG1420688
2-Hexanone	U		0.757	5.00	1	01/31/2020 19:51	WG1420688
n-Hexane	U		0.305	5.00	1	01/31/2020 19:51	WG1420688
Iodomethane	U		0.377	10.0	1	01/31/2020 19:51	WG1420688
Isopropylbenzene	U		0.126	0.500	1	01/31/2020 19:51	WG1420688
p-Isopropyltoluene	U		0.138	0.500	1	01/31/2020 19:51	WG1420688
2-Butanone (MEK)	U		1.28	5.00	1	01/31/2020 19:51	WG1420688
Methylene Chloride	U		1.07	2.50	1	01/31/2020 19:51	WG1420688
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	01/31/2020 19:51	WG1420688
Methyl tert-butyl ether	U		0.102	0.500	1	01/31/2020 19:51	WG1420688
Naphthalene	U	~~J4~~	0.174	2.50	1	01/31/2020 19:51	WG1420688
n-Propylbenzene	U		0.162	0.500	1	01/31/2020 19:51	WG1420688
Styrene	U		0.117	0.500	1	01/31/2020 19:51	WG1420688
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	01/31/2020 19:51	WG1420688
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	01/31/2020 19:51	WG1420688
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	01/31/2020 19:51	WG1420688
Tetrachloroethene	U		0.199	0.500	1	01/31/2020 19:51	WG1420688
Toluene	U		0.412	0.500	1	01/31/2020 19:51	WG1420688
1,2,3-Trichlorobenzene	U		0.164	0.500	1	01/31/2020 19:51	WG1420688
1,2,4-Trichlorobenzene	U		0.355	0.500	1	01/31/2020 19:51	WG1420688
1,1,1-Trichloroethane	U	~~J4~~	0.0940	0.500	1	01/31/2020 19:51	WG1420688
1,1,2-Trichloroethane	U		0.186	0.500	1	01/31/2020 19:51	WG1420688
Trichloroethene	U		0.153	0.500	1	01/31/2020 19:51	WG1420688
Trichlorofluoromethane	U		0.130	2.50	1	01/31/2020 19:51	WG1420688
1,2,3-Trichloropropane	U		0.247	2.50	1	01/31/2020 19:51	WG1420688
1,2,4-Trimethylbenzene	U		0.123	0.500	1	01/31/2020 19:51	WG1420688
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	01/31/2020 19:51	WG1420688
1,3,5-Trimethylbenzene	U		0.124	0.500	1	01/31/2020 19:51	WG1420688

JC 2/18/2020

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

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Vinyl acetate	U		0.645	5.00	1	01/31/2020 19:51	WG1420688
Vinyl chloride	U		0.118	0.500	1	01/31/2020 19:51	WG1420688
Xylenes, Total	U		0.316	1.50	1	01/31/2020 19:51	WG1420688
(S) Toluene-d8	*99.3*			*80.0-120*		*01/31/2020 19:51*	WG1420688
(S) 4-Bromofluorobenzene	*94.3*			*77.0-126*		*01/31/2020 19:51*	WG1420688
(S) 1,2-Dichloroethane-d4	*121*			*70.0-130*		*01/31/2020 19:51*	WG1420688

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Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	180000		2710	20000	1	01/29/2020 15:36	WG1419044

Sample Narrative:

L1183749-02 WG1419044: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	19100		51.9	1000	1	01/29/2020 22:46	WG1418892
Nitrate	U		22.7	100	1	01/29/2020 22:46	WG1418892
Sulfate	1880	J	77.4	5000	1	01/29/2020 22:46	WG1418892

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	13400		102	1000	1	02/02/2020 01:26	WG1420575

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	916		15.0	100	1	01/29/2020 21:10	WG1418980
Manganese	50.3		0.250	5.00	1	01/29/2020 21:10	WG1418980

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	66.5	U ~~B J~~	31.6	100	1	02/01/2020 02:15	WG1419920
(S) a,a,a-Trifluorotoluene(FID)	*97.2*			*78.0-120*		*02/01/2020 02:15*	WG1419920

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	3030		0.287	0.678	1	01/31/2020 14:06	WG1420207
Ethane	13.6		0.296	1.29	1	01/31/2020 14:06	WG1420207
Ethene	24.7		0.422	1.27	1	01/31/2020 14:06	WG1420207

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	15.7	J	1.05	25.0	1	02/02/2020 22:46	WG1421246
Acrylonitrile	U		0.873	5.00	1	02/02/2020 22:46	WG1421246
Benzene	U		0.0896	0.500	1	02/02/2020 22:46	WG1421246
Bromobenzene	U		0.133	0.500	1	02/02/2020 22:46	WG1421246
Bromodichloromethane	U		0.0800	0.500	1	02/02/2020 22:46	WG1421246
Bromochloromethane	U		0.145	0.500	1	02/02/2020 22:46	WG1421246
Bromoform	U		0.186	0.500	1	02/02/2020 22:46	WG1421246
Bromomethane	U		0.157	2.50	1	02/02/2020 22:46	WG1421246
n-Butylbenzene	U		0.143	0.500	1	02/02/2020 22:46	WG1421246
sec-Butylbenzene	U		0.134	0.500	1	02/02/2020 22:46	WG1421246
tert-Butylbenzene	U		0.183	0.500	1	02/02/2020 22:46	WG1421246
Carbon disulfide	1.18		0.101	0.500	1	02/02/2020 22:46	WG1421246
Carbon tetrachloride	U		0.159	0.500	1	02/02/2020 22:46	WG1421246

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chlorobenzene	U		0.140	0.500	1	02/02/2020 22:46	WG1421246
Chlorodibromomethane	U		0.128	0.500	1	02/02/2020 22:46	WG1421246
Chloroethane	U		0.141	2.50	1	02/02/2020 22:46	WG1421246
Chloroform	U		0.0860	0.500	1	02/02/2020 22:46	WG1421246
Chloromethane	U		0.153	1.25	1	02/02/2020 22:46	WG1421246
2-Chlorotoluene	U		0.111	0.500	1	02/02/2020 22:46	WG1421246
4-Chlorotoluene	U		0.0972	0.500	1	02/02/2020 22:46	WG1421246
1,2-Dibromo-3-Chloropropane	U UJ	J0	0.325	2.50	1	02/02/2020 22:46	WG1421246
1,2-Dibromoethane	U		0.193	0.500	1	02/02/2020 22:46	WG1421246
Dibromomethane	U		0.117	0.500	1	02/02/2020 22:46	WG1421246
1,2-Dichlorobenzene	U		0.101	0.500	1	02/02/2020 22:46	WG1421246
1,3-Dichlorobenzene	U		0.130	0.500	1	02/02/2020 22:46	WG1421246
1,4-Dichlorobenzene	U		0.121	0.500	1	02/02/2020 22:46	WG1421246
Dichlorodifluoromethane	U		0.127	2.50	1	02/02/2020 22:46	WG1421246
1,1-Dichloroethane	U		0.114	0.500	1	02/02/2020 22:46	WG1421246
1,2-Dichloroethane	U		0.108	0.500	1	02/02/2020 22:46	WG1421246
1,1-Dichloroethene	U		0.188	0.500	1	02/02/2020 22:46	WG1421246
cis-1,2-Dichloroethene	8.95		0.0933	0.500	1	02/02/2020 22:46	WG1421246
trans-1,2-Dichloroethene	0.479	J	0.152	0.500	1	02/02/2020 22:46	WG1421246
1,2-Dichloropropane	U		0.190	0.500	1	02/02/2020 22:46	WG1421246
1,1-Dichloropropene	U		0.128	0.500	1	02/02/2020 22:46	WG1421246
1,3-Dichloropropane	U		0.147	1.00	1	02/02/2020 22:46	WG1421246
cis-1,3-Dichloropropene	U		0.0976	0.500	1	02/02/2020 22:46	WG1421246
trans-1,3-Dichloropropene	U		0.222	0.500	1	02/02/2020 22:46	WG1421246
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	02/02/2020 22:46	WG1421246
2,2-Dichloropropane	U		0.0929	0.500	1	02/02/2020 22:46	WG1421246
Di-isopropyl ether	U		0.0924	0.500	1	02/02/2020 22:46	WG1421246
Ethylbenzene	U		0.158	0.500	1	02/02/2020 22:46	WG1421246
Hexachloro-1,3-butadiene	U		0.157	1.00	1	02/02/2020 22:46	WG1421246
2-Hexanone	U		0.757	5.00	1	02/02/2020 22:46	WG1421246
n-Hexane	U		0.305	5.00	1	02/02/2020 22:46	WG1421246
Iodomethane	U		0.377	10.0	1	02/02/2020 22:46	WG1421246
Isopropylbenzene	U		0.126	0.500	1	02/02/2020 22:46	WG1421246
p-Isopropyltoluene	U		0.138	0.500	1	02/02/2020 22:46	WG1421246
2-Butanone (MEK)	U		1.28	5.00	1	02/02/2020 22:46	WG1421246
Methylene Chloride	U		1.07	2.50	1	02/02/2020 22:46	WG1421246
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	02/02/2020 22:46	WG1421246
Methyl tert-butyl ether	U		0.102	0.500	1	02/02/2020 22:46	WG1421246
Naphthalene	U UJ	J0	0.174	2.50	1	02/02/2020 22:46	WG1421246
n-Propylbenzene	U		0.162	0.500	1	02/02/2020 22:46	WG1421246
Styrene	U		0.117	0.500	1	02/02/2020 22:46	WG1421246
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	02/02/2020 22:46	WG1421246
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	02/02/2020 22:46	WG1421246
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	02/02/2020 22:46	WG1421246
Tetrachloroethene	U		0.199	0.500	1	02/02/2020 22:46	WG1421246
Toluene	U		0.412	0.500	1	02/02/2020 22:46	WG1421246
1,2,3-Trichlorobenzene	U UJ	J0	0.164	0.500	1	02/02/2020 22:46	WG1421246
1,2,4-Trichlorobenzene	U UJ	J0	0.355	0.500	1	02/02/2020 22:46	WG1421246
1,1,1-Trichloroethane	U		0.0940	0.500	1	02/02/2020 22:46	WG1421246
1,1,2-Trichloroethane	U		0.186	0.500	1	02/02/2020 22:46	WG1421246
Trichloroethene	U		0.153	0.500	1	02/02/2020 22:46	WG1421246
Trichlorofluoromethane	U		0.130	2.50	1	02/02/2020 22:46	WG1421246
1,2,3-Trichloropropane	U		0.247	2.50	1	02/02/2020 22:46	WG1421246
1,2,4-Trimethylbenzene	U		0.123	0.500	1	02/02/2020 22:46	WG1421246
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	02/02/2020 22:46	WG1421246
1,3,5-Trimethylbenzene	U		0.124	0.500	1	02/02/2020 22:46	WG1421246

JC 2/18/2020

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

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Vinyl acetate	U		0.645	5.00	1	02/02/2020 22:46	WG1421246
Vinyl chloride	10.3		0.118	0.500	1	02/02/2020 22:46	WG1421246
Xylenes, Total	U		0.316	1.50	1	02/02/2020 22:46	WG1421246
(S) Toluene-d8	*90.9*			*80.0-120*		*02/02/2020 22:46*	WG1421246
(S) 4-Bromofluorobenzene	*106*			*77.0-126*		*02/02/2020 22:46*	WG1421246
(S) 1,2-Dichloroethane-d4	*99.6*			*70.0-130*		*02/02/2020 22:46*	WG1421246

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Wet Chemistry by Method 2320 B-2011

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Alkalinity	588000		2710	20000	1	01/29/2020 15:46	WG1419044

Sample Narrative:

L1183749-03 WG1419044: Endpoint pH 4.5

Wet Chemistry by Method 9056A

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Chloride	28800		51.9	1000	1	01/29/2020 23:12	WG1418892
Nitrate	U		22.7	100	1	01/29/2020 23:12	WG1418892
Sulfate	102000		387	25000	5	01/30/2020 01:11	WG1418892

Wet Chemistry by Method 9060A

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
TOC (Total Organic Carbon)	10300		102	1000	1	02/02/2020 01:46	WG1420575

Metals (ICPMS) by Method 6020B

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Iron	9660		15.0	100	1	01/29/2020 21:13	WG1418980
Manganese	998		0.250	5.00	1	01/29/2020 21:13	WG1418980

Volatile Organic Compounds (GC) by Method NWTPHGX

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Gasoline Range Organics-NWTPH	1890		31.6	100	1	02/01/2020 02:37	WG1419920
(S) a,a,a-Trifluorotoluene(FID)	*97.4*			*78.0-120*		*02/01/2020 02:37*	WG1419920

Sample Narrative:

L1183749-03 WG1419920: No discernable petroleum pattern.

Volatile Organic Compounds (GC) by Method RSK175

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Methane	1220		2.87	6.78	10	01/31/2020 15:36	WG1420255
Ethane	68.4		0.296	1.29	1	01/31/2020 14:08	WG1420207
Ethene	117		0.422	1.27	1	01/31/2020 14:08	WG1420207

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

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Acetone	U		21.0	500	20	01/31/2020 20:32	WG1420688
Acrylonitrile	U		17.5	100	20	01/31/2020 20:32	WG1420688
Benzene	U		1.79	10.0	20	01/31/2020 20:32	WG1420688
Bromobenzene	U		2.66	10.0	20	01/31/2020 20:32	WG1420688
Bromodichloromethane	U		1.60	10.0	20	01/31/2020 20:32	WG1420688
Bromochloromethane	U		2.90	10.0	20	01/31/2020 20:32	WG1420688
Bromoform	U		3.72	10.0	20	01/31/2020 20:32	WG1420688
Bromomethane	U		3.14	50.0	20	01/31/2020 20:32	WG1420688
n-Butylbenzene	U		2.86	10.0	20	01/31/2020 20:32	WG1420688
sec-Butylbenzene	U		2.68	10.0	20	01/31/2020 20:32	WG1420688

JC 2/18/2020

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
tert-Butylbenzene	U		3.66	10.0	20	01/31/2020 20:32	WG1420688
Carbon disulfide	U		2.02	10.0	20	01/31/2020 20:32	WG1420688
Carbon tetrachloride	U	~~J4~~	3.18	10.0	20	01/31/2020 20:32	WG1420688
Chlorobenzene	U		2.80	10.0	20	01/31/2020 20:32	WG1420688
Chlorodibromomethane	U		2.56	10.0	20	01/31/2020 20:32	WG1420688
Chloroethane	U		2.82	50.0	20	01/31/2020 20:32	WG1420688
Chloroform	U		1.72	10.0	20	01/31/2020 20:32	WG1420688
Chloromethane	U		3.06	25.0	20	01/31/2020 20:32	WG1420688
2-Chlorotoluene	U		2.22	10.0	20	01/31/2020 20:32	WG1420688
4-Chlorotoluene	U		1.94	10.0	20	01/31/2020 20:32	WG1420688
1,2-Dibromo-3-Chloropropane	U	~~J4~~	6.50	50.0	20	01/31/2020 20:32	WG1420688
1,2-Dibromoethane	U		3.86	10.0	20	01/31/2020 20:32	WG1420688
Dibromomethane	U		2.34	10.0	20	01/31/2020 20:32	WG1420688
1,2-Dichlorobenzene	U		2.02	10.0	20	01/31/2020 20:32	WG1420688
1,3-Dichlorobenzene	U		2.60	10.0	20	01/31/2020 20:32	WG1420688
1,4-Dichlorobenzene	U		2.42	10.0	20	01/31/2020 20:32	WG1420688
Dichlorodifluoromethane	U		2.54	50.0	20	01/31/2020 20:32	WG1420688
1,1-Dichloroethane	U		2.28	10.0	20	01/31/2020 20:32	WG1420688
1,2-Dichloroethane	U		2.16	10.0	20	01/31/2020 20:32	WG1420688
1,1-Dichloroethene	22.1		3.76	10.0	20	01/31/2020 20:32	WG1420688
cis-1,2-Dichloroethene	3590		18.7	100	200	02/03/2020 03:38	WG1421246
trans-1,2-Dichloroethene	22.2		3.04	10.0	20	01/31/2020 20:32	WG1420688
1,2-Dichloropropane	U		3.80	10.0	20	01/31/2020 20:32	WG1420688
1,1-Dichloropropene	U		2.56	10.0	20	01/31/2020 20:32	WG1420688
1,3-Dichloropropane	U		2.94	20.0	20	01/31/2020 20:32	WG1420688
cis-1,3-Dichloropropene	U		1.95	10.0	20	01/31/2020 20:32	WG1420688
trans-1,3-Dichloropropene	U		4.44	10.0	20	01/31/2020 20:32	WG1420688
trans-1,4-Dichloro-2-butene	U		5.14	100	20	01/31/2020 20:32	WG1420688
2,2-Dichloropropane	U		1.86	10.0	20	01/31/2020 20:32	WG1420688
Di-isopropyl ether	U		1.85	10.0	20	01/31/2020 20:32	WG1420688
Ethylbenzene	U		3.16	10.0	20	01/31/2020 20:32	WG1420688
Hexachloro-1,3-butadiene	U	~~J4~~	3.14	20.0	20	01/31/2020 20:32	WG1420688
2-Hexanone	U		15.1	100	20	01/31/2020 20:32	WG1420688
n-Hexane	U		6.10	100	20	01/31/2020 20:32	WG1420688
Iodomethane	U		7.54	200	20	01/31/2020 20:32	WG1420688
Isopropylbenzene	U		2.52	10.0	20	01/31/2020 20:32	WG1420688
p-Isopropyltoluene	U		2.76	10.0	20	01/31/2020 20:32	WG1420688
2-Butanone (MEK)	U		25.6	100	20	01/31/2020 20:32	WG1420688
Methylene Chloride	U		21.4	50.0	20	01/31/2020 20:32	WG1420688
4-Methyl-2-pentanone (MIBK)	U		16.5	100	20	01/31/2020 20:32	WG1420688
Methyl tert-butyl ether	U		2.04	10.0	20	01/31/2020 20:32	WG1420688
Naphthalene	U	~~J4~~	3.48	50.0	20	01/31/2020 20:32	WG1420688
n-Propylbenzene	U		3.24	10.0	20	01/31/2020 20:32	WG1420688
Styrene	U		2.34	10.0	20	01/31/2020 20:32	WG1420688
1,1,1,2-Tetrachloroethane	U		2.40	10.0	20	01/31/2020 20:32	WG1420688
1,1,2,2-Tetrachloroethane	U		2.60	10.0	20	01/31/2020 20:32	WG1420688
1,1,2-Trichlorotrifluoroethane	U		3.28	10.0	20	01/31/2020 20:32	WG1420688
Tetrachloroethene	U		3.98	10.0	20	01/31/2020 20:32	WG1420688
Toluene	U		8.24	10.0	20	01/31/2020 20:32	WG1420688
1,2,3-Trichlorobenzene	U		3.28	10.0	20	01/31/2020 20:32	WG1420688
1,2,4-Trichlorobenzene	U		7.10	10.0	20	01/31/2020 20:32	WG1420688
1,1,1-Trichloroethane	U	~~J4~~	1.88	10.0	20	01/31/2020 20:32	WG1420688
1,1,2-Trichloroethane	U		3.72	10.0	20	01/31/2020 20:32	WG1420688
Trichloroethene	168		3.06	10.0	20	01/31/2020 20:32	WG1420688
Trichlorofluoromethane	U		2.60	50.0	20	01/31/2020 20:32	WG1420688
1,2,3-Trichloropropane	U		4.94	50.0	20	01/31/2020 20:32	WG1420688

JC 2/18/2020

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,2,4-Trimethylbenzene	U		2.46	10.0	20	01/31/2020 20:32	WG1420688
1,2,3-Trimethylbenzene	U		1.48	10.0	20	01/31/2020 20:32	WG1420688
1,3,5-Trimethylbenzene	U		2.48	10.0	20	01/31/2020 20:32	WG1420688
Vinyl acetate	U		12.9	100	20	01/31/2020 20:32	WG1420688
Vinyl chloride	674		2.36	10.0	20	01/31/2020 20:32	WG1420688
Xylenes, Total	U		6.32	30.0	20	01/31/2020 20:32	WG1420688
(S) Toluene-d8	*98.6*			*80.0-120*		*01/31/2020 20:32*	WG1420688
(S) Toluene-d8	*96.5*			*80.0-120*		*02/03/2020 03:38*	WG1421246
(S) 4-Bromofluorobenzene	*97.3*			*77.0-126*		*01/31/2020 20:32*	WG1420688
(S) 4-Bromofluorobenzene	*106*			*77.0-126*		*02/03/2020 03:38*	WG1421246
(S) 1,2-Dichloroethane-d4	*122*			*70.0-130*		*01/31/2020 20:32*	WG1420688
(S) 1,2-Dichloroethane-d4	*100*			*70.0-130*		*02/03/2020 03:38*	WG1421246

JC 2/18/2020

MW-174-012820
Collected date/time: 01/28/20 12:54

SAMPLE RESULTS - 04

L1183749

Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	328000		2710	20000	1	01/29/2020 15:55	WG1419044

Sample Narrative:

L1183749-04 WG1419044: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	29700		51.9	1000	1	01/29/2020 23:25	WG1418892
Nitrate	U		22.7	100	1	01/29/2020 23:25	WG1418892
Sulfate	11100		77.4	5000	1	01/29/2020 23:25	WG1418892

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	5280		102	1000	1	02/02/2020 02:44	WG1420575

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	9950		15.0	100	1	01/29/2020 21:16	WG1418980
Manganese	710		0.250	5.00	1	01/29/2020 21:16	WG1418980

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	531	~~B~~	31.6	100	1	02/01/2020 07:21	WG1419920
(S) a,a,a-Trifluorotoluene(FID)	*96.7*			*78.0-120*		*02/01/2020 07:21*	WG1419920

Sample Narrative:

L1183749-04 WG1419920: No discernable petroleum pattern.

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	1720		2.87	6.78	10	01/31/2020 15:39	WG1420255
Ethane	111		0.296	1.29	1	01/31/2020 14:13	WG1420207
Ethene	U		0.422	1.27	1	01/31/2020 14:13	WG1420207

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U		1.05	25.0	1	01/31/2020 20:53	WG1420688
Acrylonitrile	U		0.873	5.00	1	01/31/2020 20:53	WG1420688
Benzene	U		0.0896	0.500	1	01/31/2020 20:53	WG1420688
Bromobenzene	U		0.133	0.500	1	01/31/2020 20:53	WG1420688
Bromodichloromethane	U		0.0800	0.500	1	01/31/2020 20:53	WG1420688
Bromochloromethane	U		0.145	0.500	1	01/31/2020 20:53	WG1420688
Bromoform	U		0.186	0.500	1	01/31/2020 20:53	WG1420688
Bromomethane	U		0.157	2.50	1	01/31/2020 20:53	WG1420688
n-Butylbenzene	U		0.143	0.500	1	01/31/2020 20:53	WG1420688
sec-Butylbenzene	U		0.134	0.500	1	01/31/2020 20:53	WG1420688

JC 2/18/2020

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

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
tert-Butylbenzene	U		0.183	0.500	1	01/31/2020 20:53	WG1420688
Carbon disulfide	U		0.101	0.500	1	01/31/2020 20:53	WG1420688
Carbon tetrachloride	U	~~J4~~	0.159	0.500	1	01/31/2020 20:53	WG1420688
Chlorobenzene	U		0.140	0.500	1	01/31/2020 20:53	WG1420688
Chlorodibromomethane	U		0.128	0.500	1	01/31/2020 20:53	WG1420688
Chloroethane	U		0.141	2.50	1	01/31/2020 20:53	WG1420688
Chloroform	U		0.0860	0.500	1	01/31/2020 20:53	WG1420688
Chloromethane	U		0.153	1.25	1	01/31/2020 20:53	WG1420688
2-Chlorotoluene	U		0.111	0.500	1	01/31/2020 20:53	WG1420688
4-Chlorotoluene	U		0.0972	0.500	1	01/31/2020 20:53	WG1420688
1,2-Dibromo-3-Chloropropane	U	~~J4~~	0.325	2.50	1	01/31/2020 20:53	WG1420688
1,2-Dibromoethane	U		0.193	0.500	1	01/31/2020 20:53	WG1420688
Dibromomethane	U		0.117	0.500	1	01/31/2020 20:53	WG1420688
1,2-Dichlorobenzene	U		0.101	0.500	1	01/31/2020 20:53	WG1420688
1,3-Dichlorobenzene	U		0.130	0.500	1	01/31/2020 20:53	WG1420688
1,4-Dichlorobenzene	U		0.121	0.500	1	01/31/2020 20:53	WG1420688
Dichlorodifluoromethane	U		0.127	2.50	1	01/31/2020 20:53	WG1420688
1,1-Dichloroethane	U		0.114	0.500	1	01/31/2020 20:53	WG1420688
1,2-Dichloroethane	U		0.108	0.500	1	01/31/2020 20:53	WG1420688
1,1-Dichloroethene	U		0.188	0.500	1	01/31/2020 20:53	WG1420688
cis-1,2-Dichloroethene	0.484	J	0.0933	0.500	1	02/02/2020 23:05	WG1421246
trans-1,2-Dichloroethene	1.05		0.152	0.500	1	01/31/2020 20:53	WG1420688
1,2-Dichloropropane	U		0.190	0.500	1	01/31/2020 20:53	WG1420688
1,1-Dichloropropene	U		0.128	0.500	1	01/31/2020 20:53	WG1420688
1,3-Dichloropropane	U		0.147	1.00	1	01/31/2020 20:53	WG1420688
cis-1,3-Dichloropropene	U		0.0976	0.500	1	01/31/2020 20:53	WG1420688
trans-1,3-Dichloropropene	U		0.222	0.500	1	01/31/2020 20:53	WG1420688
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	01/31/2020 20:53	WG1420688
2,2-Dichloropropane	U		0.0929	0.500	1	01/31/2020 20:53	WG1420688
Di-isopropyl ether	U		0.0924	0.500	1	01/31/2020 20:53	WG1420688
Ethylbenzene	U		0.158	0.500	1	01/31/2020 20:53	WG1420688
Hexachloro-1,3-butadiene	U	~~J4~~	0.157	1.00	1	01/31/2020 20:53	WG1420688
2-Hexanone	U		0.757	5.00	1	01/31/2020 20:53	WG1420688
n-Hexane	U		0.305	5.00	1	01/31/2020 20:53	WG1420688
Iodomethane	U		0.377	10.0	1	01/31/2020 20:53	WG1420688
Isopropylbenzene	U		0.126	0.500	1	01/31/2020 20:53	WG1420688
p-Isopropyltoluene	U		0.138	0.500	1	01/31/2020 20:53	WG1420688
2-Butanone (MEK)	U		1.28	5.00	1	01/31/2020 20:53	WG1420688
Methylene Chloride	U		1.07	2.50	1	01/31/2020 20:53	WG1420688
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	01/31/2020 20:53	WG1420688
Methyl tert-butyl ether	U		0.102	0.500	1	01/31/2020 20:53	WG1420688
Naphthalene	U	~~J4~~	0.174	2.50	1	01/31/2020 20:53	WG1420688
n-Propylbenzene	U		0.162	0.500	1	01/31/2020 20:53	WG1420688
Styrene	U		0.117	0.500	1	01/31/2020 20:53	WG1420688
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	01/31/2020 20:53	WG1420688
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	01/31/2020 20:53	WG1420688
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	01/31/2020 20:53	WG1420688
Tetrachloroethene	U		0.199	0.500	1	01/31/2020 20:53	WG1420688
Toluene	U		0.412	0.500	1	01/31/2020 20:53	WG1420688
1,2,3-Trichlorobenzene	U		0.164	0.500	1	01/31/2020 20:53	WG1420688
1,2,4-Trichlorobenzene	U		0.355	0.500	1	01/31/2020 20:53	WG1420688
1,1,1-Trichloroethane	U	~~J4~~	0.0940	0.500	1	01/31/2020 20:53	WG1420688
1,1,2-Trichloroethane	U		0.186	0.500	1	01/31/2020 20:53	WG1420688
Trichloroethene	U		0.153	0.500	1	01/31/2020 20:53	WG1420688
Trichlorofluoromethane	U		0.130	2.50	1	01/31/2020 20:53	WG1420688
1,2,3-Trichloropropane	U		0.247	2.50	1	01/31/2020 20:53	WG1420688

JC 2/18/2020

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

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

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
1,2,4-Trimethylbenzene	U		0.123	0.500	1	01/31/2020 20:53	WG1420688
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	01/31/2020 20:53	WG1420688
1,3,5-Trimethylbenzene	U		0.124	0.500	1	01/31/2020 20:53	WG1420688
Vinyl acetate	U		0.645	5.00	1	01/31/2020 20:53	WG1420688
Vinyl chloride	0.529		0.118	0.500	1	01/31/2020 20:53	WG1420688
Xylenes, Total	U		0.316	1.50	1	01/31/2020 20:53	WG1420688
(S) Toluene-d8	*101*			*80.0-120*		*01/31/2020 20:53*	WG1420688
(S) Toluene-d8	*94.8*			*80.0-120*		*02/02/2020 23:05*	WG1421246
(S) 4-Bromofluorobenzene	*97.7*			*77.0-126*		*01/31/2020 20:53*	WG1420688
(S) 4-Bromofluorobenzene	*102*			*77.0-126*		*02/02/2020 23:05*	WG1421246
(S) 1,2-Dichloroethane-d4	*118*			*70.0-130*		*01/31/2020 20:53*	WG1420688
(S) 1,2-Dichloroethane-d4	*97.8*			*70.0-130*		*02/02/2020 23:05*	WG1421246

JC 2/18/2020

Wet Chemistry by Method 2320 B-2011

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Alkalinity	257000		2710	20000	1	01/29/2020 16:03	WG1419044

Sample Narrative:

L1183749-05 WG1419044: Endpoint pH 4.5

Wet Chemistry by Method 9056A

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Chloride	22700		51.9	1000	1	01/29/2020 23:38	WG1418892
Nitrate	U		22.7	100	1	01/29/2020 23:38	WG1418892
Sulfate	11800		77.4	5000	1	01/29/2020 23:38	WG1418892

Wet Chemistry by Method 9060A

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
TOC (Total Organic Carbon)	1580	~~B~~	102	1000	1	02/02/2020 02:57	WG1420575

Metals (ICPMS) by Method 6020B

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Iron	1200		15.0	100	1	01/29/2020 21:19	WG1418980
Manganese	704		0.250	5.00	1	01/29/2020 21:19	WG1418980

Volatile Organic Compounds (GC) by Method NWTPHGX

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Gasoline Range Organics-NWTPH	72.8 U	~~B J~~	31.6	100	1	02/01/2020 07:42	WG1419920
(S) a,a,a-Trifluorotoluene(FID)	*97.4*			*78.0-120*		*02/01/2020 07:42*	WG1419920

Volatile Organic Compounds (GC) by Method RSK175

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Methane	234		0.287	0.678	1	01/31/2020 14:27	WG1420207
Ethane	U		0.296	1.29	1	01/31/2020 14:27	WG1420207
Ethene	U		0.422	1.27	1	01/31/2020 14:27	WG1420207

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

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Acetone	U		1.05	25.0	1	02/02/2020 23:25	WG1421246
Acrylonitrile	U		0.873	5.00	1	02/02/2020 23:25	WG1421246
Benzene	U		0.0896	0.500	1	02/02/2020 23:25	WG1421246
Bromobenzene	U		0.133	0.500	1	02/02/2020 23:25	WG1421246
Bromodichloromethane	U		0.0800	0.500	1	02/02/2020 23:25	WG1421246
Bromochloromethane	U		0.145	0.500	1	02/02/2020 23:25	WG1421246
Bromoform	U		0.186	0.500	1	02/02/2020 23:25	WG1421246
Bromomethane	U		0.157	2.50	1	02/02/2020 23:25	WG1421246
n-Butylbenzene	U		0.143	0.500	1	02/02/2020 23:25	WG1421246
sec-Butylbenzene	U		0.134	0.500	1	02/02/2020 23:25	WG1421246
tert-Butylbenzene	U		0.183	0.500	1	02/02/2020 23:25	WG1421246
Carbon disulfide	U		0.101	0.500	1	02/02/2020 23:25	WG1421246
Carbon tetrachloride	U		0.159	0.500	1	02/02/2020 23:25	WG1421246

JC 2/18/2020

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

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chlorobenzene	U		0.140	0.500	1	02/02/2020 23:25	WG1421246
Chlorodibromomethane	U		0.128	0.500	1	02/02/2020 23:25	WG1421246
Chloroethane	U		0.141	2.50	1	02/02/2020 23:25	WG1421246
Chloroform	U		0.0860	0.500	1	02/02/2020 23:25	WG1421246
Chloromethane	U		0.153	1.25	1	02/02/2020 23:25	WG1421246
2-Chlorotoluene	U		0.111	0.500	1	02/02/2020 23:25	WG1421246
4-Chlorotoluene	U		0.0972	0.500	1	02/02/2020 23:25	WG1421246
1,2-Dibromo-3-Chloropropane	U UJ	J0	0.325	2.50	1	02/02/2020 23:25	WG1421246
1,2-Dibromoethane	U		0.193	0.500	1	02/02/2020 23:25	WG1421246
Dibromomethane	U		0.117	0.500	1	02/02/2020 23:25	WG1421246
1,2-Dichlorobenzene	U		0.101	0.500	1	02/02/2020 23:25	WG1421246
1,3-Dichlorobenzene	U		0.130	0.500	1	02/02/2020 23:25	WG1421246
1,4-Dichlorobenzene	U		0.121	0.500	1	02/02/2020 23:25	WG1421246
Dichlorodifluoromethane	U		0.127	2.50	1	02/02/2020 23:25	WG1421246
1,1-Dichloroethane	U		0.114	0.500	1	02/02/2020 23:25	WG1421246
1,2-Dichloroethane	U		0.108	0.500	1	02/02/2020 23:25	WG1421246
1,1-Dichloroethene	1.33		0.188	0.500	1	02/02/2020 23:25	WG1421246
cis-1,2-Dichloroethene	9.02		0.0933	0.500	1	02/02/2020 23:25	WG1421246
trans-1,2-Dichloroethene	0.388	J	0.152	0.500	1	02/02/2020 23:25	WG1421246
1,2-Dichloropropane	U		0.190	0.500	1	02/02/2020 23:25	WG1421246
1,1-Dichloropropene	U		0.128	0.500	1	02/02/2020 23:25	WG1421246
1,3-Dichloropropane	U		0.147	1.00	1	02/02/2020 23:25	WG1421246
cis-1,3-Dichloropropene	U		0.0976	0.500	1	02/02/2020 23:25	WG1421246
trans-1,3-Dichloropropene	U		0.222	0.500	1	02/02/2020 23:25	WG1421246
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	02/02/2020 23:25	WG1421246
2,2-Dichloropropane	U		0.0929	0.500	1	02/02/2020 23:25	WG1421246
Di-isopropyl ether	U		0.0924	0.500	1	02/02/2020 23:25	WG1421246
Ethylbenzene	U		0.158	0.500	1	02/02/2020 23:25	WG1421246
Hexachloro-1,3-butadiene	U		0.157	1.00	1	02/02/2020 23:25	WG1421246
2-Hexanone	U		0.757	5.00	1	02/02/2020 23:25	WG1421246
n-Hexane	U		0.305	5.00	1	02/02/2020 23:25	WG1421246
Iodomethane	U		0.377	10.0	1	02/02/2020 23:25	WG1421246
Isopropylbenzene	U		0.126	0.500	1	02/02/2020 23:25	WG1421246
p-Isopropyltoluene	U		0.138	0.500	1	02/02/2020 23:25	WG1421246
2-Butanone (MEK)	U		1.28	5.00	1	02/02/2020 23:25	WG1421246
Methylene Chloride	U		1.07	2.50	1	02/02/2020 23:25	WG1421246
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	02/02/2020 23:25	WG1421246
Methyl tert-butyl ether	U		0.102	0.500	1	02/02/2020 23:25	WG1421246
Naphthalene	U UJ	J0	0.174	2.50	1	02/02/2020 23:25	WG1421246
n-Propylbenzene	U		0.162	0.500	1	02/02/2020 23:25	WG1421246
Styrene	U		0.117	0.500	1	02/02/2020 23:25	WG1421246
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	02/02/2020 23:25	WG1421246
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	02/02/2020 23:25	WG1421246
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	02/02/2020 23:25	WG1421246
Tetrachloroethene	U		0.199	0.500	1	02/02/2020 23:25	WG1421246
Toluene	U		0.412	0.500	1	02/02/2020 23:25	WG1421246
1,2,3-Trichlorobenzene	U UJ	J0	0.164	0.500	1	02/02/2020 23:25	WG1421246
1,2,4-Trichlorobenzene	U UJ	J0	0.355	0.500	1	02/02/2020 23:25	WG1421246
1,1,1-Trichloroethane	U		0.0940	0.500	1	02/02/2020 23:25	WG1421246
1,1,2-Trichloroethane	U		0.186	0.500	1	02/02/2020 23:25	WG1421246
Trichloroethene	6.05		0.153	0.500	1	02/02/2020 23:25	WG1421246
Trichlorofluoromethane	U		0.130	2.50	1	02/02/2020 23:25	WG1421246
1,2,3-Trichloropropane	U		0.247	2.50	1	02/02/2020 23:25	WG1421246
1,2,4-Trimethylbenzene	U		0.123	0.500	1	02/02/2020 23:25	WG1421246
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	02/02/2020 23:25	WG1421246
1,3,5-Trimethylbenzene	U		0.124	0.500	1	02/02/2020 23:25	WG1421246

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Vinyl acetate	U		0.645	5.00	1	02/02/2020 23:25	WG1421246
Vinyl chloride	1.10		0.118	0.500	1	02/02/2020 23:25	WG1421246
Xylenes, Total	U		0.316	1.50	1	02/02/2020 23:25	WG1421246
(S) Toluene-d8	*91.4*			*80.0-120*		*02/02/2020 23:25*	WG1421246
(S) 4-Bromofluorobenzene	*108*			*77.0-126*		*02/02/2020 23:25*	WG1421246
(S) 1,2-Dichloroethane-d4	*104*			*70.0-130*		*02/02/2020 23:25*	WG1421246

JC 2/18/2020

Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	347000		2710	20000	1	01/29/2020 16:12	WG1419044

Sample Narrative:

L1183749-06 WG1419044: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	38700		51.9	1000	1	01/30/2020 00:17	WG1418892
Nitrate	U		22.7	100	1	01/30/2020 00:17	WG1418892
Sulfate	1430	J	77.4	5000	1	01/30/2020 00:17	WG1418892

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	8740		102	1000	1	02/02/2020 03:13	WG1420575

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	365		15.0	100	1	01/29/2020 21:23	WG1418980
Manganese	213		0.250	5.00	1	01/29/2020 21:23	WG1418980

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	57.8	U ~~B J~~	31.6	100	1	02/01/2020 08:04	WG1419920
(S) a,a,a-Trifluorotoluene(FID)	*97.4*			*78.0-120*		*02/01/2020 08:04*	WG1419920

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	6210		0.287	0.678	1	01/31/2020 14:29	WG1420207
Ethane	35.2		0.296	1.29	1	01/31/2020 14:29	WG1420207
Ethene	69.1		0.422	1.27	1	01/31/2020 14:29	WG1420207

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	3.89	J	1.05	25.0	1	02/02/2020 23:44	WG1421246
Acrylonitrile	U		0.873	5.00	1	02/02/2020 23:44	WG1421246
Benzene	0.100	J	0.0896	0.500	1	02/02/2020 23:44	WG1421246
Bromobenzene	U		0.133	0.500	1	02/02/2020 23:44	WG1421246
Bromodichloromethane	U		0.0800	0.500	1	02/02/2020 23:44	WG1421246
Bromochloromethane	U		0.145	0.500	1	02/02/2020 23:44	WG1421246
Bromoform	U		0.186	0.500	1	02/02/2020 23:44	WG1421246
Bromomethane	U		0.157	2.50	1	02/02/2020 23:44	WG1421246
n-Butylbenzene	U		0.143	0.500	1	02/02/2020 23:44	WG1421246
sec-Butylbenzene	U		0.134	0.500	1	02/02/2020 23:44	WG1421246
tert-Butylbenzene	U		0.183	0.500	1	02/02/2020 23:44	WG1421246
Carbon disulfide	1.76		0.101	0.500	1	02/02/2020 23:44	WG1421246
Carbon tetrachloride	U		0.159	0.500	1	02/02/2020 23:44	WG1421246

JC 2/18/2020

MW-167-012820
Collected date/time: 01/28/20 14:00

SAMPLE RESULTS - 06

L1183749

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chlorobenzene	U		0.140	0.500	1	02/02/2020 23:44	WG1421246
Chlorodibromomethane	U		0.128	0.500	1	02/02/2020 23:44	WG1421246
Chloroethane	U		0.141	2.50	1	02/02/2020 23:44	WG1421246
Chloroform	U		0.0860	0.500	1	02/02/2020 23:44	WG1421246
Chloromethane	U		0.153	1.25	1	02/02/2020 23:44	WG1421246
2-Chlorotoluene	U		0.111	0.500	1	02/02/2020 23:44	WG1421246
4-Chlorotoluene	U		0.0972	0.500	1	02/02/2020 23:44	WG1421246
1,2-Dibromo-3-Chloropropane	U	UJ J0	0.325	2.50	1	02/02/2020 23:44	WG1421246
1,2-Dibromoethane	U		0.193	0.500	1	02/02/2020 23:44	WG1421246
Dibromomethane	U		0.117	0.500	1	02/02/2020 23:44	WG1421246
1,2-Dichlorobenzene	U		0.101	0.500	1	02/02/2020 23:44	WG1421246
1,3-Dichlorobenzene	U		0.130	0.500	1	02/02/2020 23:44	WG1421246
1,4-Dichlorobenzene	U		0.121	0.500	1	02/02/2020 23:44	WG1421246
Dichlorodifluoromethane	U		0.127	2.50	1	02/02/2020 23:44	WG1421246
1,1-Dichloroethane	U		0.114	0.500	1	02/02/2020 23:44	WG1421246
1,2-Dichloroethane	U		0.108	0.500	1	02/02/2020 23:44	WG1421246
1,1-Dichloroethene	U		0.188	0.500	1	02/02/2020 23:44	WG1421246
cis-1,2-Dichloroethene	8.08		0.0933	0.500	1	02/02/2020 23:44	WG1421246
trans-1,2-Dichloroethene	0.158	J	0.152	0.500	1	02/02/2020 23:44	WG1421246
1,2-Dichloropropane	U		0.190	0.500	1	02/02/2020 23:44	WG1421246
1,1-Dichloropropene	U		0.128	0.500	1	02/02/2020 23:44	WG1421246
1,3-Dichloropropane	U		0.147	1.00	1	02/02/2020 23:44	WG1421246
cis-1,3-Dichloropropene	U		0.0976	0.500	1	02/02/2020 23:44	WG1421246
trans-1,3-Dichloropropene	U		0.222	0.500	1	02/02/2020 23:44	WG1421246
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	02/02/2020 23:44	WG1421246
2,2-Dichloropropane	U		0.0929	0.500	1	02/02/2020 23:44	WG1421246
Di-isopropyl ether	U		0.0924	0.500	1	02/02/2020 23:44	WG1421246
Ethylbenzene	U		0.158	0.500	1	02/02/2020 23:44	WG1421246
Hexachloro-1,3-butadiene	U		0.157	1.00	1	02/02/2020 23:44	WG1421246
2-Hexanone	U		0.757	5.00	1	02/02/2020 23:44	WG1421246
n-Hexane	U		0.305	5.00	1	02/02/2020 23:44	WG1421246
Iodomethane	U		0.377	10.0	1	02/02/2020 23:44	WG1421246
Isopropylbenzene	U		0.126	0.500	1	02/02/2020 23:44	WG1421246
p-Isopropyltoluene	U		0.138	0.500	1	02/02/2020 23:44	WG1421246
2-Butanone (MEK)	U		1.28	5.00	1	02/02/2020 23:44	WG1421246
Methylene Chloride	U		1.07	2.50	1	02/02/2020 23:44	WG1421246
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	02/02/2020 23:44	WG1421246
Methyl tert-butyl ether	U		0.102	0.500	1	02/02/2020 23:44	WG1421246
Naphthalene	U	UJ J0	0.174	2.50	1	02/02/2020 23:44	WG1421246
n-Propylbenzene	U		0.162	0.500	1	02/02/2020 23:44	WG1421246
Styrene	U		0.117	0.500	1	02/02/2020 23:44	WG1421246
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	02/02/2020 23:44	WG1421246
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	02/02/2020 23:44	WG1421246
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	02/02/2020 23:44	WG1421246
Tetrachloroethene	U		0.199	0.500	1	02/02/2020 23:44	WG1421246
Toluene	U		0.412	0.500	1	02/02/2020 23:44	WG1421246
1,2,3-Trichlorobenzene	U	UJ J0	0.164	0.500	1	02/02/2020 23:44	WG1421246
1,2,4-Trichlorobenzene	U	UJ J0	0.355	0.500	1	02/02/2020 23:44	WG1421246
1,1,1-Trichloroethane	U		0.0940	0.500	1	02/02/2020 23:44	WG1421246
1,1,2-Trichloroethane	U		0.186	0.500	1	02/02/2020 23:44	WG1421246
Trichloroethene	U		0.153	0.500	1	02/02/2020 23:44	WG1421246
Trichlorofluoromethane	U		0.130	2.50	1	02/02/2020 23:44	WG1421246
1,2,3-Trichloropropane	U		0.247	2.50	1	02/02/2020 23:44	WG1421246
1,2,4-Trimethylbenzene	U		0.123	0.500	1	02/02/2020 23:44	WG1421246
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	02/02/2020 23:44	WG1421246
1,3,5-Trimethylbenzene	U		0.124	0.500	1	02/02/2020 23:44	WG1421246

JC 2/18/2020

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

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Vinyl acetate	U		0.645	5.00	1	02/02/2020 23:44	WG1421246
Vinyl chloride	11.5		0.118	0.500	1	02/02/2020 23:44	WG1421246
Xylenes, Total	U		0.316	1.50	1	02/02/2020 23:44	WG1421246
(S) Toluene-d8	*91.8*			*80.0-120*		*02/02/2020 23:44*	WG1421246
(S) 4-Bromofluorobenzene	*110*			*77.0-126*		*02/02/2020 23:44*	WG1421246
(S) 1,2-Dichloroethane-d4	*101*			*70.0-130*		*02/02/2020 23:44*	WG1421246

JC 2/18/2020

Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	179000		2710	20000	1	01/30/2020 18:31	WG1419673

Sample Narrative:

L1184164-01 WG1419673: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	18600		51.9	1000	1	01/30/2020 18:21	WG1419560
Nitrate	23.7	J	22.7	100	1	01/30/2020 18:21	WG1419560
Sulfate	11400		77.4	5000	1	01/30/2020 18:21	WG1419560

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	2820	~~B~~	102	1000	1	02/04/2020 02:51	WG1421496

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	1590		15.0	100	1	02/01/2020 15:34	WG1419838
Manganese	132		0.250	5.00	1	02/01/2020 15:34	WG1419838

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	39.3	U ~~B J~~	31.6	100	1	02/01/2020 08:25	WG1419920
(S) a,a,a-Trifluorotoluene(FID)	*97.5*			*78.0-120*		*02/01/2020 08:25*	WG1419920

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	291		0.287	0.678	1	02/01/2020 15:49	WG1420804
Ethane	U		0.296	1.29	1	02/01/2020 15:49	WG1420804
Ethene	U		0.422	1.27	1	02/01/2020 15:49	WG1420804

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U		1.05	25.0	1	01/31/2020 21:54	WG1420688
Acrylonitrile	U		0.873	5.00	1	01/31/2020 21:54	WG1420688
Benzene	U		0.0896	0.500	1	01/31/2020 21:54	WG1420688
Bromobenzene	U		0.133	0.500	1	01/31/2020 21:54	WG1420688
Bromodichloromethane	U		0.0800	0.500	1	01/31/2020 21:54	WG1420688
Bromochloromethane	U		0.145	0.500	1	01/31/2020 21:54	WG1420688
Bromoform	U		0.186	0.500	1	01/31/2020 21:54	WG1420688
Bromomethane	U		0.157	2.50	1	01/31/2020 21:54	WG1420688
n-Butylbenzene	U		0.143	0.500	1	01/31/2020 21:54	WG1420688
sec-Butylbenzene	U		0.134	0.500	1	01/31/2020 21:54	WG1420688
tert-Butylbenzene	U		0.183	0.500	1	01/31/2020 21:54	WG1420688
Carbon disulfide	U		0.101	0.500	1	01/31/2020 21:54	WG1420688
Carbon tetrachloride	U	~~J4~~	0.159	0.500	1	01/31/2020 21:54	WG1420688

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chlorobenzene	U		0.140	0.500	1	01/31/2020 21:54	WG1420688
Chlorodibromomethane	U		0.128	0.500	1	01/31/2020 21:54	WG1420688
Chloroethane	U		0.141	2.50	1	01/31/2020 21:54	WG1420688
Chloroform	U		0.0860	0.500	1	01/31/2020 21:54	WG1420688
Chloromethane	U		0.153	1.25	1	01/31/2020 21:54	WG1420688
2-Chlorotoluene	U		0.111	0.500	1	01/31/2020 21:54	WG1420688
4-Chlorotoluene	U		0.0972	0.500	1	01/31/2020 21:54	WG1420688
1,2-Dibromo-3-Chloropropane	U	~~J4~~	0.325	2.50	1	01/31/2020 21:54	WG1420688
1,2-Dibromoethane	U		0.193	0.500	1	01/31/2020 21:54	WG1420688
Dibromomethane	U		0.117	0.500	1	01/31/2020 21:54	WG1420688
1,2-Dichlorobenzene	U		0.101	0.500	1	01/31/2020 21:54	WG1420688
1,3-Dichlorobenzene	U		0.130	0.500	1	01/31/2020 21:54	WG1420688
1,4-Dichlorobenzene	U		0.121	0.500	1	01/31/2020 21:54	WG1420688
Dichlorodifluoromethane	U		0.127	2.50	1	01/31/2020 21:54	WG1420688
1,1-Dichloroethane	U		0.114	0.500	1	01/31/2020 21:54	WG1420688
1,2-Dichloroethane	U		0.108	0.500	1	01/31/2020 21:54	WG1420688
1,1-Dichloroethene	U		0.188	0.500	1	01/31/2020 21:54	WG1420688
cis-1,2-Dichloroethene	0.319	J	0.0933	0.500	1	01/31/2020 21:54	WG1420688
trans-1,2-Dichloroethene	U		0.152	0.500	1	01/31/2020 21:54	WG1420688
1,2-Dichloropropane	U		0.190	0.500	1	01/31/2020 21:54	WG1420688
1,1-Dichloropropene	U		0.128	0.500	1	01/31/2020 21:54	WG1420688
1,3-Dichloropropane	U		0.147	1.00	1	01/31/2020 21:54	WG1420688
cis-1,3-Dichloropropene	U		0.0976	0.500	1	01/31/2020 21:54	WG1420688
trans-1,3-Dichloropropene	U		0.222	0.500	1	01/31/2020 21:54	WG1420688
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	01/31/2020 21:54	WG1420688
2,2-Dichloropropane	U		0.0929	0.500	1	01/31/2020 21:54	WG1420688
Di-isopropyl ether	U		0.0924	0.500	1	01/31/2020 21:54	WG1420688
Ethylbenzene	U		0.158	0.500	1	01/31/2020 21:54	WG1420688
Hexachloro-1,3-butadiene	U	~~J4~~	0.157	1.00	1	01/31/2020 21:54	WG1420688
2-Hexanone	U		0.757	5.00	1	01/31/2020 21:54	WG1420688
n-Hexane	U		0.305	5.00	1	01/31/2020 21:54	WG1420688
Iodomethane	U		0.377	10.0	1	01/31/2020 21:54	WG1420688
Isopropylbenzene	U		0.126	0.500	1	01/31/2020 21:54	WG1420688
p-Isopropyltoluene	U		0.138	0.500	1	01/31/2020 21:54	WG1420688
2-Butanone (MEK)	U		1.28	5.00	1	01/31/2020 21:54	WG1420688
Methylene Chloride	U		1.07	2.50	1	01/31/2020 21:54	WG1420688
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	01/31/2020 21:54	WG1420688
Methyl tert-butyl ether	U		0.102	0.500	1	01/31/2020 21:54	WG1420688
Naphthalene	U	~~J4~~	0.174	2.50	1	01/31/2020 21:54	WG1420688
n-Propylbenzene	U		0.162	0.500	1	01/31/2020 21:54	WG1420688
Styrene	U		0.117	0.500	1	01/31/2020 21:54	WG1420688
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	01/31/2020 21:54	WG1420688
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	01/31/2020 21:54	WG1420688
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	01/31/2020 21:54	WG1420688
Tetrachloroethene	U		0.199	0.500	1	01/31/2020 21:54	WG1420688
Toluene	U		0.412	0.500	1	01/31/2020 21:54	WG1420688
1,2,3-Trichlorobenzene	U		0.164	0.500	1	01/31/2020 21:54	WG1420688
1,2,4-Trichlorobenzene	U		0.355	0.500	1	01/31/2020 21:54	WG1420688
1,1,1-Trichloroethane	U	~~J4~~	0.0940	0.500	1	01/31/2020 21:54	WG1420688
1,1,2-Trichloroethane	U		0.186	0.500	1	01/31/2020 21:54	WG1420688
Trichloroethene	U		0.153	0.500	1	01/31/2020 21:54	WG1420688
Trichlorofluoromethane	U		0.130	2.50	1	01/31/2020 21:54	WG1420688
1,2,3-Trichloropropane	U		0.247	2.50	1	01/31/2020 21:54	WG1420688
1,2,4-Trimethylbenzene	U		0.123	0.500	1	01/31/2020 21:54	WG1420688
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	01/31/2020 21:54	WG1420688
1,3,5-Trimethylbenzene	U		0.124	0.500	1	01/31/2020 21:54	WG1420688

JC 2/18/2020

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

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Vinyl acetate	U		0.645	5.00	1	01/31/2020 21:54	WG1420688
Vinyl chloride	0.254	J	0.118	0.500	1	01/31/2020 21:54	WG1420688
Xylenes, Total	U		0.316	1.50	1	01/31/2020 21:54	WG1420688
(S) Toluene-d8	*100*			*80.0-120*		*01/31/2020 21:54*	WG1420688
(S) 4-Bromofluorobenzene	*95.6*			*77.0-126*		*01/31/2020 21:54*	WG1420688
(S) 1,2-Dichloroethane-d4	*118*			*70.0-130*		*01/31/2020 21:54*	WG1420688

JC 2/18/2020

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

Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	1120000		2710	20000	1	01/30/2020 18:40	WG1419673

Sample Narrative:

L1184164-02 WG1419673: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	150000		260	5000	5	01/30/2020 18:48	WG1419560
Nitrate	U		22.7	100	1	01/30/2020 18:35	WG1419560
Sulfate	112	J	77.4	5000	1	01/30/2020 18:35	WG1419560

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	38700		102	1000	1	02/04/2020 03:13	WG1421496

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	18500		15.0	100	1	02/01/2020 15:37	WG1419838
Manganese	3420		0.250	5.00	1	02/01/2020 15:37	WG1419838

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	U		31.6	100	1	02/04/2020 13:48	WG1422255
(S) a,a,a-Trifluorotoluene(FID)	*107*			*78.0-120*		*02/04/2020 13:48*	WG1422255

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	37000		2.87	6.78	10	02/04/2020 14:18	WG1421971
Ethane	213		0.296	1.29	1	02/01/2020 16:00	WG1420804
Ethene	U		0.422	1.27	1	02/01/2020 16:00	WG1420804

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	108		1.05	25.0	1	02/04/2020 20:48	WG1422455
Acrylonitrile	U		0.873	5.00	1	02/03/2020 00:04	WG1421246
Benzene	0.228	J	0.0896	0.500	1	02/03/2020 00:04	WG1421246
Bromobenzene	U		0.133	0.500	1	02/03/2020 00:04	WG1421246
Bromodichloromethane	U		0.0800	0.500	1	02/03/2020 00:04	WG1421246
Bromochloromethane	U		0.145	0.500	1	02/03/2020 00:04	WG1421246
Bromoform	U		0.186	0.500	1	02/03/2020 00:04	WG1421246
Bromomethane	U		0.157	2.50	1	02/03/2020 00:04	WG1421246
n-Butylbenzene	U		0.143	0.500	1	02/03/2020 00:04	WG1421246
sec-Butylbenzene	U		0.134	0.500	1	02/03/2020 00:04	WG1421246
tert-Butylbenzene	U		0.183	0.500	1	02/03/2020 00:04	WG1421246
Carbon disulfide	U		0.101	0.500	1	02/03/2020 00:04	WG1421246
Carbon tetrachloride	U		0.159	0.500	1	02/03/2020 00:04	WG1421246

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chlorobenzene	U		0.140	0.500	1	02/03/2020 00:04	WG1421246
Chlorodibromomethane	U		0.128	0.500	1	02/03/2020 00:04	WG1421246
Chloroethane	0.325	J	0.141	2.50	1	02/03/2020 00:04	WG1421246
Chloroform	U		0.0860	0.500	1	02/03/2020 00:04	WG1421246
Chloromethane	U		0.153	1.25	1	02/03/2020 00:04	WG1421246
2-Chlorotoluene	U		0.111	0.500	1	02/03/2020 00:04	WG1421246
4-Chlorotoluene	U		0.0972	0.500	1	02/03/2020 00:04	WG1421246
1,2-Dibromo-3-Chloropropane	U	UJ J0	0.325	2.50	1	02/03/2020 00:04	WG1421246
1,2-Dibromoethane	U		0.193	0.500	1	02/03/2020 00:04	WG1421246
Dibromomethane	U		0.117	0.500	1	02/03/2020 00:04	WG1421246
1,2-Dichlorobenzene	U		0.101	0.500	1	02/03/2020 00:04	WG1421246
1,3-Dichlorobenzene	U		0.130	0.500	1	02/03/2020 00:04	WG1421246
1,4-Dichlorobenzene	U		0.121	0.500	1	02/03/2020 00:04	WG1421246
Dichlorodifluoromethane	U		0.127	2.50	1	02/03/2020 00:04	WG1421246
1,1-Dichloroethane	U		0.114	0.500	1	02/03/2020 00:04	WG1421246
1,2-Dichloroethane	U		0.108	0.500	1	02/03/2020 00:04	WG1421246
1,1-Dichloroethene	U		0.188	0.500	1	02/03/2020 00:04	WG1421246
cis-1,2-Dichloroethene	1.09		0.0933	0.500	1	02/03/2020 00:04	WG1421246
trans-1,2-Dichloroethene	1.52		0.152	0.500	1	02/03/2020 00:04	WG1421246
1,2-Dichloropropane	U		0.190	0.500	1	02/03/2020 00:04	WG1421246
1,1-Dichloropropene	U		0.128	0.500	1	02/03/2020 00:04	WG1421246
1,3-Dichloropropane	U		0.147	1.00	1	02/03/2020 00:04	WG1421246
cis-1,3-Dichloropropene	U		0.0976	0.500	1	02/03/2020 00:04	WG1421246
trans-1,3-Dichloropropene	U		0.222	0.500	1	02/03/2020 00:04	WG1421246
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	02/03/2020 00:04	WG1421246
2,2-Dichloropropane	U		0.0929	0.500	1	02/03/2020 00:04	WG1421246
Di-isopropyl ether	U		0.0924	0.500	1	02/03/2020 00:04	WG1421246
Ethylbenzene	U		0.158	0.500	1	02/03/2020 00:04	WG1421246
Hexachloro-1,3-butadiene	U		0.157	1.00	1	02/03/2020 00:04	WG1421246
2-Hexanone	0.925	J	0.757	5.00	1	02/03/2020 00:04	WG1421246
n-Hexane	U		0.305	5.00	1	02/03/2020 00:04	WG1421246
Iodomethane	U		0.377	10.0	1	02/03/2020 00:04	WG1421246
Isopropylbenzene	U		0.126	0.500	1	02/03/2020 00:04	WG1421246
p-Isopropyltoluene	U		0.138	0.500	1	02/03/2020 00:04	WG1421246
2-Butanone (MEK)	31.0		1.28	5.00	1	02/03/2020 00:04	WG1421246
Methylene Chloride	U		1.07	2.50	1	02/03/2020 00:04	WG1421246
4-Methyl-2-pentanone (MIBK)	1.15	J	0.823	5.00	1	02/03/2020 00:04	WG1421246
Methyl tert-butyl ether	U		0.102	0.500	1	02/03/2020 00:04	WG1421246
Naphthalene	U	UJ J0	0.174	2.50	1	02/03/2020 00:04	WG1421246
n-Propylbenzene	U		0.162	0.500	1	02/03/2020 00:04	WG1421246
Styrene	U		0.117	0.500	1	02/03/2020 00:04	WG1421246
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	02/03/2020 00:04	WG1421246
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	02/03/2020 00:04	WG1421246
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	02/03/2020 00:04	WG1421246
Tetrachloroethene	U		0.199	0.500	1	02/03/2020 00:04	WG1421246
Toluene	U		0.412	0.500	1	02/03/2020 00:04	WG1421246
1,2,3-Trichlorobenzene	U	UJ J0	0.164	0.500	1	02/03/2020 00:04	WG1421246
1,2,4-Trichlorobenzene	U	UJ J0	0.355	0.500	1	02/03/2020 00:04	WG1421246
1,1,1-Trichloroethane	U		0.0940	0.500	1	02/03/2020 00:04	WG1421246
1,1,2-Trichloroethane	U		0.186	0.500	1	02/03/2020 00:04	WG1421246
Trichloroethene	U		0.153	0.500	1	02/03/2020 00:04	WG1421246
Trichlorofluoromethane	U		0.130	2.50	1	02/03/2020 00:04	WG1421246
1,2,3-Trichloropropane	U		0.247	2.50	1	02/03/2020 00:04	WG1421246
1,2,4-Trimethylbenzene	U		0.123	0.500	1	02/03/2020 00:04	WG1421246
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	02/03/2020 00:04	WG1421246
1,3,5-Trimethylbenzene	U		0.124	0.500	1	02/03/2020 00:04	WG1421246

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Vinyl acetate	U		0.645	5.00	1	02/03/2020 00:04	WG1421246
Vinyl chloride	1.66		0.118	0.500	1	02/03/2020 00:04	WG1421246
Xylenes, Total	U		0.316	1.50	1	02/03/2020 00:04	WG1421246
(S) Toluene-d8	*92.4*			*80.0-120*		*02/03/2020 00:04*	WG1421246
(S) Toluene-d8	*108*			*80.0-120*		*02/04/2020 20:48*	WG1422455
(S) 4-Bromofluorobenzene	*108*			*77.0-126*		*02/03/2020 00:04*	WG1421246
(S) 4-Bromofluorobenzene	*106*			*77.0-126*		*02/04/2020 20:48*	WG1422455
(S) 1,2-Dichloroethane-d4	*101*			*70.0-130*		*02/03/2020 00:04*	WG1421246
(S) 1,2-Dichloroethane-d4	*92.3*			*70.0-130*		*02/04/2020 20:48*	WG1422455

JC 2/18/2020

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

Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	172000		2710	20000	1	01/30/2020 18:49	WG1419673

Sample Narrative:

L1184164-03 WG1419673: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	8940		51.9	1000	1	01/30/2020 19:01	WG1419560
Nitrate	U		22.7	100	1	01/30/2020 19:01	WG1419560
Sulfate	2300	J	77.4	5000	1	01/30/2020 19:01	WG1419560

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	6590		102	1000	1	02/04/2020 05:12	WG1421496

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	769		15.0	100	1	02/01/2020 15:40	WG1419838
Manganese	324		0.250	5.00	1	02/01/2020 15:40	WG1419838

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	35.0 U	~~B J~~	31.6	100	1	02/01/2020 09:08	WG1419920
(S) a,a,a-Trifluorotoluene(FID)	*97.4*			*78.0-120*		*02/01/2020 09:08*	WG1419920

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	294		0.287	0.678	1	02/01/2020 16:16	WG1420804
Ethane	6.02		0.296	1.29	1	02/01/2020 16:16	WG1420804
Ethene	U		0.422	1.27	1	02/01/2020 16:16	WG1420804

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U		1.05	25.0	1	01/31/2020 22:35	WG1420688
Acrylonitrile	U		0.873	5.00	1	01/31/2020 22:35	WG1420688
Benzene	U		0.0896	0.500	1	01/31/2020 22:35	WG1420688
Bromobenzene	U		0.133	0.500	1	01/31/2020 22:35	WG1420688
Bromodichloromethane	U		0.0800	0.500	1	01/31/2020 22:35	WG1420688
Bromochloromethane	U		0.145	0.500	1	01/31/2020 22:35	WG1420688
Bromoform	U		0.186	0.500	1	01/31/2020 22:35	WG1420688
Bromomethane	U		0.157	2.50	1	01/31/2020 22:35	WG1420688
n-Butylbenzene	U		0.143	0.500	1	01/31/2020 22:35	WG1420688
sec-Butylbenzene	U		0.134	0.500	1	01/31/2020 22:35	WG1420688
tert-Butylbenzene	U		0.183	0.500	1	01/31/2020 22:35	WG1420688
Carbon disulfide	U		0.101	0.500	1	01/31/2020 22:35	WG1420688
Carbon tetrachloride	U	~~J4~~	0.159	0.500	1	01/31/2020 22:35	WG1420688

JC 2/18/2020

MW-160-012920

Collected date/time: 01/29/20 14:46

SAMPLE RESULTS - 03

L1184164

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

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chlorobenzene	U		0.140	0.500	1	01/31/2020 22:35	WG1420688
Chlorodibromomethane	U		0.128	0.500	1	01/31/2020 22:35	WG1420688
Chloroethane	U		0.141	2.50	1	01/31/2020 22:35	WG1420688
Chloroform	U		0.0860	0.500	1	01/31/2020 22:35	WG1420688
Chloromethane	U		0.153	1.25	1	01/31/2020 22:35	WG1420688
2-Chlorotoluene	U		0.111	0.500	1	01/31/2020 22:35	WG1420688
4-Chlorotoluene	U		0.0972	0.500	1	01/31/2020 22:35	WG1420688
1,2-Dibromo-3-Chloropropane	U	~~J4~~	0.325	2.50	1	01/31/2020 22:35	WG1420688
1,2-Dibromoethane	U		0.193	0.500	1	01/31/2020 22:35	WG1420688
Dibromomethane	U		0.117	0.500	1	01/31/2020 22:35	WG1420688
1,2-Dichlorobenzene	U		0.101	0.500	1	01/31/2020 22:35	WG1420688
1,3-Dichlorobenzene	U		0.130	0.500	1	01/31/2020 22:35	WG1420688
1,4-Dichlorobenzene	U		0.121	0.500	1	01/31/2020 22:35	WG1420688
Dichlorodifluoromethane	U		0.127	2.50	1	01/31/2020 22:35	WG1420688
1,1-Dichloroethane	U		0.114	0.500	1	01/31/2020 22:35	WG1420688
1,2-Dichloroethane	U		0.108	0.500	1	01/31/2020 22:35	WG1420688
1,1-Dichloroethene	U		0.188	0.500	1	01/31/2020 22:35	WG1420688
cis-1,2-Dichloroethene	0.176	J	0.0933	0.500	1	01/31/2020 22:35	WG1420688
trans-1,2-Dichloroethene	U		0.152	0.500	1	01/31/2020 22:35	WG1420688
1,2-Dichloropropane	U		0.190	0.500	1	01/31/2020 22:35	WG1420688
1,1-Dichloropropene	U		0.128	0.500	1	01/31/2020 22:35	WG1420688
1,3-Dichloropropane	U		0.147	1.00	1	01/31/2020 22:35	WG1420688
cis-1,3-Dichloropropene	U		0.0976	0.500	1	01/31/2020 22:35	WG1420688
trans-1,3-Dichloropropene	U		0.222	0.500	1	01/31/2020 22:35	WG1420688
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	01/31/2020 22:35	WG1420688
2,2-Dichloropropane	U		0.0929	0.500	1	01/31/2020 22:35	WG1420688
Di-isopropyl ether	U		0.0924	0.500	1	01/31/2020 22:35	WG1420688
Ethylbenzene	U		0.158	0.500	1	01/31/2020 22:35	WG1420688
Hexachloro-1,3-butadiene	U	~~J4~~	0.157	1.00	1	01/31/2020 22:35	WG1420688
2-Hexanone	U		0.757	5.00	1	01/31/2020 22:35	WG1420688
n-Hexane	U		0.305	5.00	1	01/31/2020 22:35	WG1420688
Iodomethane	U		0.377	10.0	1	01/31/2020 22:35	WG1420688
Isopropylbenzene	U		0.126	0.500	1	01/31/2020 22:35	WG1420688
p-Isopropyltoluene	U		0.138	0.500	1	01/31/2020 22:35	WG1420688
2-Butanone (MEK)	U		1.28	5.00	1	01/31/2020 22:35	WG1420688
Methylene Chloride	U		1.07	2.50	1	01/31/2020 22:35	WG1420688
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	01/31/2020 22:35	WG1420688
Methyl tert-butyl ether	U		0.102	0.500	1	01/31/2020 22:35	WG1420688
Naphthalene	U	~~J4~~	0.174	2.50	1	01/31/2020 22:35	WG1420688
n-Propylbenzene	U		0.162	0.500	1	01/31/2020 22:35	WG1420688
Styrene	U		0.117	0.500	1	01/31/2020 22:35	WG1420688
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	01/31/2020 22:35	WG1420688
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	01/31/2020 22:35	WG1420688
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	01/31/2020 22:35	WG1420688
Tetrachloroethene	U		0.199	0.500	1	01/31/2020 22:35	WG1420688
Toluene	U		0.412	0.500	1	01/31/2020 22:35	WG1420688
1,2,3-Trichlorobenzene	U		0.164	0.500	1	01/31/2020 22:35	WG1420688
1,2,4-Trichlorobenzene	U		0.355	0.500	1	01/31/2020 22:35	WG1420688
1,1,1-Trichloroethane	U	~~J4~~	0.0940	0.500	1	01/31/2020 22:35	WG1420688
1,1,2-Trichloroethane	U		0.186	0.500	1	01/31/2020 22:35	WG1420688
Trichloroethene	0.195	J	0.153	0.500	1	01/31/2020 22:35	WG1420688
Trichlorofluoromethane	U		0.130	2.50	1	01/31/2020 22:35	WG1420688
1,2,3-Trichloropropane	U		0.247	2.50	1	01/31/2020 22:35	WG1420688
1,2,4-Trimethylbenzene	U		0.123	0.500	1	01/31/2020 22:35	WG1420688
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	01/31/2020 22:35	WG1420688
1,3,5-Trimethylbenzene	U		0.124	0.500	1	01/31/2020 22:35	WG1420688

JC 2/18/2020

MW-160-012920

Collected date/time: 01/29/20 14:46

SAMPLE RESULTS - 03

L1184164

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Vinyl acetate	U		0.645	5.00	1	01/31/2020 22:35	WG1420688
Vinyl chloride	0.744		0.118	0.500	1	01/31/2020 22:35	WG1420688
Xylenes, Total	U		0.316	1.50	1	01/31/2020 22:35	WG1420688
(S) Toluene-d8	*98.4*			*80.0-120*		*01/31/2020 22:35*	WG1420688
(S) 4-Bromofluorobenzene	*96.2*			*77.0-126*		*01/31/2020 22:35*	WG1420688
(S) 1,2-Dichloroethane-d4	*125*			*70.0-130*		*01/31/2020 22:35*	WG1420688

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

JC 2/18/2020

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

Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	187000		2710	20000	1	01/30/2020 18:58	WG1419673

Sample Narrative:

L1184164-04 WG1419673: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	23900		51.9	1000	1	01/30/2020 19:53	WG1419560
Nitrate	U		22.7	100	1	01/30/2020 19:53	WG1419560
Sulfate	31700		77.4	5000	1	01/30/2020 19:53	WG1419560

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	1310	~~B~~	102	1000	1	02/04/2020 05:26	WG1421496

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	668		15.0	100	1	02/01/2020 15:44	WG1419838
Manganese	460		0.250	5.00	1	02/01/2020 15:44	WG1419838

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	31.9 U	~~B J~~	31.6	100	1	02/01/2020 09:30	WG1419920
(S) a,a,a-Trifluorotoluene(FID)	*96.8*			*78.0-120*		*02/01/2020 09:30*	WG1419920

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	102		0.287	0.678	1	02/01/2020 16:19	WG1420804
Ethane	U		0.296	1.29	1	02/01/2020 16:19	WG1420804
Ethene	U		0.422	1.27	1	02/01/2020 16:19	WG1420804

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U		1.05	25.0	1	01/31/2020 22:56	WG1420688
Acrylonitrile	U		0.873	5.00	1	01/31/2020 22:56	WG1420688
Benzene	U		0.0896	0.500	1	01/31/2020 22:56	WG1420688
Bromobenzene	U		0.133	0.500	1	01/31/2020 22:56	WG1420688
Bromodichloromethane	U		0.0800	0.500	1	01/31/2020 22:56	WG1420688
Bromochloromethane	U		0.145	0.500	1	01/31/2020 22:56	WG1420688
Bromoform	U		0.186	0.500	1	01/31/2020 22:56	WG1420688
Bromomethane	U		0.157	2.50	1	01/31/2020 22:56	WG1420688
n-Butylbenzene	U		0.143	0.500	1	01/31/2020 22:56	WG1420688
sec-Butylbenzene	U		0.134	0.500	1	01/31/2020 22:56	WG1420688
tert-Butylbenzene	U		0.183	0.500	1	01/31/2020 22:56	WG1420688
Carbon disulfide	0.348	J	0.101	0.500	1	01/31/2020 22:56	WG1420688
Carbon tetrachloride	U	~~J4~~	0.159	0.500	1	01/31/2020 22:56	WG1420688

JC 2/18/2020

MW-188-012920

Collected date/time: 01/29/20 15:45

SAMPLE RESULTS - 04

L1184164

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chlorobenzene	U		0.140	0.500	1	01/31/2020 22:56	WG1420688
Chlorodibromomethane	U		0.128	0.500	1	01/31/2020 22:56	WG1420688
Chloroethane	U		0.141	2.50	1	01/31/2020 22:56	WG1420688
Chloroform	U		0.0860	0.500	1	01/31/2020 22:56	WG1420688
Chloromethane	U		0.153	1.25	1	01/31/2020 22:56	WG1420688
2-Chlorotoluene	U		0.111	0.500	1	01/31/2020 22:56	WG1420688
4-Chlorotoluene	U		0.0972	0.500	1	01/31/2020 22:56	WG1420688
1,2-Dibromo-3-Chloropropane	U	~~J4~~	0.325	2.50	1	01/31/2020 22:56	WG1420688
1,2-Dibromoethane	U		0.193	0.500	1	01/31/2020 22:56	WG1420688
Dibromomethane	U		0.117	0.500	1	01/31/2020 22:56	WG1420688
1,2-Dichlorobenzene	U		0.101	0.500	1	01/31/2020 22:56	WG1420688
1,3-Dichlorobenzene	U		0.130	0.500	1	01/31/2020 22:56	WG1420688
1,4-Dichlorobenzene	U		0.121	0.500	1	01/31/2020 22:56	WG1420688
Dichlorodifluoromethane	U		0.127	2.50	1	01/31/2020 22:56	WG1420688
1,1-Dichloroethane	U		0.114	0.500	1	01/31/2020 22:56	WG1420688
1,2-Dichloroethane	U		0.108	0.500	1	01/31/2020 22:56	WG1420688
1,1-Dichloroethene	U		0.188	0.500	1	01/31/2020 22:56	WG1420688
cis-1,2-Dichloroethene	U		0.0933	0.500	1	01/31/2020 22:56	WG1420688
trans-1,2-Dichloroethene	U		0.152	0.500	1	01/31/2020 22:56	WG1420688
1,2-Dichloropropane	U		0.190	0.500	1	01/31/2020 22:56	WG1420688
1,1-Dichloropropene	U		0.128	0.500	1	01/31/2020 22:56	WG1420688
1,3-Dichloropropane	U		0.147	1.00	1	01/31/2020 22:56	WG1420688
cis-1,3-Dichloropropene	U		0.0976	0.500	1	01/31/2020 22:56	WG1420688
trans-1,3-Dichloropropene	U		0.222	0.500	1	01/31/2020 22:56	WG1420688
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	01/31/2020 22:56	WG1420688
2,2-Dichloropropane	U		0.0929	0.500	1	01/31/2020 22:56	WG1420688
Di-isopropyl ether	U		0.0924	0.500	1	01/31/2020 22:56	WG1420688
Ethylbenzene	U		0.158	0.500	1	01/31/2020 22:56	WG1420688
Hexachloro-1,3-butadiene	U	~~J4~~	0.157	1.00	1	01/31/2020 22:56	WG1420688
2-Hexanone	U		0.757	5.00	1	01/31/2020 22:56	WG1420688
n-Hexane	U		0.305	5.00	1	01/31/2020 22:56	WG1420688
Iodomethane	U		0.377	10.0	1	01/31/2020 22:56	WG1420688
Isopropylbenzene	U		0.126	0.500	1	01/31/2020 22:56	WG1420688
p-Isopropyltoluene	U		0.138	0.500	1	01/31/2020 22:56	WG1420688
2-Butanone (MEK)	U		1.28	5.00	1	01/31/2020 22:56	WG1420688
Methylene Chloride	U		1.07	2.50	1	01/31/2020 22:56	WG1420688
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	01/31/2020 22:56	WG1420688
Methyl tert-butyl ether	U		0.102	0.500	1	01/31/2020 22:56	WG1420688
Naphthalene	U	~~J4~~	0.174	2.50	1	01/31/2020 22:56	WG1420688
n-Propylbenzene	U		0.162	0.500	1	01/31/2020 22:56	WG1420688
Styrene	U		0.117	0.500	1	01/31/2020 22:56	WG1420688
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	01/31/2020 22:56	WG1420688
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	01/31/2020 22:56	WG1420688
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	01/31/2020 22:56	WG1420688
Tetrachloroethene	U		0.199	0.500	1	01/31/2020 22:56	WG1420688
Toluene	U		0.412	0.500	1	01/31/2020 22:56	WG1420688
1,2,3-Trichlorobenzene	U		0.164	0.500	1	01/31/2020 22:56	WG1420688
1,2,4-Trichlorobenzene	U		0.355	0.500	1	01/31/2020 22:56	WG1420688
1,1,1-Trichloroethane	U	~~J4~~	0.0940	0.500	1	01/31/2020 22:56	WG1420688
1,1,2-Trichloroethane	U		0.186	0.500	1	01/31/2020 22:56	WG1420688
Trichloroethene	U		0.153	0.500	1	01/31/2020 22:56	WG1420688
Trichlorofluoromethane	U		0.130	2.50	1	01/31/2020 22:56	WG1420688
1,2,3-Trichloropropane	U		0.247	2.50	1	01/31/2020 22:56	WG1420688
1,2,4-Trimethylbenzene	U		0.123	0.500	1	01/31/2020 22:56	WG1420688
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	01/31/2020 22:56	WG1420688
1,3,5-Trimethylbenzene	U		0.124	0.500	1	01/31/2020 22:56	WG1420688

JC 2/18/2020

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
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Xylenes, Total	U		0.316	1.50	1	01/31/2020 22:56	WG1420688
(S) Toluene-d8	*101*			*80.0-120*		*01/31/2020 22:56*	WG1420688
(S) 4-Bromofluorobenzene	*97.6*			*77.0-126*		*01/31/2020 22:56*	WG1420688
(S) 1,2-Dichloroethane-d4	*122*			*70.0-130*		*01/31/2020 22:56*	WG1420688

JC 2/18/2020

MEMORANDUM

TO: Project File **DATE:** February 19, 2020

FROM: Jessie Compeau

SUBJECT: Laboratory Data Validation Review

PROJECT: American Linen Data Validation

PROJECT #: 1413.001.02.501E

TASK: EIM Data Validation Level EPA2A for 1st Quarter 2020 – Groundwater Samples

LAB: Pace Sample Delivery Groups (SDGs): L1184195, L1184637, and L1184934

Eight (8) groundwater samples and two trip blanks were collected as part of the Remedial Investigation (RI) first quarter of 2020 groundwater sampling event at the Former American Linen Supply Site, in Seattle, Washington on January 29-31, 2020. The samples were shipped and delivered to Pace Lab Sciences (Pace) of Mount Juliet, TN for laboratory analysis. Selected samples were analyzed for the following:

- Volatile organic compounds (VOCs) by United States Environmental Protection Agency (USEPA) Method 8260D;
- Total petroleum hydrocarbons as gasoline (TPH-Gx) by NWTPH-Gx per analytical method stipulated by Washington State Department of Ecology;
- VOCs (dissolved gases – methane, ethane, and ethene) by EPA SOP RSK 175;
- Alkalinity by Method 2320 B-2011;
- Anions (chloride, nitrate, and sulfate) by USEPA Method 9056A;
- Total Organic Carbon (TOC) by USEPA Method 9060A; and
- Metals (iron and manganese) by USEPA Method 6020B.

Results are reported in multiple SDGs from Pace. Pace SDGs are reviewed in groups (less than 10 SDGs) for each data validation report. Group 5 analytical results are reported in SDGs L1184195, L1184637, and L1184934. The quality assurance review of the laboratory data associated with Group 5 is summarized below.

DATA QUALIFICATIONS

Guidelines established by USEPA for a limited data validation review of analytical data along with Pace control limit criteria were used to validate the data. The comments presented in this memorandum refer to the laboratory's performance in meeting the quality control criteria outlined in the USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (USEPA, 2017) and USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Superfund Methods Data Review (USEPA, 2017). Following Guidelines, non-project-specific laboratory duplicates and matrix spike results were not evaluated as part of this data validation.

DATA VALIDATION

Completeness

All samples were collected and analyzed as requested with the following discussion:

- SDG L1184195: Pace's non-conformance form indicates that the one of eight VOA vials for sample MW104-012920 was received broken. PES indicated that Pace should continue to analyze the remaining vials as requested.

- SDG L1184637: Sample MW-166-013020 results for manganese and iron are not reported in the report hardcopy. Per PES's request the report was revised on February 19, 2020 to include these results.

Sample Collection and Preservation

Samples were collected in laboratory-supplied sample containers preserved as appropriate for the individual analyses conducted. The samples were packed on ice in coolers and delivered by courier to the analytical laboratory. The laboratory reported that the coolers were received at a cooler temperature less than the recommended temperature preservation of 6°C. Samples were received in good condition. No data were qualified based upon the sample collection and preservation information.

Holding Times

USEPA Method 8260D:
All samples were analyzed for VOCs within the EPA recommended holding time of fourteen days for preserved waters from the date of collection. All holding time criteria are met.

NWTPH-Gx Method:
All samples were analyzed within the WA State recommended holding time of fourteen days for preserved waters from the date of sample collection. All holding time criteria are met.

Dissolved Gases (Methane, Ethane, and Ethene) by RSK 175:
All samples were analyzed within the WA State recommended holding time of fourteen days for preserved waters from the date of sample collection. All holding time criteria are met.

USEPA Method 6020B:
All samples were analyzed within the USEPA recommended holding time for iron and manganese of 180 days for preserved waters from the date of sample collection. All holding time criteria are met.

General Chemistry (Alkalinity, Chloride, Sulfate, Nitrate, and TOC):
All samples were analyzed within the USEPA recommended holding time for alkalinity (14 days), chloride (28 days), sulfate (28 days), and nitrate (48 hours), and TOC (28 days) for preserved waters from the date of sample collection. All holding time criteria are met.

Initial and Continuing Calibration

Calibration data for this project are not required for this deliverable however Pace's notes indicate the following:

- Multiple SDGs - *USEPA Method 8260D:* Continuing calibration verification (CCV) issues were noted by Pace for multiple compounds associated with analytical batches in each SDG. These compounds are qualified by the laboratory "J0" to indicate that percent difference CCV is outside of laboratory acceptance criteria. **Associated sample results with laboratory qualified (J0) results are estimated and qualified (J/UJ).**

Method Blank Results

USEPA Method 8260D:
Laboratory method blanks were included with the analytical batches per method requirement. The target analytes were not detected in the method blanks at or above the reporting detection limits (RDLs) with the following exceptions:

- SDG L1184195 – Analytical batch WG1420688: A low level of 1,2,4-trimethylbenzene is detected in the method blank. No action is taken for this compound as it is not detected in the associated samples.

- SDGs L1184195 and L1184637 – Analytical batch WG1420746: A low level of naphthalene is detected in the method blank. No action is taken for this compound as it is not detected in the associated samples.

- SDGs L1184934 – Analytical batch WG1421589: A low level of naphthalene is detected in the method blank. **Naphthalene was detected in sample MW-168-013120 below the RDL and qualified as not detected (U) due to method contamination.**

NWTPH-Gx Method:
Laboratory method blanks were included with the analytical batches per method requirement. The target analyte (gasoline) was not detected in the method blanks at or above the RDLs with the following exceptions:

- SDG L1184195 – Analytical batch WG1420077: A low level gasoline concentration is detected in the method blank. **The associated gasoline range organic (GRO) detection in sample MW125-012920, MW-159-012920, and MW-186-012920 is below the RDL and qualified as not detected (U) due to method contamination.**

Dissolved Gases (Methane, Ethane, and Ethene) by RSK 175:
Laboratory method blanks were included with the analytical batches per method requirement. The target analytes (dissolved gases) are not detected in the method blanks at or above the RDLs.

USEPA Method 6020B and General Chemistry (Alkalinity, Chloride, Sulfate, Nitrate, and TOC):
Laboratory method blanks were included with the analytical batches per method requirement. The target analytes were detected in the method blanks below the RDLs. Per Guidance, no

action is taken for blank detections less than the RDL when associated sample detections are greater than the RDL. General chemistry and metal blank detections are shown below:

SDG	Batch	Method	Analyte	Method Blank Result	Qualifier	RDL	Units	Associated Result(s) Qualified
L1184195	WG1419673	SM2320B	Alkalinity as CaCO3, Total	4030	J	20000	µg/L	NO
L1184195	WG1421496	9060A	TOC	361	J	1000	µg/L	NO
L1184195	WG1419838	6020B	Manganese	0.279	J	5.00	µg/L	NO
L1184637	WG1420302	SM2320B	Alkalinity as CaCO3, Total	4530	J	20000	µg/L	NO
L1184637	WG1420280	9056A	Chloride	354	J	1000	µg/L	NO
L1184637	WG1420280	9056A	Sulfate	486	J	5000	µg/L	NO
L1184637	WG1421501	9060A	TOC	281	J	1000	µg/L	NO
L1184637	WG1420188	6020B	Manganese	0.433	J	5.00	µg/L	NO
L1184934	WG1421599	SM2320B	Alkalinity as CaCO3, Total	3130	J	20000	µg/L	NO
L1184934	WG1422742	9060A	TOC	320	J	1000	µg/L	NO
L1184934	WG1420932	6020B	Manganese	0.486	J	5.00	µg/L	NO

Target analytes were detected in method blanks at low levels with no impact to the associated samples with the following exception:

- SDG L1184637 – Analytical batch WG1420280: A low level of sulfate (486 µg/L) is detected in the method blank. Sample MW124-013020 sulfate detection is 2,120 µg/L and is also below the RDL (5,000 µg/L). *In this case, using professional judgement, no action is taken other than to note this.*

Trip Blank Results

USEPA Method 8260D and NWTPH-Gx:
Two trip blanks were collected and analyzed. The target analytes (gasoline and VOCs) were not detected in the trip blanks at or above the RDLs with the following exceptions:

- SDG L1184637: A low level of acetone is detected in the trip blank (TB-013020). **A low level of acetone is detected in the associated samples MW124-013020, MW-166-013020, and MW-165-013020 are qualified as not detected (U) due to trip blank contamination.**

- SDG L1183659: A low level of acetone is detected in the trip blank (TB-013120). **A low level of acetone is detected in the associated sample MW-168-013120 and is qualified as not detected (U) due to trip blank contamination.**

Field, Rinsate, or Equipment Blank Results

All Analytical Methods:
A field, rinsate, or equipment blank was not collected.

Field Duplicate Analyses

Field duplicates were not collected.

Laboratory Duplicate Analyses

USEPA Method 8260D:
Laboratory duplicate samples were not analyzed. Refer to laboratory control sample/sample duplicate (LCS/LCSD) results for precision data.

NWTPH-Gx Method:
Laboratory duplicate samples were not analyzed. Refer to field duplicate results for precision data.

Dissolved Gases (Methane, Ethane, and Ethene) by RSK 175:
Laboratory duplicate sample analyses were performed on client and non-client samples within the analytical batches. The primary/duplicate RPDs for dissolved gas analyses are within the laboratory control limit of 20%.

USEPA Method 6020B:
Laboratory duplicate samples were not analyzed. Refer to LCS/LCSD or MS/MSD results for precision data.

General Chemistry (Alkalinity, Chloride, Sulfate, Nitrate, and TOC):
Laboratory duplicate sample analyses were performed on client samples and/or on non-client samples. The primary/duplicate RPDs for general chemistry parameters are within the laboratory control RPD limits or ± 1x RDL for groundwater results <5X the RDL with the following discussion:

- SDG L1184637: Sulfate laboratory duplicate analysis was performed on a non-client sample within the analytical batch. Duplicate results are laboratory qualified (J, P1) because the results are below the RDL. No action is taken other than to note that this is a non-client sample. Refer to laboratory duplicate sample results for precision data.

- SDG L1184934: Nitrate laboratory duplicate analysis was performed on a non-client sample within the analytical batch. Duplicate results are laboratory qualified (J3) because the RPD is greater than laboratory acceptance criteria. No action is taken other than to note that this is a non-client sample. Refer to laboratory duplicate sample results for precision data.

Surrogate Recoveries

USEPA Method 8260D:
The surrogate recovery results for the samples, laboratory control samples, and the blanks are within the laboratory surrogate control limits for all the analyses.

NWTPH-Gx Method:

The surrogate recovery results for the samples, laboratory control samples, and the blanks are within the laboratory surrogate control limits for all analyses.

Laboratory Control Samples

USEPA Method 8260D:
Laboratory control sample/laboratory control sample duplicate (LCS/LCSD) or laboratory control sample (LCS) were analyzed by USEPA Method 8260D method. The LCS % Rs or LCS/LCSD % Rs and RPDs for the all target compounds are within the laboratory control criteria for waters with the following discussions:

- SDG L1184195 - Analytical batch WG1420688: LCS % recovery for carbon tetrachloride, 1,2-dibromo-3-chloropropane, hexachloro-1,3-butadiene, naphthalene, and 1,1,1-trichloroethane are above laboratory acceptance criteria and laboratory qualified (J4). No action is needed because these compounds are not detected in the associated samples.

- SDG L1184934 - Analytical batch WG1421075: LCS % recovery for bromochloromethane and cis-1,2-dichloroethene are above laboratory acceptance criteria and laboratory qualified (J4). No action is needed because these compounds are not detected in the associated samples. LCS/LCSD % recoveries for bromomethane are within laboratory acceptance criteria but were recovered wide with an elevated RPD and laboratory qualified (J3). No action is taken other than to note that the recoveries are within criteria.

- SDG L1184934 - Analytical batch WG1421589: LCS/LCSD % recoveries for 1,2-Dibromo-3-Chloropropane are within laboratory acceptance criteria but were recovered wide with an elevated RPD and laboratory qualified (J3). No action is taken other than to note that the recoveries are within criteria.

NWTPH-Gx Method:
The LCS/LCSD % Rs and RPDs for the target compound (gasoline) are within the laboratory control criteria for waters. Precision data are not provided for SDGs L1184637. No action was taken other than to note that precision data are provide for the remaining SDGs.

Dissolved Gases (Methane, Ethane, and Ethene) by RSK 175:
The LCS/LCSD % Rs and RPDs for the target compound (dissolved gases) are within the laboratory control criteria for waters.

USEPA Method 6020B:
The LCS/LCSD % Rs and RPDs for the target compound (iron and manganese) are within the laboratory control criteria for waters.

General Chemistry (Alkalinity, Chloride, Sulfate, Nitrate, and TOC):
The LCS % Rs for general chemistry parameters are within the laboratory control criteria for waters.

Matrix Spike/Matrix Spike Duplicates

USEPA Method 8260D:
Matrix spike/matrix spike duplicate (MS/MSD) analyses were not performed. Refer to LCS/LCSD results for accuracy and precision data.

NWTPH-Gx Method:
MS/MSD analyses was performed on a non-client sample within one of the analytical batches. The MS/MSD % Rs and RPD were acceptable and within laboratory control limit criteria for water samples.

Dissolved Gases (Methane, Ethane, and Ethene) by RSK 175:
MS/MSD analyses were not performed. Refer to LCS/LCSD results and field duplicate sample for accuracy and precision data.

USEPA Method 6020B:
MS/MSD analyses were performed on client and/or non-client samples within the analytical batches. The MS/MSD % Rs and RPD were acceptable and within laboratory control limit criteria for water samples with the following discussion:

- SDG L1184195: Manganese spike analysis was performed on a non-client sample within the analytical batch. MS/MSD recoveries are laboratory qualified (V) because the sample amount is greater than four times the spiked amount. Per Guidance, no action is needed. Refer to laboratory duplicate and laboratory control sample results for precision and accuracy data.

- SDG L1184637: Manganese and iron spike analysis were performed on sample MW-166-013020. MS/MSD recoveries are laboratory qualified (V) because the sample amount is greater than four times the spiked amount. Per Guidance, no action is needed. Refer to laboratory duplicate and laboratory control sample results for precision and accuracy data.

General Chemistry (Alkalinity, Chloride, Sulfate, Nitrate, and TOC):
MS or MS/MSD analyses were performed on client and/or non-client samples within the analytical batches. In cases where MS/MSD spike analyses are not performed refer to LCS/LCSD or laboratory duplicate data for accuracy and precision data. The MS/MSD % Rs and RPDs are acceptable and within laboratory control limit criteria for water samples with the following discussion:

- SDG L1184195: Sulfate spike analysis was performed on a non-client sample within the analytical batch. MS/MSD recoveries are laboratory qualified (E, J6) because the spiked amount exceeded the upper limit of the calibration limit and sample matrix interference. No action is taken other than to note that this is a non-client sample. Refer to laboratory duplicate and laboratory control sample results for precision and accuracy data.

Other Quality Control Issues

No laboratory quality control issues were identified in the laboratory report with the following discussions:

- Multiple SDGs: Selected sample narratives for alkalinity results indicate that several sample containers had some headspace and exposure to air may have impacted the reported results. No action was taken other than to note this.

- Electronic data deliverables (EDDs) for these SDGs were provided by the laboratory and data validator qualifiers were entered. In some cases, different chemical synonyms are used between the EDD and the hardcopy however associated Chemical Abstracts Service (CAS) numbers are provided in the EDD to confirm chemical identifications.

Compound Identification and Quantitation Limits

Results of the analyses were reported based on laboratory RDLs for all compounds. RDLs for selected compounds are elevated due to method-required dilutions. No action is taken other than to note this.

Gasoline and gasoline range organics are analyzed for via Volatile Organic Compounds (GC) by Washington State Method NWTPHGx (using a gas chromatograph/flame ionization detector (GC/FID)) and Pace reported gasoline range organic-NWTPH results. Several chlorinated VOC compounds (including cis-1,2-dichloroethene, trans-1,2-dichloroethene, trichloroethene, tetrachloroethene, and vinyl chloride) elute within the gasoline range organics (GRO) retention time range as specified by Washington State (detections falling between the toluene and dodecane range).

Non-petroleum organics (e.g. chlorinated VOC compounds) eluting within the gasoline range contribute to the GRO result and GRO results are likely biased high (J+). PES requested that Pace evaluate chromatograms associated with positive sample detections to confirm the potential presence of gasoline. Per PES's request Pace reviewed selected sample chromatograms against the gasoline standard chromatograms and assigned "no discernible petroleum pattern" to GRO results associated with this Task. PES assigned an additional project level qualifier (Z) to GRO results when the chromatogram for the sample does not match a discernible petroleum pattern. Associated chromatograms and qualified samples for this Task are as follows:

Sample ID	Laboratory Identification	Gasoline Range Organic Result (µg/L)	DV Qualifier	Data Validation Comments	Pace Chromatogram Review Notes
MW104-012920	L1184195-04	447	Z, J+	Elevated chlorinated VOCs detected within the GRO elution range.	No discernible petroleum pattern

Project level qualifiers have been included to the PES's project database (Epiphany) as (ZJ+). Washington State EIM valid values were reviewed. In this case no Washington State EIM valid value descriptor is ideal and the default estimated value (J) has been selected as the best match to qualify GRO (ZJ+) data.

Data Assessment

The laboratory data reported for this project were reviewed based on the criteria outlined in:

- USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (USEPA, 2017); and
- USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Superfund Methods Data Review (USEPA, 2017).

Data qualifiers are assigned and laboratory report pages with qualifiers are attached. All data, including qualified data, are judged to be acceptable for their intended use.

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

Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	417000		2710	20000	1	01/30/2020 19:07	WG1419673

Sample Narrative:

L1184195-01 WG1419673: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	10800		51.9	1000	1	01/30/2020 20:19	WG1419560
Nitrate	U		22.7	100	1	01/30/2020 20:19	WG1419560
Sulfate	32300		77.4	5000	1	01/30/2020 20:19	WG1419560

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	8280		102	1000	1	02/04/2020 06:45	WG1421496

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	17300		15.0	100	1	02/01/2020 16:06	WG1419838
Manganese	3550		0.250	5.00	1	02/01/2020 16:06	WG1419838

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	51.1	U ~~B J~~	31.6	100	1	01/31/2020 11:18	WG1420077
(S) a,a,a-Trifluorotoluene(FID)	*104*			*78.0-120*		*01/31/2020 11:18*	WG1420077

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	2530		0.287	0.678	1	02/01/2020 16:29	WG1420804
Ethane	1.25	J	0.296	1.29	1	02/01/2020 16:29	WG1420804
Ethene	U		0.422	1.27	1	02/01/2020 16:29	WG1420804

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U		1.05	25.0	1	01/31/2020 23:16	WG1420688
Acrylonitrile	U		0.873	5.00	1	01/31/2020 23:16	WG1420688
Benzene	U		0.0896	0.500	1	01/31/2020 23:16	WG1420688
Bromobenzene	U		0.133	0.500	1	01/31/2020 23:16	WG1420688
Bromodichloromethane	U		0.0800	0.500	1	01/31/2020 23:16	WG1420688
Bromochloromethane	U		0.145	0.500	1	01/31/2020 23:16	WG1420688
Bromoform	U		0.186	0.500	1	01/31/2020 23:16	WG1420688
Bromomethane	U		0.157	2.50	1	01/31/2020 23:16	WG1420688
n-Butylbenzene	U		0.143	0.500	1	01/31/2020 23:16	WG1420688
sec-Butylbenzene	U		0.134	0.500	1	01/31/2020 23:16	WG1420688
tert-Butylbenzene	U		0.183	0.500	1	01/31/2020 23:16	WG1420688
Carbon disulfide	U		0.101	0.500	1	01/31/2020 23:16	WG1420688
Carbon tetrachloride	U	~~J4~~	0.159	0.500	1	01/31/2020 23:16	WG1420688

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chlorobenzene	U		0.140	0.500	1	01/31/2020 23:16	WG1420688
Chlorodibromomethane	U		0.128	0.500	1	01/31/2020 23:16	WG1420688
Chloroethane	U		0.141	2.50	1	01/31/2020 23:16	WG1420688
Chloroform	U		0.0860	0.500	1	01/31/2020 23:16	WG1420688
Chloromethane	U		0.153	1.25	1	01/31/2020 23:16	WG1420688
2-Chlorotoluene	U		0.111	0.500	1	01/31/2020 23:16	WG1420688
4-Chlorotoluene	U		0.0972	0.500	1	01/31/2020 23:16	WG1420688
1,2-Dibromo-3-Chloropropane	U	~~J4~~	0.325	2.50	1	01/31/2020 23:16	WG1420688
1,2-Dibromoethane	U		0.193	0.500	1	01/31/2020 23:16	WG1420688
Dibromomethane	U		0.117	0.500	1	01/31/2020 23:16	WG1420688
1,2-Dichlorobenzene	U		0.101	0.500	1	01/31/2020 23:16	WG1420688
1,3-Dichlorobenzene	U		0.130	0.500	1	01/31/2020 23:16	WG1420688
1,4-Dichlorobenzene	U		0.121	0.500	1	01/31/2020 23:16	WG1420688
Dichlorodifluoromethane	U		0.127	2.50	1	01/31/2020 23:16	WG1420688
1,1-Dichloroethane	U		0.114	0.500	1	01/31/2020 23:16	WG1420688
1,2-Dichloroethane	U		0.108	0.500	1	01/31/2020 23:16	WG1420688
1,1-Dichloroethene	U		0.188	0.500	1	01/31/2020 23:16	WG1420688
cis-1,2-Dichloroethene	0.369	J	0.0933	0.500	1	01/31/2020 23:16	WG1420688
trans-1,2-Dichloroethene	U		0.152	0.500	1	01/31/2020 23:16	WG1420688
1,2-Dichloropropane	U		0.190	0.500	1	01/31/2020 23:16	WG1420688
1,1-Dichloropropene	U		0.128	0.500	1	01/31/2020 23:16	WG1420688
1,3-Dichloropropane	U		0.147	1.00	1	01/31/2020 23:16	WG1420688
cis-1,3-Dichloropropene	U		0.0976	0.500	1	01/31/2020 23:16	WG1420688
trans-1,3-Dichloropropene	U		0.222	0.500	1	01/31/2020 23:16	WG1420688
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	01/31/2020 23:16	WG1420688
2,2-Dichloropropane	U		0.0929	0.500	1	01/31/2020 23:16	WG1420688
Di-isopropyl ether	U		0.0924	0.500	1	01/31/2020 23:16	WG1420688
Ethylbenzene	U		0.158	0.500	1	01/31/2020 23:16	WG1420688
Hexachloro-1,3-butadiene	U	~~J4~~	0.157	1.00	1	01/31/2020 23:16	WG1420688
2-Hexanone	U		0.757	5.00	1	01/31/2020 23:16	WG1420688
n-Hexane	U		0.305	5.00	1	01/31/2020 23:16	WG1420688
Iodomethane	U		0.377	10.0	1	01/31/2020 23:16	WG1420688
Isopropylbenzene	U		0.126	0.500	1	01/31/2020 23:16	WG1420688
p-Isopropyltoluene	U		0.138	0.500	1	01/31/2020 23:16	WG1420688
2-Butanone (MEK)	U		1.28	5.00	1	01/31/2020 23:16	WG1420688
Methylene Chloride	U		1.07	2.50	1	01/31/2020 23:16	WG1420688
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	01/31/2020 23:16	WG1420688
Methyl tert-butyl ether	U		0.102	0.500	1	01/31/2020 23:16	WG1420688
Naphthalene	U	~~J4~~	0.174	2.50	1	01/31/2020 23:16	WG1420688
n-Propylbenzene	U		0.162	0.500	1	01/31/2020 23:16	WG1420688
Styrene	U		0.117	0.500	1	01/31/2020 23:16	WG1420688
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	01/31/2020 23:16	WG1420688
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	01/31/2020 23:16	WG1420688
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	01/31/2020 23:16	WG1420688
Tetrachloroethene	U		0.199	0.500	1	01/31/2020 23:16	WG1420688
Toluene	U		0.412	0.500	1	01/31/2020 23:16	WG1420688
1,2,3-Trichlorobenzene	U		0.164	0.500	1	01/31/2020 23:16	WG1420688
1,2,4-Trichlorobenzene	U		0.355	0.500	1	01/31/2020 23:16	WG1420688
1,1,1-Trichloroethane	U	~~J4~~	0.0940	0.500	1	01/31/2020 23:16	WG1420688
1,1,2-Trichloroethane	U		0.186	0.500	1	01/31/2020 23:16	WG1420688
Trichloroethene	U		0.153	0.500	1	01/31/2020 23:16	WG1420688
Trichlorofluoromethane	U		0.130	2.50	1	01/31/2020 23:16	WG1420688
1,2,3-Trichloropropane	U		0.247	2.50	1	01/31/2020 23:16	WG1420688
1,2,4-Trimethylbenzene	U		0.123	0.500	1	01/31/2020 23:16	WG1420688
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	01/31/2020 23:16	WG1420688
1,3,5-Trimethylbenzene	U		0.124	0.500	1	01/31/2020 23:16	WG1420688

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

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Vinyl acetate	U		0.645	5.00	1	01/31/2020 23:16	WG1420688
Vinyl chloride	U		0.118	0.500	1	01/31/2020 23:16	WG1420688
Xylenes, Total	U		0.316	1.50	1	01/31/2020 23:16	WG1420688
(S) Toluene-d8	*101*			*80.0-120*		*01/31/2020 23:16*	WG1420688
(S) 4-Bromofluorobenzene	*97.4*			*77.0-126*		*01/31/2020 23:16*	WG1420688
(S) 1,2-Dichloroethane-d4	*123*			*70.0-130*		*01/31/2020 23:16*	WG1420688

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

JC 2/18/2020

Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	393000		2710	20000	1	01/30/2020 19:25	WG1419673

Sample Narrative:

L1184195-02 WG1419673: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	11000		51.9	1000	1	01/30/2020 20:32	WG1419560
Nitrate	U		22.7	100	1	01/30/2020 20:32	WG1419560
Sulfate	32900		77.4	5000	1	01/30/2020 20:32	WG1419560

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	4170		102	1000	1	02/04/2020 06:59	WG1421496

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	3640		15.0	100	1	02/01/2020 16:10	WG1419838
Manganese	3470		0.250	5.00	1	02/01/2020 16:10	WG1419838

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	33.9	U ~~B J~~	31.6	100	1	01/31/2020 11:39	WG1420077
(S) a,a,a-Trifluorotoluene(FID)	*104*			*78.0-120*		*01/31/2020 11:39*	WG1420077

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	6410		0.287	0.678	1	02/04/2020 16:04	WG1421983
Ethane	44.9		0.296	1.29	1	02/04/2020 16:04	WG1421983
Ethene	U		0.422	1.27	1	02/04/2020 16:04	WG1421983

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	1.19	J J J0	1.05	25.0	1	01/31/2020 23:37	WG1420688
Acrylonitrile	U		0.873	5.00	1	01/31/2020 23:37	WG1420688
Benzene	U		0.0896	0.500	1	01/31/2020 23:37	WG1420688
Bromobenzene	U		0.133	0.500	1	01/31/2020 23:37	WG1420688
Bromodichloromethane	U		0.0800	0.500	1	01/31/2020 23:37	WG1420688
Bromochloromethane	U		0.145	0.500	1	01/31/2020 23:37	WG1420688
Bromoform	U		0.186	0.500	1	01/31/2020 23:37	WG1420688
Bromomethane	U		0.157	2.50	1	01/31/2020 23:37	WG1420688
n-Butylbenzene	U		0.143	0.500	1	01/31/2020 23:37	WG1420688
sec-Butylbenzene	U		0.134	0.500	1	01/31/2020 23:37	WG1420688
tert-Butylbenzene	U		0.183	0.500	1	01/31/2020 23:37	WG1420688
Carbon disulfide	U		0.101	0.500	1	01/31/2020 23:37	WG1420688
Carbon tetrachloride	U	~~J4~~	0.159	0.500	1	01/31/2020 23:37	WG1420688

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chlorobenzene	U		0.140	0.500	1	01/31/2020 23:37	WG1420688
Chlorodibromomethane	U		0.128	0.500	1	01/31/2020 23:37	WG1420688
Chloroethane	U		0.141	2.50	1	01/31/2020 23:37	WG1420688
Chloroform	U		0.0860	0.500	1	01/31/2020 23:37	WG1420688
Chloromethane	U		0.153	1.25	1	01/31/2020 23:37	WG1420688
2-Chlorotoluene	U		0.111	0.500	1	01/31/2020 23:37	WG1420688
4-Chlorotoluene	U		0.0972	0.500	1	01/31/2020 23:37	WG1420688
1,2-Dibromo-3-Chloropropane	U	~~J4~~	0.325	2.50	1	01/31/2020 23:37	WG1420688
1,2-Dibromoethane	U		0.193	0.500	1	01/31/2020 23:37	WG1420688
Dibromomethane	U		0.117	0.500	1	01/31/2020 23:37	WG1420688
1,2-Dichlorobenzene	U		0.101	0.500	1	01/31/2020 23:37	WG1420688
1,3-Dichlorobenzene	U		0.130	0.500	1	01/31/2020 23:37	WG1420688
1,4-Dichlorobenzene	U		0.121	0.500	1	01/31/2020 23:37	WG1420688
Dichlorodifluoromethane	U		0.127	2.50	1	01/31/2020 23:37	WG1420688
1,1-Dichloroethane	U		0.114	0.500	1	01/31/2020 23:37	WG1420688
1,2-Dichloroethane	U		0.108	0.500	1	01/31/2020 23:37	WG1420688
1,1-Dichloroethene	U		0.188	0.500	1	01/31/2020 23:37	WG1420688
cis-1,2-Dichloroethene	0.811		0.0933	0.500	1	01/31/2020 23:37	WG1420688
trans-1,2-Dichloroethene	U		0.152	0.500	1	01/31/2020 23:37	WG1420688
1,2-Dichloropropane	U		0.190	0.500	1	01/31/2020 23:37	WG1420688
1,1-Dichloropropene	U		0.128	0.500	1	01/31/2020 23:37	WG1420688
1,3-Dichloropropane	U		0.147	1.00	1	01/31/2020 23:37	WG1420688
cis-1,3-Dichloropropene	U		0.0976	0.500	1	01/31/2020 23:37	WG1420688
trans-1,3-Dichloropropene	U		0.222	0.500	1	01/31/2020 23:37	WG1420688
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	01/31/2020 23:37	WG1420688
2,2-Dichloropropane	U		0.0929	0.500	1	01/31/2020 23:37	WG1420688
Di-isopropyl ether	U		0.0924	0.500	1	01/31/2020 23:37	WG1420688
Ethylbenzene	U		0.158	0.500	1	01/31/2020 23:37	WG1420688
Hexachloro-1,3-butadiene	U	~~J4~~	0.157	1.00	1	01/31/2020 23:37	WG1420688
2-Hexanone	U		0.757	5.00	1	01/31/2020 23:37	WG1420688
n-Hexane	U		0.305	5.00	1	01/31/2020 23:37	WG1420688
Iodomethane	U		0.377	10.0	1	01/31/2020 23:37	WG1420688
Isopropylbenzene	U		0.126	0.500	1	01/31/2020 23:37	WG1420688
p-Isopropyltoluene	U		0.138	0.500	1	01/31/2020 23:37	WG1420688
2-Butanone (MEK)	U		1.28	5.00	1	01/31/2020 23:37	WG1420688
Methylene Chloride	U		1.07	2.50	1	01/31/2020 23:37	WG1420688
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	01/31/2020 23:37	WG1420688
Methyl tert-butyl ether	U		0.102	0.500	1	01/31/2020 23:37	WG1420688
Naphthalene	U	~~J4~~	0.174	2.50	1	01/31/2020 23:37	WG1420688
n-Propylbenzene	U		0.162	0.500	1	01/31/2020 23:37	WG1420688
Styrene	U		0.117	0.500	1	01/31/2020 23:37	WG1420688
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	01/31/2020 23:37	WG1420688
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	01/31/2020 23:37	WG1420688
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	01/31/2020 23:37	WG1420688
Tetrachloroethene	U		0.199	0.500	1	01/31/2020 23:37	WG1420688
Toluene	U		0.412	0.500	1	01/31/2020 23:37	WG1420688
1,2,3-Trichlorobenzene	U		0.164	0.500	1	01/31/2020 23:37	WG1420688
1,2,4-Trichlorobenzene	U		0.355	0.500	1	01/31/2020 23:37	WG1420688
1,1,1-Trichloroethane	U	J4	0.0940	0.500	1	01/31/2020 23:37	WG1420688
1,1,2-Trichloroethane	U		0.186	0.500	1	01/31/2020 23:37	WG1420688
Trichloroethene	U		0.153	0.500	1	01/31/2020 23:37	WG1420688
Trichlorofluoromethane	U		0.130	2.50	1	01/31/2020 23:37	WG1420688
1,2,3-Trichloropropane	U		0.247	2.50	1	01/31/2020 23:37	WG1420688
1,2,4-Trimethylbenzene	U		0.123	0.500	1	01/31/2020 23:37	WG1420688
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	01/31/2020 23:37	WG1420688
1,3,5-Trimethylbenzene	U		0.124	0.500	1	01/31/2020 23:37	WG1420688

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Vinyl acetate	U		0.645	5.00	1	01/31/2020 23:37	WG1420688
Vinyl chloride	U		0.118	0.500	1	01/31/2020 23:37	WG1420688
Xylenes, Total	U		0.316	1.50	1	01/31/2020 23:37	WG1420688
(S) Toluene-d8	*102*			*80.0-120*		*01/31/2020 23:37*	WG1420688
(S) 4-Bromofluorobenzene	*97.1*			*77.0-126*		*01/31/2020 23:37*	WG1420688
(S) 1,2-Dichloroethane-d4	*123*			*70.0-130*		*01/31/2020 23:37*	WG1420688

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Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	249000		2710	20000	1	01/30/2020 19:33	WG1419673

Sample Narrative:

L1184195-03 WG1419673: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	58800		51.9	1000	1	01/30/2020 20:45	WG1419560
Nitrate	U		22.7	100	1	01/30/2020 20:45	WG1419560
Sulfate	21200		77.4	5000	1	01/30/2020 20:45	WG1419560

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	5850		102	1000	1	02/04/2020 07:16	WG1421496

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	1650		15.0	100	1	02/01/2020 16:13	WG1419838
Manganese	226		0.250	5.00	1	02/01/2020 16:13	WG1419838

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	42.7 U	~~B J~~	31.6	100	1	01/31/2020 12:02	WG1420077
(S) a,a,a-Trifluorotoluene(FID)	*103*			*78.0-120*		*01/31/2020 12:02*	WG1420077

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	1790		0.287	0.678	1	02/04/2020 16:50	WG1421983
Ethane	9.35		0.296	1.29	1	02/04/2020 16:50	WG1421983
Ethene	26.6		0.422	1.27	1	02/04/2020 16:50	WG1421983

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U		1.05	25.0	1	02/01/2020 01:29	WG1420746
Acrylonitrile	U		0.873	5.00	1	02/01/2020 01:29	WG1420746
Benzene	U		0.0896	0.500	1	02/01/2020 01:29	WG1420746
Bromobenzene	U		0.133	0.500	1	02/01/2020 01:29	WG1420746
Bromodichloromethane	U		0.0800	0.500	1	02/01/2020 01:29	WG1420746
Bromochloromethane	U		0.145	0.500	1	02/01/2020 01:29	WG1420746
Bromoform	U		0.186	0.500	1	02/01/2020 01:29	WG1420746
Bromomethane	U		0.157	2.50	1	02/01/2020 01:29	WG1420746
n-Butylbenzene	U		0.143	0.500	1	02/01/2020 01:29	WG1420746
sec-Butylbenzene	U		0.134	0.500	1	02/01/2020 01:29	WG1420746
tert-Butylbenzene	U		0.183	0.500	1	02/01/2020 01:29	WG1420746
Carbon disulfide	U		0.101	0.500	1	02/01/2020 01:29	WG1420746
Carbon tetrachloride	U		0.159	0.500	1	02/01/2020 01:29	WG1420746

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

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Chlorobenzene	U		0.140	0.500	1	02/01/2020 01:29	WG1420746
Chlorodibromomethane	U		0.128	0.500	1	02/01/2020 01:29	WG1420746
Chloroethane	U		0.141	2.50	1	02/01/2020 01:29	WG1420746
Chloroform	U		0.0860	0.500	1	02/01/2020 01:29	WG1420746
Chloromethane	U		0.153	1.25	1	02/01/2020 01:29	WG1420746
2-Chlorotoluene	U		0.111	0.500	1	02/01/2020 01:29	WG1420746
4-Chlorotoluene	U		0.0972	0.500	1	02/01/2020 01:29	WG1420746
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	02/01/2020 01:29	WG1420746
1,2-Dibromoethane	U		0.193	0.500	1	02/01/2020 01:29	WG1420746
Dibromomethane	U		0.117	0.500	1	02/01/2020 01:29	WG1420746
1,2-Dichlorobenzene	U		0.101	0.500	1	02/01/2020 01:29	WG1420746
1,3-Dichlorobenzene	U		0.130	0.500	1	02/01/2020 01:29	WG1420746
1,4-Dichlorobenzene	U		0.121	0.500	1	02/01/2020 01:29	WG1420746
Dichlorodifluoromethane	U		0.127	2.50	1	02/01/2020 01:29	WG1420746
1,1-Dichloroethane	U		0.114	0.500	1	02/01/2020 01:29	WG1420746
1,2-Dichloroethane	U		0.108	0.500	1	02/01/2020 01:29	WG1420746
1,1-Dichloroethene	U		0.188	0.500	1	02/01/2020 01:29	WG1420746
cis-1,2-Dichloroethene	0.777		0.0933	0.500	1	02/01/2020 01:29	WG1420746
trans-1,2-Dichloroethene	U		0.152	0.500	1	02/01/2020 01:29	WG1420746
1,2-Dichloropropane	U		0.190	0.500	1	02/01/2020 01:29	WG1420746
1,1-Dichloropropene	U		0.128	0.500	1	02/01/2020 01:29	WG1420746
1,3-Dichloropropane	U		0.147	1.00	1	02/01/2020 01:29	WG1420746
cis-1,3-Dichloropropene	U		0.0976	0.500	1	02/01/2020 01:29	WG1420746
trans-1,3-Dichloropropene	U		0.222	0.500	1	02/01/2020 01:29	WG1420746
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	02/01/2020 01:29	WG1420746
2,2-Dichloropropane	U		0.0929	0.500	1	02/01/2020 01:29	WG1420746
Di-isopropyl ether	U		0.0924	0.500	1	02/01/2020 01:29	WG1420746
Ethylbenzene	U		0.158	0.500	1	02/01/2020 01:29	WG1420746
Hexachloro-1,3-butadiene	U		0.157	1.00	1	02/01/2020 01:29	WG1420746
2-Hexanone	U		0.757	5.00	1	02/01/2020 01:29	WG1420746
n-Hexane	U		0.305	5.00	1	02/01/2020 01:29	WG1420746
Iodomethane	U	UJ J0	0.377	10.0	1	02/01/2020 01:29	WG1420746
Isopropylbenzene	U		0.126	0.500	1	02/01/2020 01:29	WG1420746
p-Isopropyltoluene	U		0.138	0.500	1	02/01/2020 01:29	WG1420746
2-Butanone (MEK)	U		1.28	5.00	1	02/01/2020 01:29	WG1420746
Methylene Chloride	U		1.07	2.50	1	02/01/2020 01:29	WG1420746
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	02/01/2020 01:29	WG1420746
Methyl tert-butyl ether	U		0.102	0.500	1	02/01/2020 01:29	WG1420746
Naphthalene	U		0.174	2.50	1	02/01/2020 01:29	WG1420746
n-Propylbenzene	U		0.162	0.500	1	02/01/2020 01:29	WG1420746
Styrene	U		0.117	0.500	1	02/01/2020 01:29	WG1420746
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	02/01/2020 01:29	WG1420746
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	02/01/2020 01:29	WG1420746
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	02/01/2020 01:29	WG1420746
Tetrachloroethene	U		0.199	0.500	1	02/01/2020 01:29	WG1420746
Toluene	U		0.412	0.500	1	02/01/2020 01:29	WG1420746
1,2,3-Trichlorobenzene	U		0.164	0.500	1	02/01/2020 01:29	WG1420746
1,2,4-Trichlorobenzene	U		0.355	0.500	1	02/01/2020 01:29	WG1420746
1,1,1-Trichloroethane	U		0.0940	0.500	1	02/01/2020 01:29	WG1420746
1,1,2-Trichloroethane	U		0.186	0.500	1	02/01/2020 01:29	WG1420746
Trichloroethene	U		0.153	0.500	1	02/01/2020 01:29	WG1420746
Trichlorofluoromethane	U		0.130	2.50	1	02/01/2020 01:29	WG1420746
1,2,3-Trichloropropane	U		0.247	2.50	1	02/01/2020 01:29	WG1420746
1,2,4-Trimethylbenzene	U		0.123	0.500	1	02/01/2020 01:29	WG1420746
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	02/01/2020 01:29	WG1420746
1,3,5-Trimethylbenzene	U		0.124	0.500	1	02/01/2020 01:29	WG1420746

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

Analyte	Result ug/l		Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Vinyl acetate	U	UJ	J0	0.645	5.00	1	02/01/2020 01:29	WG1420746
Vinyl chloride	28.2			0.118	0.500	1	02/01/2020 01:29	WG1420746
Xylenes, Total	U			0.316	1.50	1	02/01/2020 01:29	WG1420746
(S) Toluene-d8	*101*				*80.0-120*		*02/01/2020 01:29*	WG1420746
(S) 4-Bromofluorobenzene	*87.3*				*77.0-126*		*02/01/2020 01:29*	WG1420746
(S) 1,2-Dichloroethane-d4	*94.8*				*70.0-130*		*02/01/2020 01:29*	WG1420746

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

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Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	140000		2710	20000	1	01/30/2020 19:44	WG1419673

Sample Narrative:

L1184195-04 WG1419673: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	24200		51.9	1000	1	01/30/2020 20:58	WG1419560
Nitrate	U		22.7	100	1	01/30/2020 20:58	WG1419560
Sulfate	6800		77.4	5000	1	01/30/2020 20:58	WG1419560

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	26000		102	1000	1	02/04/2020 09:06	WG1421496

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	2850		15.0	100	1	02/01/2020 16:16	WG1419838
Manganese	114		0.250	5.00	1	02/01/2020 16:16	WG1419838

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	447	Z, J+	31.6	100	1	01/31/2020 12:24	WG1420077
(S) a,a,a-Trifluorotoluene(FID)	*104*			*78.0-120*		*01/31/2020 12:24*	WG1420077

Sample Narrative:

L1184195-04 WG1420077: No discernable petroleum pattern.

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	459		0.287	0.678	1	02/04/2020 15:55	WG1421983
Ethane	5.74		0.296	1.29	1	02/04/2020 15:55	WG1421983
Ethene	72.0		0.422	1.27	1	02/04/2020 15:55	WG1421983

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	11.3	J	1.05	25.0	1	02/01/2020 01:49	WG1420746
Acrylonitrile	U		0.873	5.00	1	02/01/2020 01:49	WG1420746
Benzene	0.167	J	0.0896	0.500	1	02/01/2020 01:49	WG1420746
Bromobenzene	U		0.133	0.500	1	02/01/2020 01:49	WG1420746
Bromodichloromethane	U		0.0800	0.500	1	02/01/2020 01:49	WG1420746
Bromochloromethane	U		0.145	0.500	1	02/01/2020 01:49	WG1420746
Bromoform	U		0.186	0.500	1	02/01/2020 01:49	WG1420746
Bromomethane	U		0.157	2.50	1	02/01/2020 01:49	WG1420746
n-Butylbenzene	U		0.143	0.500	1	02/01/2020 01:49	WG1420746
sec-Butylbenzene	U		0.134	0.500	1	02/01/2020 01:49	WG1420746

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MW104-012920

Collected date/time: 01/29/20 12:10

SAMPLE RESULTS - 04

L1184195

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
tert-Butylbenzene	U		0.183	0.500	1	02/01/2020 01:49	WG1420746
Carbon disulfide	U		0.101	0.500	1	02/01/2020 01:49	WG1420746
Carbon tetrachloride	U		0.159	0.500	1	02/01/2020 01:49	WG1420746
Chlorobenzene	U		0.140	0.500	1	02/01/2020 01:49	WG1420746
Chlorodibromomethane	U		0.128	0.500	1	02/01/2020 01:49	WG1420746
Chloroethane	U		0.141	2.50	1	02/01/2020 01:49	WG1420746
Chloroform	U		0.0860	0.500	1	02/01/2020 01:49	WG1420746
Chloromethane	U		0.153	1.25	1	02/01/2020 01:49	WG1420746
2-Chlorotoluene	U		0.111	0.500	1	02/01/2020 01:49	WG1420746
4-Chlorotoluene	U		0.0972	0.500	1	02/01/2020 01:49	WG1420746
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	02/01/2020 01:49	WG1420746
1,2-Dibromoethane	U		0.193	0.500	1	02/01/2020 01:49	WG1420746
Dibromomethane	U		0.117	0.500	1	02/01/2020 01:49	WG1420746
1,2-Dichlorobenzene	U		0.101	0.500	1	02/01/2020 01:49	WG1420746
1,3-Dichlorobenzene	U		0.130	0.500	1	02/01/2020 01:49	WG1420746
1,4-Dichlorobenzene	U		0.121	0.500	1	02/01/2020 01:49	WG1420746
Dichlorodifluoromethane	U		0.127	2.50	1	02/01/2020 01:49	WG1420746
1,1-Dichloroethane	U		0.114	0.500	1	02/01/2020 01:49	WG1420746
1,2-Dichloroethane	U		0.108	0.500	1	02/01/2020 01:49	WG1420746
1,1-Dichloroethene	1.02		0.188	0.500	1	02/01/2020 01:49	WG1420746
cis-1,2-Dichloroethene	44.6		0.0933	0.500	1	02/01/2020 01:49	WG1420746
trans-1,2-Dichloroethene	0.481	J	0.152	0.500	1	02/01/2020 01:49	WG1420746
1,2-Dichloropropane	U		0.190	0.500	1	02/01/2020 01:49	WG1420746
1,1-Dichloropropene	U		0.128	0.500	1	02/01/2020 01:49	WG1420746
1,3-Dichloropropane	U		0.147	1.00	1	02/01/2020 01:49	WG1420746
cis-1,3-Dichloropropene	U		0.0976	0.500	1	02/01/2020 01:49	WG1420746
trans-1,3-Dichloropropene	U		0.222	0.500	1	02/01/2020 01:49	WG1420746
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	02/01/2020 01:49	WG1420746
2,2-Dichloropropane	U		0.0929	0.500	1	02/01/2020 01:49	WG1420746
Di-isopropyl ether	U		0.0924	0.500	1	02/01/2020 01:49	WG1420746
Ethylbenzene	U		0.158	0.500	1	02/01/2020 01:49	WG1420746
Hexachloro-1,3-butadiene	U		0.157	1.00	1	02/01/2020 01:49	WG1420746
2-Hexanone	U		0.757	5.00	1	02/01/2020 01:49	WG1420746
n-Hexane	U		0.305	5.00	1	02/01/2020 01:49	WG1420746
Iodomethane	U UJ	J0	0.377	10.0	1	02/01/2020 01:49	WG1420746
Isopropylbenzene	U		0.126	0.500	1	02/01/2020 01:49	WG1420746
p-Isopropyltoluene	U		0.138	0.500	1	02/01/2020 01:49	WG1420746
2-Butanone (MEK)	U		1.28	5.00	1	02/01/2020 01:49	WG1420746
Methylene Chloride	U		1.07	2.50	1	02/01/2020 01:49	WG1420746
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	02/01/2020 01:49	WG1420746
Methyl tert-butyl ether	U		0.102	0.500	1	02/01/2020 01:49	WG1420746
Naphthalene	U		0.174	2.50	1	02/01/2020 01:49	WG1420746
n-Propylbenzene	U		0.162	0.500	1	02/01/2020 01:49	WG1420746
Styrene	U		0.117	0.500	1	02/01/2020 01:49	WG1420746
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	02/01/2020 01:49	WG1420746
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	02/01/2020 01:49	WG1420746
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	02/01/2020 01:49	WG1420746
Tetrachloroethene	0.894		0.199	0.500	1	02/01/2020 01:49	WG1420746
Toluene	U		0.412	0.500	1	02/01/2020 01:49	WG1420746
1,2,3-Trichlorobenzene	U		0.164	0.500	1	02/01/2020 01:49	WG1420746
1,2,4-Trichlorobenzene	U		0.355	0.500	1	02/01/2020 01:49	WG1420746
1,1,1-Trichloroethane	U		0.0940	0.500	1	02/01/2020 01:49	WG1420746
1,1,2-Trichloroethane	U		0.186	0.500	1	02/01/2020 01:49	WG1420746
Trichloroethene	6.44		0.153	0.500	1	02/01/2020 01:49	WG1420746
Trichlorofluoromethane	U		0.130	2.50	1	02/01/2020 01:49	WG1420746
1,2,3-Trichloropropane	U		0.247	2.50	1	02/01/2020 01:49	WG1420746

JC 2/18/2020

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

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,2,4-Trimethylbenzene	U		0.123	0.500	1	02/01/2020 01:49	WG1420746
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	02/01/2020 01:49	WG1420746
1,3,5-Trimethylbenzene	U		0.124	0.500	1	02/01/2020 01:49	WG1420746
Vinyl acetate	U	UJ J0	0.645	5.00	1	02/01/2020 01:49	WG1420746
Vinyl chloride	31.7		0.118	0.500	1	02/01/2020 01:49	WG1420746
Xylenes, Total	U		0.316	1.50	1	02/01/2020 01:49	WG1420746
(S) Toluene-d8	*107*			*80.0-120*		*02/01/2020 01:49*	WG1420746
(S) 4-Bromofluorobenzene	*98.2*			*77.0-126*		*02/01/2020 01:49*	WG1420746
(S) 1,2-Dichloroethane-d4	*98.4*			*70.0-130*		*02/01/2020 01:49*	WG1420746

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

JC 2/18/2020

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

Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	232000		6780	50000	2.5	02/01/2020 13:35	WG1420302

Sample Narrative:

L1184637-01 WG1420302: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	5400		51.9	1000	1	01/31/2020 20:40	WG1420280
Nitrate	66.8	J	22.7	100	1	01/31/2020 20:40	WG1420280
Sulfate	2120	~~B J~~	77.4	5000	1	01/31/2020 20:40	WG1420280

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	2690	~~B~~	102	1000	1	02/04/2020 22:06	WG1421501

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	5460		15.0	100	1	01/31/2020 17:57	WG1420188
Manganese	347		0.250	5.00	1	01/31/2020 17:57	WG1420188

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	U		31.6	100	1	02/01/2020 02:23	WG1420595
(S) a,a,a-Trifluorotoluene(FID)	*108*			*78.0-120*		*02/01/2020 02:23*	WG1420595

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	70.8		0.287	0.678	1	02/04/2020 16:06	WG1421983
Ethane	U		0.296	1.29	1	02/04/2020 16:06	WG1421983
Ethene	U		0.422	1.27	1	02/04/2020 16:06	WG1421983

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	1.53	J	1.05	25.0	1	02/01/2020 04:28	WG1420746
Acrylonitrile	U		0.873	5.00	1	02/01/2020 04:28	WG1420746
Benzene	U		0.0896	0.500	1	02/01/2020 04:28	WG1420746
Bromobenzene	U		0.133	0.500	1	02/01/2020 04:28	WG1420746
Bromodichloromethane	U		0.0800	0.500	1	02/01/2020 04:28	WG1420746
Bromochloromethane	U		0.145	0.500	1	02/01/2020 04:28	WG1420746
Bromoform	U		0.186	0.500	1	02/01/2020 04:28	WG1420746
Bromomethane	U		0.157	2.50	1	02/01/2020 04:28	WG1420746
n-Butylbenzene	U		0.143	0.500	1	02/01/2020 04:28	WG1420746
sec-Butylbenzene	U		0.134	0.500	1	02/01/2020 04:28	WG1420746
tert-Butylbenzene	U		0.183	0.500	1	02/01/2020 04:28	WG1420746
Carbon disulfide	U		0.101	0.500	1	02/01/2020 04:28	WG1420746
Carbon tetrachloride	U		0.159	0.500	1	02/01/2020 04:28	WG1420746

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chlorobenzene	U		0.140	0.500	1	02/01/2020 04:28	WG1420746
Chlorodibromomethane	U		0.128	0.500	1	02/01/2020 04:28	WG1420746
Chloroethane	U		0.141	2.50	1	02/01/2020 04:28	WG1420746
Chloroform	0.510		0.0860	0.500	1	02/01/2020 04:28	WG1420746
Chloromethane	U		0.153	1.25	1	02/01/2020 04:28	WG1420746
2-Chlorotoluene	U		0.111	0.500	1	02/01/2020 04:28	WG1420746
4-Chlorotoluene	U		0.0972	0.500	1	02/01/2020 04:28	WG1420746
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	02/01/2020 04:28	WG1420746
1,2-Dibromoethane	U		0.193	0.500	1	02/01/2020 04:28	WG1420746
Dibromomethane	U		0.117	0.500	1	02/01/2020 04:28	WG1420746
1,2-Dichlorobenzene	U		0.101	0.500	1	02/01/2020 04:28	WG1420746
1,3-Dichlorobenzene	U		0.130	0.500	1	02/01/2020 04:28	WG1420746
1,4-Dichlorobenzene	U		0.121	0.500	1	02/01/2020 04:28	WG1420746
Dichlorodifluoromethane	U		0.127	2.50	1	02/01/2020 04:28	WG1420746
1,1-Dichloroethane	U		0.114	0.500	1	02/01/2020 04:28	WG1420746
1,2-Dichloroethane	U		0.108	0.500	1	02/01/2020 04:28	WG1420746
1,1-Dichloroethene	U		0.188	0.500	1	02/01/2020 04:28	WG1420746
cis-1,2-Dichloroethene	U		0.0933	0.500	1	02/01/2020 04:28	WG1420746
trans-1,2-Dichloroethene	U		0.152	0.500	1	02/01/2020 04:28	WG1420746
1,2-Dichloropropane	U		0.190	0.500	1	02/01/2020 04:28	WG1420746
1,1-Dichloropropene	U		0.128	0.500	1	02/01/2020 04:28	WG1420746
1,3-Dichloropropane	U		0.147	1.00	1	02/01/2020 04:28	WG1420746
cis-1,3-Dichloropropene	U		0.0976	0.500	1	02/01/2020 04:28	WG1420746
trans-1,3-Dichloropropene	U		0.222	0.500	1	02/01/2020 04:28	WG1420746
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	02/01/2020 04:28	WG1420746
2,2-Dichloropropane	U		0.0929	0.500	1	02/01/2020 04:28	WG1420746
Di-isopropyl ether	U		0.0924	0.500	1	02/01/2020 04:28	WG1420746
Ethylbenzene	U		0.158	0.500	1	02/01/2020 04:28	WG1420746
Hexachloro-1,3-butadiene	U		0.157	1.00	1	02/01/2020 04:28	WG1420746
2-Hexanone	U		0.757	5.00	1	02/01/2020 04:28	WG1420746
n-Hexane	U		0.305	5.00	1	02/01/2020 04:28	WG1420746
Iodomethane	U	UJ J0	0.377	10.0	1	02/01/2020 04:28	WG1420746
Isopropylbenzene	U		0.126	0.500	1	02/01/2020 04:28	WG1420746
p-Isopropyltoluene	U		0.138	0.500	1	02/01/2020 04:28	WG1420746
2-Butanone (MEK)	U		1.28	5.00	1	02/01/2020 04:28	WG1420746
Methylene Chloride	U		1.07	2.50	1	02/01/2020 04:28	WG1420746
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	02/01/2020 04:28	WG1420746
Methyl tert-butyl ether	U		0.102	0.500	1	02/01/2020 04:28	WG1420746
Naphthalene	U		0.174	2.50	1	02/01/2020 04:28	WG1420746
n-Propylbenzene	U		0.162	0.500	1	02/01/2020 04:28	WG1420746
Styrene	U		0.117	0.500	1	02/01/2020 04:28	WG1420746
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	02/01/2020 04:28	WG1420746
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	02/01/2020 04:28	WG1420746
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	02/01/2020 04:28	WG1420746
Tetrachloroethene	U		0.199	0.500	1	02/01/2020 04:28	WG1420746
Toluene	U		0.412	0.500	1	02/01/2020 04:28	WG1420746
1,2,3-Trichlorobenzene	U		0.164	0.500	1	02/01/2020 04:28	WG1420746
1,2,4-Trichlorobenzene	U		0.355	0.500	1	02/01/2020 04:28	WG1420746
1,1,1-Trichloroethane	U		0.0940	0.500	1	02/01/2020 04:28	WG1420746
1,1,2-Trichloroethane	U		0.186	0.500	1	02/01/2020 04:28	WG1420746
Trichloroethene	U		0.153	0.500	1	02/01/2020 04:28	WG1420746
Trichlorofluoromethane	U		0.130	2.50	1	02/01/2020 04:28	WG1420746
1,2,3-Trichloropropane	U		0.247	2.50	1	02/01/2020 04:28	WG1420746
1,2,4-Trimethylbenzene	U		0.123	0.500	1	02/01/2020 04:28	WG1420746
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	02/01/2020 04:28	WG1420746
1,3,5-Trimethylbenzene	U		0.124	0.500	1	02/01/2020 04:28	WG1420746

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Vinyl acetate	U UJ	J0	0.645	5.00	1	02/01/2020 04:28	WG1420746
Vinyl chloride	U		0.118	0.500	1	02/01/2020 04:28	WG1420746
Xylenes, Total	U		0.316	1.50	1	02/01/2020 04:28	WG1420746
(S) Toluene-d8	*102*			*80.0-120*		*02/01/2020 04:28*	WG1420746
(S) 4-Bromofluorobenzene	*95.3*			*77.0-126*		*02/01/2020 04:28*	WG1420746
(S) 1,2-Dichloroethane-d4	*105*			*70.0-130*		*02/01/2020 04:28*	WG1420746

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

JC 2/18/2020

Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	871000		2710	20000	1	02/01/2020 12:07	WG1420302

Sample Narrative:

L1184637-02 WG1420302: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	77300		519	10000	10	02/01/2020 09:02	WG1420280
Nitrate	86.3	J	22.7	100	1	01/31/2020 20:53	WG1420280
Sulfate	U		77.4	5000	1	01/31/2020 20:53	WG1420280

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	95700		510	5000	5	02/04/2020 22:26	WG1421501

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	41500	~~V~~	15.0	100	1	01/31/2020 16:45	WG1420188
Manganese	2060	~~V~~	0.250	5.00	1	01/31/2020 16:45	WG1420188

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	U		31.6	100	1	02/01/2020 02:47	WG1420595
(S) a,a,a-Trifluorotoluene(FID)	*107*			*78.0-120*		*02/01/2020 02:47*	WG1420595

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	22800		2.87	6.78	10	02/05/2020 14:05	WG1422805
Ethane	772		0.296	1.29	1	02/04/2020 16:08	WG1421983
Ethene	987		0.422	1.27	1	02/04/2020 16:08	WG1421983

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	20.5 U	J	1.05	25.0	1	02/01/2020 04:48	WG1420746
Acrylonitrile	U		0.873	5.00	1	02/01/2020 04:48	WG1420746
Benzene	U		0.0896	0.500	1	02/01/2020 04:48	WG1420746
Bromobenzene	U		0.133	0.500	1	02/01/2020 04:48	WG1420746
Bromodichloromethane	U		0.0800	0.500	1	02/01/2020 04:48	WG1420746
Bromochloromethane	U		0.145	0.500	1	02/01/2020 04:48	WG1420746
Bromoform	U		0.186	0.500	1	02/01/2020 04:48	WG1420746
Bromomethane	U		0.157	2.50	1	02/01/2020 04:48	WG1420746
n-Butylbenzene	U		0.143	0.500	1	02/01/2020 04:48	WG1420746
sec-Butylbenzene	U		0.134	0.500	1	02/01/2020 04:48	WG1420746
tert-Butylbenzene	U		0.183	0.500	1	02/01/2020 04:48	WG1420746
Carbon disulfide	0.309	J	0.101	0.500	1	02/01/2020 04:48	WG1420746
Carbon tetrachloride	U		0.159	0.500	1	02/01/2020 04:48	WG1420746

JC 2/20/20

MW-166-013020
Collected date/time: 01/30/20 12:50

SAMPLE RESULTS - 02
L1184637

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chlorobenzene	U		0.140	0.500	1	02/01/2020 04:48	WG1420746
Chlorodibromomethane	U		0.128	0.500	1	02/01/2020 04:48	WG1420746
Chloroethane	U		0.141	2.50	1	02/01/2020 04:48	WG1420746
Chloroform	U		0.0860	0.500	1	02/01/2020 04:48	WG1420746
Chloromethane	U		0.153	1.25	1	02/01/2020 04:48	WG1420746
2-Chlorotoluene	U		0.111	0.500	1	02/01/2020 04:48	WG1420746
4-Chlorotoluene	U		0.0972	0.500	1	02/01/2020 04:48	WG1420746
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	02/01/2020 04:48	WG1420746
1,2-Dibromoethane	U		0.193	0.500	1	02/01/2020 04:48	WG1420746
Dibromomethane	U		0.117	0.500	1	02/01/2020 04:48	WG1420746
1,2-Dichlorobenzene	U		0.101	0.500	1	02/01/2020 04:48	WG1420746
1,3-Dichlorobenzene	U		0.130	0.500	1	02/01/2020 04:48	WG1420746
1,4-Dichlorobenzene	U		0.121	0.500	1	02/01/2020 04:48	WG1420746
Dichlorodifluoromethane	U		0.127	2.50	1	02/01/2020 04:48	WG1420746
1,1-Dichloroethane	U		0.114	0.500	1	02/01/2020 04:48	WG1420746
1,2-Dichloroethane	U		0.108	0.500	1	02/01/2020 04:48	WG1420746
1,1-Dichloroethene	U		0.188	0.500	1	02/01/2020 04:48	WG1420746
cis-1,2-Dichloroethene	118		0.0933	0.500	1	02/01/2020 04:48	WG1420746
trans-1,2-Dichloroethene	11.4		0.152	0.500	1	02/01/2020 04:48	WG1420746
1,2-Dichloropropane	U		0.190	0.500	1	02/01/2020 04:48	WG1420746
1,1-Dichloropropene	U		0.128	0.500	1	02/01/2020 04:48	WG1420746
1,3-Dichloropropane	U		0.147	1.00	1	02/01/2020 04:48	WG1420746
cis-1,3-Dichloropropene	U		0.0976	0.500	1	02/01/2020 04:48	WG1420746
trans-1,3-Dichloropropene	U		0.222	0.500	1	02/01/2020 04:48	WG1420746
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	02/01/2020 04:48	WG1420746
2,2-Dichloropropane	U		0.0929	0.500	1	02/01/2020 04:48	WG1420746
Di-isopropyl ether	U		0.0924	0.500	1	02/01/2020 04:48	WG1420746
Ethylbenzene	U		0.158	0.500	1	02/01/2020 04:48	WG1420746
Hexachloro-1,3-butadiene	U		0.157	1.00	1	02/01/2020 04:48	WG1420746
2-Hexanone	U		0.757	5.00	1	02/01/2020 04:48	WG1420746
n-Hexane	U		0.305	5.00	1	02/01/2020 04:48	WG1420746
Iodomethane	U	UJ J0	0.377	10.0	1	02/01/2020 04:48	WG1420746
Isopropylbenzene	U		0.126	0.500	1	02/01/2020 04:48	WG1420746
p-Isopropyltoluene	U		0.138	0.500	1	02/01/2020 04:48	WG1420746
2-Butanone (MEK)	26.2		1.28	5.00	1	02/01/2020 04:48	WG1420746
Methylene Chloride	U		1.07	2.50	1	02/01/2020 04:48	WG1420746
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	02/01/2020 04:48	WG1420746
Methyl tert-butyl ether	U		0.102	0.500	1	02/01/2020 04:48	WG1420746
Naphthalene	U		0.174	2.50	1	02/01/2020 04:48	WG1420746
n-Propylbenzene	U		0.162	0.500	1	02/01/2020 04:48	WG1420746
Styrene	U		0.117	0.500	1	02/01/2020 04:48	WG1420746
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	02/01/2020 04:48	WG1420746
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	02/01/2020 04:48	WG1420746
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	02/01/2020 04:48	WG1420746
Tetrachloroethene	U		0.199	0.500	1	02/01/2020 04:48	WG1420746
Toluene	U		0.412	0.500	1	02/01/2020 04:48	WG1420746
1,2,3-Trichlorobenzene	U		0.164	0.500	1	02/01/2020 04:48	WG1420746
1,2,4-Trichlorobenzene	U		0.355	0.500	1	02/01/2020 04:48	WG1420746
1,1,1-Trichloroethane	U		0.0940	0.500	1	02/01/2020 04:48	WG1420746
1,1,2-Trichloroethane	U		0.186	0.500	1	02/01/2020 04:48	WG1420746
Trichloroethene	U		0.153	0.500	1	02/01/2020 04:48	WG1420746
Trichlorofluoromethane	U		0.130	2.50	1	02/01/2020 04:48	WG1420746
1,2,3-Trichloropropane	U		0.247	2.50	1	02/01/2020 04:48	WG1420746
1,2,4-Trimethylbenzene	U		0.123	0.500	1	02/01/2020 04:48	WG1420746
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	02/01/2020 04:48	WG1420746
1,3,5-Trimethylbenzene	U		0.124	0.500	1	02/01/2020 04:48	WG1420746

JC 2/20/20

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

Analyte	Result ug/l		Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Vinyl acetate	U	UJ	J0	0.645	5.00	1	02/01/2020 04:48	WG1420746
Vinyl chloride	250			1.18	5.00	10	02/06/2020 00:55	WG1423094
Xylenes, Total	U			0.316	1.50	1	02/01/2020 04:48	WG1420746
(S) Toluene-d8	*112*				*80.0-120*		*02/01/2020 04:48*	WG1420746
(S) Toluene-d8	*99.7*				*80.0-120*		*02/06/2020 00:55*	WG1423094
(S) 4-Bromofluorobenzene	*96.9*				*77.0-126*		*02/01/2020 04:48*	WG1420746
(S) 4-Bromofluorobenzene	*92.9*				*77.0-126*		*02/06/2020 00:55*	WG1423094
(S) 1,2-Dichloroethane-d4	*99.5*				*70.0-130*		*02/01/2020 04:48*	WG1420746
(S) 1,2-Dichloroethane-d4	*106*				*70.0-130*		*02/06/2020 00:55*	WG1423094

JC 2/20/20

Wet Chemistry by Method 2320 B-2011

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Alkalinity	1340000		2710	20000	1	02/01/2020 12:16	WG1420302

Sample Narrative:

L1184637-03 WG1420302: Endpoint pH 4.5

Wet Chemistry by Method 9056A

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Chloride	41100		519	10000	10	02/01/2020 09:15	WG1420280
Nitrate	U		22.7	100	1	01/31/2020 21:06	WG1420280
Sulfate	12900		77.4	5000	1	01/31/2020 21:06	WG1420280

Wet Chemistry by Method 9060A

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
TOC (Total Organic Carbon)	88700		510	5000	5	02/04/2020 23:58	WG1421501

Metals (ICPMS) by Method 6020B

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Iron	48100		15.0	100	1	01/31/2020 18:00	WG1420188
Manganese	7470		0.250	5.00	1	01/31/2020 18:00	WG1420188

Volatile Organic Compounds (GC) by Method NWTPHGX

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Gasoline Range Organics-NWTPH	U		31.6	100	1	02/01/2020 03:11	WG1420595
(S) a,a,a-Trifluorotoluene(FID)	*108*			*78.0-120*		*02/01/2020 03:11*	WG1420595

Volatile Organic Compounds (GC) by Method RSK175

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Methane	21000		2.87	6.78	10	02/05/2020 14:07	WG1422805
Ethane	221		0.296	1.29	1	02/04/2020 16:16	WG1421983
Ethene	69.4		0.422	1.27	1	02/04/2020 16:16	WG1421983

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

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Acetone	3.58	J	1.05	25.0	1	02/01/2020 05:08	WG1420746
Acrylonitrile	U		0.873	5.00	1	02/01/2020 05:08	WG1420746
Benzene	0.176	J	0.0896	0.500	1	02/01/2020 05:08	WG1420746
Bromobenzene	U		0.133	0.500	1	02/01/2020 05:08	WG1420746
Bromodichloromethane	U		0.0800	0.500	1	02/01/2020 05:08	WG1420746
Bromochloromethane	U		0.145	0.500	1	02/01/2020 05:08	WG1420746
Bromoform	U		0.186	0.500	1	02/01/2020 05:08	WG1420746
Bromomethane	U		0.157	2.50	1	02/01/2020 05:08	WG1420746
n-Butylbenzene	U		0.143	0.500	1	02/01/2020 05:08	WG1420746
sec-Butylbenzene	U		0.134	0.500	1	02/01/2020 05:08	WG1420746
tert-Butylbenzene	U		0.183	0.500	1	02/01/2020 05:08	WG1420746
Carbon disulfide	U		0.101	0.500	1	02/01/2020 05:08	WG1420746
Carbon tetrachloride	U		0.159	0.500	1	02/01/2020 05:08	WG1420746

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chlorobenzene	U		0.140	0.500	1	02/01/2020 05:08	WG1420746
Chlorodibromomethane	U		0.128	0.500	1	02/01/2020 05:08	WG1420746
Chloroethane	U		0.141	2.50	1	02/01/2020 05:08	WG1420746
Chloroform	U		0.0860	0.500	1	02/01/2020 05:08	WG1420746
Chloromethane	U		0.153	1.25	1	02/01/2020 05:08	WG1420746
2-Chlorotoluene	U		0.111	0.500	1	02/01/2020 05:08	WG1420746
4-Chlorotoluene	U		0.0972	0.500	1	02/01/2020 05:08	WG1420746
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	02/01/2020 05:08	WG1420746
1,2-Dibromoethane	U		0.193	0.500	1	02/01/2020 05:08	WG1420746
Dibromomethane	U		0.117	0.500	1	02/01/2020 05:08	WG1420746
1,2-Dichlorobenzene	U		0.101	0.500	1	02/01/2020 05:08	WG1420746
1,3-Dichlorobenzene	U		0.130	0.500	1	02/01/2020 05:08	WG1420746
1,4-Dichlorobenzene	U		0.121	0.500	1	02/01/2020 05:08	WG1420746
Dichlorodifluoromethane	U		0.127	2.50	1	02/01/2020 05:08	WG1420746
1,1-Dichloroethane	U		0.114	0.500	1	02/01/2020 05:08	WG1420746
1,2-Dichloroethane	U		0.108	0.500	1	02/01/2020 05:08	WG1420746
1,1-Dichloroethene	U		0.188	0.500	1	02/01/2020 05:08	WG1420746
cis-1,2-Dichloroethene	6.89		0.0933	0.500	1	02/01/2020 05:08	WG1420746
trans-1,2-Dichloroethene	2.56		0.152	0.500	1	02/01/2020 05:08	WG1420746
1,2-Dichloropropane	U		0.190	0.500	1	02/01/2020 05:08	WG1420746
1,1-Dichloropropene	U		0.128	0.500	1	02/01/2020 05:08	WG1420746
1,3-Dichloropropane	U		0.147	1.00	1	02/01/2020 05:08	WG1420746
cis-1,3-Dichloropropene	U		0.0976	0.500	1	02/01/2020 05:08	WG1420746
trans-1,3-Dichloropropene	U		0.222	0.500	1	02/01/2020 05:08	WG1420746
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	02/01/2020 05:08	WG1420746
2,2-Dichloropropane	U		0.0929	0.500	1	02/01/2020 05:08	WG1420746
Di-isopropyl ether	U		0.0924	0.500	1	02/01/2020 05:08	WG1420746
Ethylbenzene	U		0.158	0.500	1	02/01/2020 05:08	WG1420746
Hexachloro-1,3-butadiene	U		0.157	1.00	1	02/01/2020 05:08	WG1420746
2-Hexanone	U		0.757	5.00	1	02/01/2020 05:08	WG1420746
n-Hexane	U		0.305	5.00	1	02/01/2020 05:08	WG1420746
Iodomethane	U	UJ J0	0.377	10.0	1	02/01/2020 05:08	WG1420746
Isopropylbenzene	U		0.126	0.500	1	02/01/2020 05:08	WG1420746
p-Isopropyltoluene	U		0.138	0.500	1	02/01/2020 05:08	WG1420746
2-Butanone (MEK)	U		1.28	5.00	1	02/01/2020 05:08	WG1420746
Methylene Chloride	U		1.07	2.50	1	02/01/2020 05:08	WG1420746
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	02/01/2020 05:08	WG1420746
Methyl tert-butyl ether	U		0.102	0.500	1	02/01/2020 05:08	WG1420746
Naphthalene	U		0.174	2.50	1	02/01/2020 05:08	WG1420746
n-Propylbenzene	U		0.162	0.500	1	02/01/2020 05:08	WG1420746
Styrene	U		0.117	0.500	1	02/01/2020 05:08	WG1420746
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	02/01/2020 05:08	WG1420746
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	02/01/2020 05:08	WG1420746
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	02/01/2020 05:08	WG1420746
Tetrachloroethene	U		0.199	0.500	1	02/01/2020 05:08	WG1420746
Toluene	U		0.412	0.500	1	02/01/2020 05:08	WG1420746
1,2,3-Trichlorobenzene	U		0.164	0.500	1	02/01/2020 05:08	WG1420746
1,2,4-Trichlorobenzene	U		0.355	0.500	1	02/01/2020 05:08	WG1420746
1,1,1-Trichloroethane	U		0.0940	0.500	1	02/01/2020 05:08	WG1420746
1,1,2-Trichloroethane	U		0.186	0.500	1	02/01/2020 05:08	WG1420746
Trichloroethene	U		0.153	0.500	1	02/01/2020 05:08	WG1420746
Trichlorofluoromethane	U		0.130	2.50	1	02/01/2020 05:08	WG1420746
1,2,3-Trichloropropane	U		0.247	2.50	1	02/01/2020 05:08	WG1420746
1,2,4-Trimethylbenzene	U		0.123	0.500	1	02/01/2020 05:08	WG1420746
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	02/01/2020 05:08	WG1420746
1,3,5-Trimethylbenzene	U		0.124	0.500	1	02/01/2020 05:08	WG1420746

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

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Vinyl acetate	U	UJ J0	0.645	5.00	1	02/01/2020 05:08	WG1420746
Vinyl chloride	9.64		0.118	0.500	1	02/06/2020 01:16	WG1423094
Xylenes, Total	U		0.316	1.50	1	02/01/2020 05:08	WG1420746
(S) Toluene-d8	*101*			*80.0-120*		*02/01/2020 05:08*	WG1420746
(S) Toluene-d8	*97.1*			*80.0-120*		*02/06/2020 01:16*	WG1423094
(S) 4-Bromofluorobenzene	*94.6*			*77.0-126*		*02/01/2020 05:08*	WG1420746
(S) 4-Bromofluorobenzene	*97.0*			*77.0-126*		*02/06/2020 01:16*	WG1423094
(S) 1,2-Dichloroethane-d4	*102*			*70.0-130*		*02/01/2020 05:08*	WG1420746
(S) 1,2-Dichloroethane-d4	*101*			*70.0-130*		*02/06/2020 01:16*	WG1423094

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MEMORANDUM

TO: Project File **DATE:** February 19, 2019

FROM: Jessie Compeau

SUBJECT: Laboratory Data Validation Review

PROJECT: American Linen Data Validation

PROJECT #: 1413.001.02.501F

TASK: EIM Data Validation Level EPA2A for January 2020 – Soil Vapor Samples

LAB: Pace Sample Delivery Groups (SDG): L1183594

Two (2) soil vapor samples (including one field duplicate) were collected as part of the ongoing sampling event at the Former American Linen Supply Site, in Seattle, Washington on January 27, 2020. The samples were shipped and delivered to Pace Lab Sciences (Pace) of Mount Juliet, TN for laboratory analysis. Samples were analyzed for the following:

- Volatile organic compounds (VOCs) by United States Environmental Protection Agency (USEPA) Method TO-15

The quality assurance review of the sample data is summarized below.

DATA QUALIFICATIONS

Guidelines established by USEPA for a limited data validation review of analytical data along with PACE control limit criteria were used to validate the data. The comments presented in this memorandum refer to the laboratory's performance in meeting the quality control criteria outlined in the USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (USEPA, 2017). Following Guidelines, non-project-specific laboratory duplicates and matrix spike results were not evaluated as part of this data validation.

DATA VALIDATION

Completeness

All samples were collected and analyzed as requested.

Sample Collection and Preservation

The laboratory supplied a Summa Canister ^{TM} canister (1Liter) for the air sample. The samples were shipped, delivered by FedEx, and received in good condition by the laboratory. The sample was collected, handled, and delivered in an appropriate manner. No data qualifications were warranted based upon sampling techniques.

Holding Times

The analyses for VOCs by Method TO-15 were performed within the 30-day recommended holding time limit for the air samples collected in Summa canisters. All holding time criteria are met.

Initial and Continuing Calibration

Initial and continuing calibration data for this project are retained by the laboratory and available for review if necessary. Case narrative and laboratory notes do not indicate that there are any issues with calibration.

Method Blank Results

A laboratory method blank is included with the analytical batch per method requirement. The target analytes were not detected in the method blank at or above the RDLs with one exception:

- A low level of propene was detected in the method blank. No action is necessary is this was not detected in the associated samples.

Trip Blank Results

A trip blank was not required for the VOCs by TO-15 analyses. No action is taken other than to note this.

Field Duplicate Analyses

Field duplicate sample pair is as follows:

- Samples SV01-012720 and SV01-012720-D

Target analyte results are comparable and within a relative percent difference (RPD) of 30% for the field duplicate pair with the following exceptions:

- Samples SV01-012720 and SV01-012720-D – Multiple VOC results are not comparable with RPDs greater than 30% (or for results < 5X RDL the absolute difference < 1X RDL). **Field duplicate results for acetone, chloromethane, cyclohexane, 1,1-dichloroethane, ethanol, hexane, toluene, and 1,1,1-trichloroethane are estimated and qualified (UJ/J).**

Laboratory Duplicate/Replicate Analyses

A laboratory replicate was not performed. Refer to the Laboratory Control Sample section for additional information.

Surrogate Recoveries

The surrogate percent recovery (% R) results for the VOCs by TO-15 air samples, method blank, and laboratory control samples are within the laboratory surrogate control limits of 60 -140% R. No data qualifications were warranted.

Laboratory Control Samples

A laboratory control sample/laboratory control sample duplicate (LCS/LCSD) were analyzed for the VOCs by TO-15 along with each analytical batch. The LCS/LCSD recovery and relative percent differences (RPDs) for all control compounds met laboratory control limit criteria.

Matrix Spike/Matrix Spike Duplicates

A matrix spike/matrix spike duplicate (MS/MSD) is not required for the VOCs by TO-15 method.

Other Quality Control Issues

No laboratory quality control issues were identified in the laboratory report with the following discussion:

- Electronic data deliverables (EDDs) for these SDGs were provided by the laboratory and data validator qualifiers were entered. In some cases, different chemical synonyms are used between the EDD and the hardcopy however associated Chemical Abstracts Service (CAS) numbers are provided in the EDD to confirm chemical identifications.

Quantitation Limits

Results of the VOCs by TO-15 analysis are reported based on laboratory MRLs (assuming standard temperature and pressure is equal to 24.45) and reported in units of ppbv and $\mu g/m^3$.

The RDLs indicate the minimum quantity of a target analyte that can be confidently determined by the reference method. The RDLs were acceptable for the project; therefore, no data qualifications were warranted.

Data Assessment

The laboratory data reported for this project were reviewed based on the criteria outlined in:

- USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (USEPA, 2017).

Data qualifiers are assigned and laboratory report pages with qualifiers are attached. All data, including qualified data, are judged to be acceptable for their intended use.

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

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
Acetone	67-64-1	58.10	1.25	2.97	9.05	21.5	J	1	WG1419175
Allyl chloride	107-05-1	76.53	0.200	0.626	ND	ND		1	WG1419175
Benzene	71-43-2	78.10	0.200	0.639	0.243	0.776		1	WG1419175
Benzyl Chloride	100-44-7	127	0.200	1.04	ND	ND		1	WG1419175
Bromodichloromethane	75-27-4	164	0.200	1.34	ND	ND		1	WG1419175
Bromoform	75-25-2	253	0.600	6.21	ND	ND		1	WG1419175
Bromomethane	74-83-9	94.90	0.200	0.776	ND	ND		1	WG1419175
1,3-Butadiene	106-99-0	54.10	2.00	4.43	ND	ND		1	WG1419175
Carbon disulfide	75-15-0	76.10	0.200	0.622	ND	ND		1	WG1419175
Carbon tetrachloride	56-23-5	154	0.200	1.26	ND	ND		1	WG1419175
Chlorobenzene	108-90-7	113	0.200	0.924	ND	ND		1	WG1419175
Chloroethane	75-00-3	64.50	0.200	0.528	ND	ND		1	WG1419175
Chloroform	67-66-3	119	0.200	0.973	ND	ND		1	WG1419175
Chloromethane	74-87-3	50.50	0.200	0.413	0.419	0.865	J	1	WG1419175
2-Chlorotoluene	95-49-8	126	0.200	1.03	ND	ND		1	WG1419175
Cyclohexane	110-82-7	84.20	0.200	0.689	0.449	1.55	J	1	WG1419175
Dibromochloromethane	124-48-1	208	0.200	1.70	ND	ND		1	WG1419175
1,2-Dibromoethane	106-93-4	188	0.200	1.54	ND	ND		1	WG1419175
1,2-Dichlorobenzene	95-50-1	147	0.200	1.20	ND	ND		1	WG1419175
1,3-Dichlorobenzene	541-73-1	147	0.200	1.20	ND	ND		1	WG1419175
1,4-Dichlorobenzene	106-46-7	147	0.200	1.20	ND	ND		1	WG1419175
1,2-Dichloroethane	107-06-2	99	0.200	0.810	ND	ND		1	WG1419175
1,1-Dichloroethane	75-34-3	98	0.200	0.802	ND	ND	UJ	1	WG1419175
1,1-Dichloroethene	75-35-4	96.90	0.200	0.793	ND	ND		1	WG1419175
cis-1,2-Dichloroethene	156-59-2	96.90	0.200	0.793	ND	ND		1	WG1419175
trans-1,2-Dichloroethene	156-60-5	96.90	0.200	0.793	ND	ND		1	WG1419175
1,2-Dichloropropane	78-87-5	113	0.200	0.924	ND	ND		1	WG1419175
cis-1,3-Dichloropropene	10061-01-5	111	0.200	0.908	ND	ND		1	WG1419175
trans-1,3-Dichloropropene	10061-02-6	111	0.200	0.908	ND	ND		1	WG1419175
1,4-Dioxane	123-91-1	88.10	0.200	0.721	ND	ND		1	WG1419175
Ethanol	64-17-5	46.10	0.630	1.19	19.6	37.0	J	1	WG1419175
Ethylbenzene	100-41-4	106	0.200	0.867	ND	ND		1	WG1419175
4-Ethyltoluene	622-96-8	120	0.200	0.982	ND	ND		1	WG1419175
Trichlorofluoromethane	75-69-4	137.40	0.200	1.12	ND	ND		1	WG1419175
Dichlorodifluoromethane	75-71-8	120.92	0.200	0.989	0.441	2.18		1	WG1419175
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	0.200	1.53	ND	ND		1	WG1419175
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.200	1.40	ND	ND		1	WG1419175
Heptane	142-82-5	100	0.200	0.818	0.393	1.61		1	WG1419175
Hexachloro-1,3-butadiene	87-68-3	261	0.630	6.73	ND	ND		1	WG1419175
n-Hexane	110-54-3	86.20	0.200	0.705	0.532	1.88	J	1	WG1419175
Isopropylbenzene	98-82-8	120.20	0.200	0.983	ND	ND		1	WG1419175
Methylene Chloride	75-09-2	84.90	0.200	0.694	0.203	0.705		1	WG1419175
Methyl Butyl Ketone	591-78-6	100	1.25	5.11	ND	ND		1	WG1419175
2-Butanone (MEK)	78-93-3	72.10	1.25	3.69	ND	ND		1	WG1419175
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	1.25	5.12	ND	ND		1	WG1419175
Methyl methacrylate	80-62-6	100.12	0.200	0.819	ND	ND		1	WG1419175
MTBE	1634-04-4	88.10	0.200	0.721	ND	ND		1	WG1419175
Naphthalene	91-20-3	128	0.630	3.30	ND	ND		1	WG1419175
2-Propanol	67-63-0	60.10	1.25	3.07	ND	ND		1	WG1419175
Propene	115-07-1	42.10	0.400	0.689	ND	ND		1	WG1419175
Styrene	100-42-5	104	0.200	0.851	ND	ND		1	WG1419175
1,1,2,2-Tetrachloroethane	79-34-5	168	0.200	1.37	ND	ND		1	WG1419175
Tetrachloroethylene	127-18-4	166	0.200	1.36	ND	ND		1	WG1419175
Tetrahydrofuran	109-99-9	72.10	0.200	0.590	ND	ND		1	WG1419175
Toluene	108-88-3	92.10	0.200	0.753	0.704	2.65	J	1	WG1419175
1,2,4-Trichlorobenzene	120-82-1	181	0.630	4.66	ND	ND		1	WG1419175

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Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
1,1,1-Trichloroethane	71-55-6	133	0.200	1.09	2.05	11.2	J	1	WG1419175
1,1,2-Trichloroethane	79-00-5	133	0.200	1.09	ND	ND		1	WG1419175
Trichloroethylene	79-01-6	131	0.200	1.07	ND	ND		1	WG1419175
1,2,4-Trimethylbenzene	95-63-6	120	0.200	0.982	ND	ND		1	WG1419175
1,3,5-Trimethylbenzene	108-67-8	120	0.200	0.982	ND	ND		1	WG1419175
2,2,4-Trimethylpentane	540-84-1	114.22	0.200	0.934	ND	ND		1	WG1419175
Vinyl chloride	75-01-4	62.50	0.200	0.511	ND	ND		1	WG1419175
Vinyl Bromide	593-60-2	106.95	0.200	0.875	ND	ND		1	WG1419175
Vinyl acetate	108-05-4	86.10	0.200	0.704	ND	ND		1	WG1419175
m&p-Xylene	1330-20-7	106	0.400	1.73	ND	ND		1	WG1419175
o-Xylene	95-47-6	106	0.200	0.867	ND	ND		1	WG1419175
(S) 1,4-Bromofluorobenzene	*460-00-4*	*175*	*60.0-140*		*101*				WG1419175

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

JC 2/19/2020

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
Acetone	67-64-1	58.10	1.25	2.97	1.86	4.42	J	1	WG1419175
Allyl chloride	107-05-1	76.53	0.200	0.626	ND	ND		1	WG1419175
Benzene	71-43-2	78.10	0.200	0.639	ND	ND		1	WG1419175
Benzyl Chloride	100-44-7	127	0.200	1.04	ND	ND		1	WG1419175
Bromodichloromethane	75-27-4	164	0.200	1.34	ND	ND		1	WG1419175
Bromoform	75-25-2	253	0.600	6.21	ND	ND		1	WG1419175
Bromomethane	74-83-9	94.90	0.200	0.776	ND	ND		1	WG1419175
1,3-Butadiene	106-99-0	54.10	2.00	4.43	ND	ND		1	WG1419175
Carbon disulfide	75-15-0	76.10	0.200	0.622	ND	ND		1	WG1419175
Carbon tetrachloride	56-23-5	154	0.200	1.26	ND	ND		1	WG1419175
Chlorobenzene	108-90-7	113	0.200	0.924	ND	ND		1	WG1419175
Chloroethane	75-00-3	64.50	0.200	0.528	ND	ND		1	WG1419175
Chloroform	67-66-3	119	0.200	0.973	ND	ND		1	WG1419175
Chloromethane	74-87-3	50.50	0.200	0.413	ND	ND	UJ	1	WG1419175
2-Chlorotoluene	95-49-8	126	0.200	1.03	ND	ND		1	WG1419175
Cyclohexane	110-82-7	84.20	0.200	0.689	ND	ND	UJ	1	WG1419175
Dibromochloromethane	124-48-1	208	0.200	1.70	ND	ND		1	WG1419175
1,2-Dibromoethane	106-93-4	188	0.200	1.54	ND	ND		1	WG1419175
1,2-Dichlorobenzene	95-50-1	147	0.200	1.20	ND	ND		1	WG1419175
1,3-Dichlorobenzene	541-73-1	147	0.200	1.20	ND	ND		1	WG1419175
1,4-Dichlorobenzene	106-46-7	147	0.200	1.20	ND	ND		1	WG1419175
1,2-Dichloroethane	107-06-2	99	0.200	0.810	ND	ND		1	WG1419175
1,1-Dichloroethane	75-34-3	98	0.200	0.802	0.448	1.80	J	1	WG1419175
1,1-Dichloroethene	75-35-4	96.90	0.200	0.793	ND	ND		1	WG1419175
cis-1,2-Dichloroethene	156-59-2	96.90	0.200	0.793	ND	ND		1	WG1419175
trans-1,2-Dichloroethene	156-60-5	96.90	0.200	0.793	ND	ND		1	WG1419175
1,2-Dichloropropane	78-87-5	113	0.200	0.924	ND	ND		1	WG1419175
cis-1,3-Dichloropropene	10061-01-5	111	0.200	0.908	ND	ND		1	WG1419175
trans-1,3-Dichloropropene	10061-02-6	111	0.200	0.908	ND	ND		1	WG1419175
1,4-Dioxane	123-91-1	88.10	0.200	0.721	ND	ND		1	WG1419175
Ethanol	64-17-5	46.10	0.630	1.19	2.28	4.30	J	1	WG1419175
Ethylbenzene	100-41-4	106	0.200	0.867	ND	ND		1	WG1419175
4-Ethyltoluene	622-96-8	120	0.200	0.982	ND	ND		1	WG1419175
Trichlorofluoromethane	75-69-4	137.40	0.200	1.12	ND	ND		1	WG1419175
Dichlorodifluoromethane	75-71-8	120.92	0.200	0.989	0.310	1.53		1	WG1419175
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	0.200	1.53	ND	ND		1	WG1419175
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.200	1.40	ND	ND		1	WG1419175
Heptane	142-82-5	100	0.200	0.818	ND	ND		1	WG1419175
Hexachloro-1,3-butadiene	87-68-3	261	0.630	6.73	ND	ND		1	WG1419175
n-Hexane	110-54-3	86.20	0.200	0.705	ND	ND	UJ	1	WG1419175
Isopropylbenzene	98-82-8	120.20	0.200	0.983	ND	ND		1	WG1419175
Methylene Chloride	75-09-2	84.90	0.200	0.694	ND	ND		1	WG1419175
Methyl Butyl Ketone	591-78-6	100	1.25	5.11	ND	ND		1	WG1419175
2-Butanone (MEK)	78-93-3	72.10	1.25	3.69	ND	ND		1	WG1419175
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	1.25	5.12	ND	ND		1	WG1419175
Methyl methacrylate	80-62-6	100.12	0.200	0.819	ND	ND		1	WG1419175
MTBE	1634-04-4	88.10	0.200	0.721	ND	ND		1	WG1419175
Naphthalene	91-20-3	128	0.630	3.30	ND	ND		1	WG1419175
2-Propanol	67-63-0	60.10	1.25	3.07	ND	ND		1	WG1419175
Propene	115-07-1	42.10	0.400	0.689	ND	ND		1	WG1419175
Styrene	100-42-5	104	0.200	0.851	ND	ND		1	WG1419175
1,1,2,2-Tetrachloroethane	79-34-5	168	0.200	1.37	ND	ND		1	WG1419175
Tetrachloroethylene	127-18-4	166	0.200	1.36	ND	ND		1	WG1419175
Tetrahydrofuran	109-99-9	72.10	0.200	0.590	ND	ND		1	WG1419175
Toluene	108-88-3	92.10	0.200	0.753	ND	ND	UJ	1	WG1419175
1,2,4-Trichlorobenzene	120-82-1	181	0.630	4.66	ND	ND		1	WG1419175

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Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
1,1,1-Trichloroethane	71-55-6	133	0.200	1.09	6.84	37.2	J	1	WG1419175
1,1,2-Trichloroethane	79-00-5	133	0.200	1.09	ND	ND		1	WG1419175
Trichloroethylene	79-01-6	131	0.200	1.07	ND	ND		1	WG1419175
1,2,4-Trimethylbenzene	95-63-6	120	0.200	0.982	ND	ND		1	WG1419175
1,3,5-Trimethylbenzene	108-67-8	120	0.200	0.982	ND	ND		1	WG1419175
2,2,4-Trimethylpentane	540-84-1	114.22	0.200	0.934	ND	ND		1	WG1419175
Vinyl chloride	75-01-4	62.50	0.200	0.511	ND	ND		1	WG1419175
Vinyl Bromide	593-60-2	106.95	0.200	0.875	ND	ND		1	WG1419175
Vinyl acetate	108-05-4	86.10	0.200	0.704	ND	ND		1	WG1419175
m&p-Xylene	1330-20-7	106	0.400	1.73	ND	ND		1	WG1419175
o-Xylene	95-47-6	106	0.200	0.867	ND	ND		1	WG1419175
(S) 1,4-Bromofluorobenzene	*460-00-4*	*175*	*60.0-140*		*101*				WG1419175

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MEMORANDUM

TO: Project File **DATE:** April 20, 2020

FROM: Jessie Compeau

SUBJECT: Laboratory Data Validation Review

PROJECT: American Linen Data Validation

PROJECT #: 1413.001.05.202

TASK: EIM Data Validation Level EPA2A for March 2020 Soil Boring Samples/Interim Action 2020

LAB: Pace Analytical (Pace) Sample Delivery Groups: L1200814 and L1200909

Thirty-seven (37) soil samples including two field duplicates, and two trip blank samples were collected as an individual event within the Interim Action effort at the Former American Linen Supply Site, in Seattle, Washington on March 17 and 18, 2020. The samples were delivered to Pace Analytical (Pace) of Mount Juliet, Tennessee for laboratory analysis. Selected samples were analyzed for the following parameters:

- Volatile organic compounds (VOCs) by United States Environmental Protection Agency (USEPA) Method 8260D;
- Total petroleum hydrocarbons as gasoline (TPH-Gx) by NWTPH-Gx and TPH as diesel and heavy oil (TPH-Dx) by NWTPH-Dx per analytical methods stipulated by Washington State Department of Ecology; and
- Total Solids by USEPA Method 2540 G-2011.

The quality assurance review of the laboratory data associated with SDGs L1200814 and L1200909 are summarized below.

DATA QUALIFICATIONS

Guidelines established by USEPA for review of analytical data were used to validate the data. The comments presented in this memorandum refer to the laboratory's performance in meeting the quality control criteria outlined in the USEPA Contract Laboratory Program National Functional Guidelines for Organic Superfund Methods Data Review (USEPA, 2017). Following Guidelines, non-project-specific laboratory duplicates and matrix spike results were not evaluated as part of this data validation.

DATA VALIDATION

Sample Receipt, Preservation and Handling

The samples were delivered to the project laboratory in coolers under standard chain-of-custody protocols. Review of Pace's notes on the chain of custody form indicates that all samples were received in good condition below the recommended preservation temperature 6.0°C. No data qualifications were assigned due to sample receipt or temperature preservation issues.

Holding Times

USEPA Method 8260D:
All samples were analyzed for VOCs within the USEPA recommended holding time of fourteen days for soils (preserved waters) from the date of sample collection. All holding time criteria were met.

NWTPH-Gx Method:
All samples were analyzed for gasoline within the WA State recommended holding time of fourteen days for soils (preserved waters) from the date of sample collection.

NWTPH-Dx Method:
All samples were extracted within the WA State recommended holding time of fourteen days for soils from the date of sample collection to extraction. All samples were analyzed within forty days from the date of extraction. All holding time criteria were met.

Total Solids by USEPA Method 2540 G-2011:
Samples were analyzed within the USEPA recommended holding time of seven days for total solids.

Initial and Continuing Calibration

USEPA Method 8260D (VOCs):
Initial and continuing calibration data for this project are retained by the laboratory and available for review if necessary. Pace indicated within the laboratory report that continuing calibration verification (CCV) criteria for were not met for the following:

- SDGs L1200814 and L1200909: CCV compounds outside of criteria are qualified by the laboratory (J0). **The associated sample results with laboratory qualifiers (J0) are estimated (UJ/J) as the associated CCV recoveries are outside of laboratory control limits.**

Method Blank Results

USEPA Method 8260D:
Laboratory method blanks are included with the analytical batches per method requirement. The target analytes are not detected in the method blanks at or above the method reporting limits (RDLs) with the following exceptions:

- SDG L1200814 - Analytical batch WG1447912: Low levels of chloroform, 2-butanone (MEK), and naphthalene are detected in the method blank. **Chloroform, 2-butanone (MEK), and/or naphthalene detections in samples below the RDL and are qualified as not detected (U) as follows:**
    - **Chloroform results for samples B-277-1, B-277-3, B-277-5, B-277-11, B-278-3, B-278-6, B-279-3, B-279-5, and B-281-2 are below the RDL and qualified as not detected (U).** No action is required for sample B-277-9.5 since the detection is slightly above the RDL**.**
    - **2-Butanone (MEK) results for samples B-277-1, B-277-5, B-277-11, B-278-6, B-279-3, B-279-5, B-279-10, B-280-6, B-281-2, B-281-5, and B-282-2 are below the RDL and qualified as not detected (U).** No action is required for samples B-277-3, B-277-9.5, and B-280-4.5 since the detections are slightly above the RDL**.**
    - **Naphthalene results for samples B-277-1, B-277-3, B-277-9.5, B-278-3, B-279-3, B-281-2, B-281-5, and B-282-2 are below the RDL and qualified as not detected (U).**
- SDG L1200814 - Analytical batch WG1447922: A low level of 2-butanone (MEK) is detected in the method blank. **2-Butanone (MEK) detection in sample B-282-4 is below the RDL and qualified as not detected (U).**
- SDG L1200909 - Analytical batch WG1447922: A low level of 2-butanone (MEK) is detected in the method blank. **2-Butanone (MEK) detections in sample B-272-6, B-273-3, and B-274-3 are below the RDL and qualified as not detected (U).** 2-Butanone (MEK) detection in samples B-271-1, B-275-6, and B-275-9 are slightly greater than the RDL and no action is taken on this basis.
- SDG L1200909 - Analytical batch WG1448125: A low level of 2-butanone (MEK) is detected in the method blank. 2-Butanone (MEK) detection in sample B-276-11 is slightly greater than the RDL and no action is taken on this basis.

NWTPH-Gx Method:
Laboratory method blank was included with the analytical batch per method requirement. The target analyte (gasoline) is not detected in the method blank at or above the RDL with the following exception:

- SDG L1200814: Gasoline was detected at a low level in the method blank and in the associated trip blank. **A low level of gasoline is detected in the associated samples B-277-9.5 and B-277-11 and are qualified as not detected (U) due to method or trip blank contamination.**

NWTPH-Dx Method:
Laboratory method blank was included with the analytical batch per method requirement. The

target analytes (diesel and heavy oil) were not detected in the method blank at or above the RDLs.

Total Solids by SM 2540 G 2011:
Laboratory method blanks were included with the analytical batches per method requirement. The target analytes (% solids) were not detected at a significant level in the method blanks and sample results are not impacted.

Trip Blank Results

USEPA Method 8260D and NWTPH-Gx
Two trip blanks (TB-031720 and TB-031820) were collected and submitted for analysis. The target analytes were not detected in the trip blanks at or above the RDLs with the following exceptions:

- SDG L1200814: Low levels of gasoline and acetone are detected in the trip blank (TB-031820). **A low level of gasoline is detected in the associated samples (B-277-9.5 and B-277-11) and are qualified as not detected (U) due to method or trip blank contamination.** Acetone was not detected in the associated samples. No further action is required.

- SDG L1200909: A low level of acetone was detected in the trip blank (TB-031720). No action is required since associated sample acetone results were either non-detects or, in one case, is detected slightly above the RDL.

Field, Rinsate, or Equipment Blank Results

Field, rinsate or equipment blanks were not collected.

Field Duplicate Analyses

Field duplicate pairs were submitted and analyzed. Field duplicate sample pairs are as follows:

- SDG L1200814: Samples B-282-4 and B-971-5
- SDG L1200909: Samples B-276-7 and B-970-6

Target analyte results are comparable and within a relative percent difference (RPD) of 30% (or ± <2X RDL) for the field duplicate pairs.

Laboratory Duplicate Analyses

USEPA Method 8260D:
Laboratory duplicate samples were not analyzed. Refer to laboratory control sample/sample duplicate (LCS/LCSD) or matrix spike/matrix spike duplicate (MS/MSD) results for precision data.

NWTPH-Gx Method:

Laboratory duplicate samples were not analyzed. Refer to LCS/LCSD or MS/MSD results for precision data. In one case, only LCS data are available (SDGs L1200814). Refer to field duplicate data for precision data.

NWTPH-Dx Method:
Laboratory duplicate samples were not analyzed. Refer to MS/MSD results for precision data. The RPDs for diesel and heavy oil are within the laboratory control limits of 30% RPD.

Moisture by Method 2540 G-2011:
Laboratory duplicate samples were performed on client and non-client samples associated with the analytical batches. The RPDs for percent moisture are within the laboratory control limit of 20% RPD.

Surrogate Recoveries

USEPA Method 8260D:
The surrogate recovery results for the samples, laboratory control samples, matrix spike samples, and the method blanks are within the laboratory surrogate control limits for all the analyses.

NWTPH-Gx Method:
The surrogate recovery results for the samples, laboratory control samples, matrix spike samples, and the blanks are within the laboratory surrogate control limits.

NWTPH-Dx Method:
The surrogate recovery results for the samples, laboratory control samples, matrix spike samples, and method blanks are within the laboratory surrogate control limits.

Matrix Spike/ Matrix Spike Duplicates

USEPA Method 8260D:
Matrix spike/matrix spike duplicate (MS/MSD) analyses were performed on non-client samples. The MS/MSD percent recoveries (%R’s) and RPDs for the all target compounds are within the laboratory control criteria for soil with the following exceptions:

- SDG L1200814: MS/MSD (analytical batch WG1447912) was performed on a non-client sample within the analytical batch. Recovery for two targets are laboratory qualified (J5) to indicate matrix interference. No action is taken since the spike was performed on a non-client sample. Refer to LCS/LCSD results for accuracy and precision data.

- SDG L1200909: MS/MSD (analytical batch WG1448125) was performed on a non-client sample within the analytical batch. Two target analyte RPDs were recovered above lab criteria and laboratory qualified (J3). Review indicates that MS/MSD recoveries are within but are recovered wide. No action is taken in this case. Refer to LCS/LCSD results for precision data.

NWTPH-Gx Method:

MS/MSD analyses were performed on two client samples within the analytical batches. MS/MSD % Rs and RPDs are acceptable and within laboratory control limit criteria.

NWTPH-Dx Method:
MS/MSD analyses were performed on a non-client sample within the analytical batch. MS/MSD % Rs and RPD are acceptable and within laboratory control limit criteria

Laboratory Control Samples

USEPA Method 8260D:
Laboratory control sample/laboratory control sample duplicates (LCS/LCSD) were analyzed by USEPA Method 8260D. In some cases, only an LCS was analyzed. Refer to matrix spike duplicate or field duplicate results in these cases. The LCS or LCS/LCSD %R's and RPDs for the target compounds are within the laboratory control criteria for soils with the following exceptions:

- SDG L1200814: LCSD (analytical batch WG1447922) recovery for acetone is laboratory qualified (J3) to indicate an elevated RPD exceeding laboratory criteria. No action is taken since the spike recoveries are within acceptance criteria but are recovered wide. LCSD recovery for bromochloromethane is 76.5% and laboratory qualified (J4) because the recovery is slightly below acceptance criteria of 77.0-128%. No action is taken since the LCS is within criteria and LCSD recovery is marginally outside of criteria.

NWTPH-Gx Method:
LCS or LCS/LCSDs were analyzed by the NWTPH-Gx method along with the analytical batch. The LCS or LCS/LCSD %Rs and RPDs for the all target compounds are within the laboratory control criteria.

NWTPH-Dx Method:
LCS or LCS/LCSD were analyzed by the NWTPH-Dx method along with the analytical batch. The LCS or LCS/LCSD %Rs and RPD for the target compound is within the laboratory control criteria

Other Quality Control Issues

No laboratory quality control issues were identified in the laboratory reports with the following discussion:

- Electronic data deliverables (EDDs) for these SDGs were provided by the laboratory and data validator qualifiers were entered, as appropriate, into the EDDs.

Quantitation Limits

Results of all analyses were reported based on standard laboratory RDLs. The reported RDLs are considered appropriate for this project. RDLs in some all cases are raised for method-required dilutions. No data qualifiers were warranted based upon standard detection limits.

Compound Identification

Gasoline and gasoline range organics are analyzed for via Volatile Organic Compounds (GC) by Washington State Method NWTPHGx (using a gas chromatograph/flame ionization detector (GC/FID)) and Pace reported gasoline range organic-NWTPH results. Several chlorinated VOC compounds (including cis-1,2-dichloroethene, trans-1,2-dichloroethene, trichloroethene, and tetrachloroethene) elute within the gasoline range organics (GRO) retention time range as specified by Washington State (detections falling between the toluene and dodecane range).

Non-petroleum organics (e.g. chlorinated VOC compounds) eluting within the gasoline range contribute to the GRO result and GRO results are likely biased high (J+). PES requested that Pace evaluate chromatograms associated with positive sample detections to confirm the potential presence of gasoline. Per PES's request Pace reviewed selected sample chromatograms against the gasoline standard chromatograms and assigned "no discernible petroleum pattern" or "chromatogram pattern most closely resembles diesel fuel" to GRO results associated with this Task. PES assigned an additional project level qualifier (Z) to GRO results when the chromatogram for the sample does not match a discernible petroleum pattern. Associated chromatograms and qualified samples for this Task are as follows:

Sample ID	Laboratory Identification	Gasoline Range Organic Result (mg/Kg)	DV Qualifier	Data Validation Comments	Pace Chromatogram Review Notes
B-270-2	L1200909-03	82.5	Z,J+	Refer to diesel results.	Chromatographic pattern most closely resembles diesel fuel.
B-273-6	L1200909-09	10.7	Z, J+	Low levels of chlorinated VOCs detected within the GRO elution range	No discernible petroleum pattern
B-274-6	L1200909-12	10.7	Z, J+	Low levels of chlorinated VOCs detected within the GRO elution range	No discernible petroleum pattern

Completeness

The samples were collected and analyzed as requested. Data completeness is 100%.

Data Assessment

The laboratory data reported for this project were reviewed based on laboratory control limit acceptance criteria and criteria outlined in:

- USEPA Contract Laboratory Program National Functional Guidelines for Organic Superfund Methods Data Review (USEPA, 2017)

Data qualifiers are assigned and laboratory report pages with qualifiers are attached. All data, including qualified data, are judged to be acceptable for their intended use.

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	79.3		1	03/22/2020 03:01	WG1447722

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	U		1.07	3.15	25	03/20/2020 23:12	WG1447769
(S) a,a,a-Trifluorotoluene(FID)	*99.3*			*77.0-120*		*03/20/2020 23:12*	WG1447769

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

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	U		0.0173	0.0315	1	03/21/2020 09:44	WG1447912
Acrylonitrile	U		0.00239	0.0158	1	03/21/2020 09:44	WG1447912
Benzene	U		0.000504	0.00126	1	03/21/2020 09:44	WG1447912
Bromobenzene	U		0.00132	0.0158	1	03/21/2020 09:44	WG1447912
Bromodichloromethane	U		0.000993	0.00315	1	03/21/2020 09:44	WG1447912
Bromochloromethane	U		0.00142	0.00630	1	03/21/2020 09:44	WG1447912
Bromoform	U		0.00754	0.0315	1	03/21/2020 09:44	WG1447912
Bromomethane	U		0.00466	0.0158	1	03/21/2020 09:44	WG1447912
n-Butylbenzene	U		0.00484	0.0158	1	03/21/2020 09:44	WG1447912
sec-Butylbenzene	U		0.00319	0.0158	1	03/21/2020 09:44	WG1447912
tert-Butylbenzene	U		0.00195	0.00630	1	03/21/2020 09:44	WG1447912
Carbon disulfide	U		0.00512	0.0158	1	03/21/2020 09:44	WG1447912
Carbon tetrachloride	U		0.00136	0.00630	1	03/21/2020 09:44	WG1447912
Chlorobenzene	U		0.000722	0.00315	1	03/21/2020 09:44	WG1447912
Chlorodibromomethane	U		0.000567	0.00315	1	03/21/2020 09:44	WG1447912
Chloroethane	U		0.00136	0.00630	1	03/21/2020 09:44	WG1447912
Chloroform	0.000971 U	~~B J~~	0.000523	0.00315	1	03/21/2020 09:44	WG1447912
Chloromethane	U UJ	J0	0.00175	0.0158	1	03/21/2020 09:44	WG1447912
2-Chlorotoluene	U		0.00116	0.00315	1	03/21/2020 09:44	WG1447912
4-Chlorotoluene	U		0.00142	0.00630	1	03/21/2020 09:44	WG1447912
1,2-Dibromo-3-Chloropropane	U		0.00643	0.0315	1	03/21/2020 09:44	WG1447912
1,2-Dibromoethane	U		0.000662	0.00315	1	03/21/2020 09:44	WG1447912
Dibromomethane	U		0.00126	0.00630	1	03/21/2020 09:44	WG1447912
1,2-Dichlorobenzene	U		0.00183	0.00630	1	03/21/2020 09:44	WG1447912
1,3-Dichlorobenzene	U		0.00214	0.00630	1	03/21/2020 09:44	WG1447912
1,4-Dichlorobenzene	U		0.00248	0.00630	1	03/21/2020 09:44	WG1447912
Dichlorodifluoromethane	U		0.00103	0.00315	1	03/21/2020 09:44	WG1447912
1,1-Dichloroethane	U		0.000725	0.00315	1	03/21/2020 09:44	WG1447912
1,2-Dichloroethane	U		0.000599	0.00315	1	03/21/2020 09:44	WG1447912
1,1-Dichloroethene	U		0.000630	0.00315	1	03/21/2020 09:44	WG1447912
cis-1,2-Dichloroethene	U		0.000870	0.00315	1	03/21/2020 09:44	WG1447912
trans-1,2-Dichloroethene	U		0.00180	0.00630	1	03/21/2020 09:44	WG1447912
1,2-Dichloropropane	U		0.00160	0.00630	1	03/21/2020 09:44	WG1447912
1,1-Dichloropropene	U		0.000882	0.00315	1	03/21/2020 09:44	WG1447912
1,3-Dichloropropane	U		0.00221	0.00630	1	03/21/2020 09:44	WG1447912
cis-1,3-Dichloropropene	U		0.000855	0.00315	1	03/21/2020 09:44	WG1447912
trans-1,3-Dichloropropene	U		0.00193	0.00630	1	03/21/2020 09:44	WG1447912
trans-1,4-Dichloro-2-butene	U		0.00176	0.00630	1	03/21/2020 09:44	WG1447912
2,2-Dichloropropane	U		0.00100	0.00315	1	03/21/2020 09:44	WG1447912
Di-isopropyl ether	U		0.000441	0.00126	1	03/21/2020 09:44	WG1447912
Ethylbenzene	U		0.000668	0.00315	1	03/21/2020 09:44	WG1447912
Hexachloro-1,3-butadiene	U		0.0160	0.0315	1	03/21/2020 09:44	WG1447912
2-Hexanone	U		0.0126	0.0315	1	03/21/2020 09:44	WG1447912
n-Hexane	U		0.00134	0.00630	1	03/21/2020 09:44	WG1447912

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

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

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Iodomethane	U		0.00763	0.0158	1	03/21/2020 09:44	WG1447912
Isopropylbenzene	U		0.00109	0.00315	1	03/21/2020 09:44	WG1447912
p-Isopropyltoluene	U		0.00294	0.00630	1	03/21/2020 09:44	WG1447912
2-Butanone (MEK)	0.0193	UJ ~~B J~~	0.0158	0.0315	1	03/21/2020 09:44	WG1447912
Methylene Chloride	U		0.00837	0.0315	1	03/21/2020 09:44	WG1447912
4-Methyl-2-pentanone (MIBK)	U		0.0126	0.0315	1	03/21/2020 09:44	WG1447912
Methyl tert-butyl ether	U		0.000372	0.00126	1	03/21/2020 09:44	WG1447912
Naphthalene	0.00421	UJ ~~B J~~	0.00393	0.0158	1	03/21/2020 09:44	WG1447912
n-Propylbenzene	U		0.00149	0.00630	1	03/21/2020 09:44	WG1447912
Styrene	U		0.00344	0.0158	1	03/21/2020 09:44	WG1447912
1,1,1,2-Tetrachloroethane	U		0.000630	0.00315	1	03/21/2020 09:44	WG1447912
1,1,2,2-Tetrachloroethane	U		0.000492	0.00315	1	03/21/2020 09:44	WG1447912
1,1,2-Trichlorotrifluoroethane	U		0.000851	0.00315	1	03/21/2020 09:44	WG1447912
Tetrachloroethene	0.00434		0.000882	0.00315	1	03/21/2020 09:44	WG1447912
Toluene	U		0.00158	0.00630	1	03/21/2020 09:44	WG1447912
1,2,3-Trichlorobenzene	U		0.000788	0.0158	1	03/21/2020 09:44	WG1447912
1,2,4-Trichlorobenzene	U		0.00608	0.0158	1	03/21/2020 09:44	WG1447912
1,1,1-Trichloroethane	U		0.000347	0.00315	1	03/21/2020 09:44	WG1447912
1,1,2-Trichloroethane	U		0.00111	0.00315	1	03/21/2020 09:44	WG1447912
Trichloroethene	U		0.000504	0.00126	1	03/21/2020 09:44	WG1447912
Trichlorofluoromethane	U		0.000630	0.00315	1	03/21/2020 09:44	WG1447912
1,2,3-Trichloropropane	U		0.00643	0.0158	1	03/21/2020 09:44	WG1447912
1,2,4-Trimethylbenzene	U		0.00146	0.00630	1	03/21/2020 09:44	WG1447912
1,2,3-Trimethylbenzene	U		0.00145	0.00630	1	03/21/2020 09:44	WG1447912
1,3,5-Trimethylbenzene	U		0.00136	0.00630	1	03/21/2020 09:44	WG1447912
Vinyl acetate	U	UJ J0	0.00444	0.0158	1	03/21/2020 09:44	WG1447912
Vinyl chloride	U		0.000861	0.00315	1	03/21/2020 09:44	WG1447912
Xylenes, Total	U		0.00602	0.00819	1	03/21/2020 09:44	WG1447912
(S) Toluene-d8	*106*			*75.0-131*		*03/21/2020 09:44*	WG1447912
(S) 4-Bromofluorobenzene	*102*			*67.0-138*		*03/21/2020 09:44*	WG1447912
(S) 1,2-Dichloroethane-d4	*97.5*			*70.0-130*		*03/21/2020 09:44*	WG1447912

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Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	91.0		1	03/22/2020 03:01	WG1447722

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	U		0.932	2.75	25	03/20/2020 23:35	WG1447769
(S) a,a,a-Trifluorotoluene(FID)	*97.2*			*77.0-120*		*03/20/2020 23:35*	WG1447769

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

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	U		0.0151	0.0275	1	03/21/2020 10:03	WG1447912
Acrylonitrile	U		0.00209	0.0137	1	03/21/2020 10:03	WG1447912
Benzene	U		0.000440	0.00110	1	03/21/2020 10:03	WG1447912
Bromobenzene	U		0.00115	0.0137	1	03/21/2020 10:03	WG1447912
Bromodichloromethane	U		0.000866	0.00275	1	03/21/2020 10:03	WG1447912
Bromochloromethane	U		0.00124	0.00549	1	03/21/2020 10:03	WG1447912
Bromoform	U		0.00657	0.0275	1	03/21/2020 10:03	WG1447912
Bromomethane	U		0.00407	0.0137	1	03/21/2020 10:03	WG1447912
n-Butylbenzene	U		0.00422	0.0137	1	03/21/2020 10:03	WG1447912
sec-Butylbenzene	U		0.00278	0.0137	1	03/21/2020 10:03	WG1447912
tert-Butylbenzene	U		0.00170	0.00549	1	03/21/2020 10:03	WG1447912
Carbon disulfide	U		0.00446	0.0137	1	03/21/2020 10:03	WG1447912
Carbon tetrachloride	U		0.00119	0.00549	1	03/21/2020 10:03	WG1447912
Chlorobenzene	U		0.000630	0.00275	1	03/21/2020 10:03	WG1447912
Chlorodibromomethane	U		0.000495	0.00275	1	03/21/2020 10:03	WG1447912
Chloroethane	U		0.00119	0.00549	1	03/21/2020 10:03	WG1447912
Chloroform	0.00107	U ~~B J~~	0.000456	0.00275	1	03/21/2020 10:03	WG1447912
Chloromethane	U	UJ J0	0.00153	0.0137	1	03/21/2020 10:03	WG1447912
2-Chlorotoluene	U		0.00101	0.00275	1	03/21/2020 10:03	WG1447912
4-Chlorotoluene	U		0.00124	0.00549	1	03/21/2020 10:03	WG1447912
1,2-Dibromo-3-Chloropropane	U		0.00560	0.0275	1	03/21/2020 10:03	WG1447912
1,2-Dibromoethane	U		0.000577	0.00275	1	03/21/2020 10:03	WG1447912
Dibromomethane	U		0.00110	0.00549	1	03/21/2020 10:03	WG1447912
1,2-Dichlorobenzene	U		0.00159	0.00549	1	03/21/2020 10:03	WG1447912
1,3-Dichlorobenzene	U		0.00187	0.00549	1	03/21/2020 10:03	WG1447912
1,4-Dichlorobenzene	U		0.00216	0.00549	1	03/21/2020 10:03	WG1447912
Dichlorodifluoromethane	U		0.000899	0.00275	1	03/21/2020 10:03	WG1447912
1,1-Dichloroethane	U		0.000632	0.00275	1	03/21/2020 10:03	WG1447912
1,2-Dichloroethane	U		0.000522	0.00275	1	03/21/2020 10:03	WG1447912
1,1-Dichloroethene	U		0.000549	0.00275	1	03/21/2020 10:03	WG1447912
cis-1,2-Dichloroethene	U		0.000758	0.00275	1	03/21/2020 10:03	WG1447912
trans-1,2-Dichloroethene	U		0.00157	0.00549	1	03/21/2020 10:03	WG1447912
1,2-Dichloropropane	U		0.00140	0.00549	1	03/21/2020 10:03	WG1447912
1,1-Dichloropropene	U		0.000769	0.00275	1	03/21/2020 10:03	WG1447912
1,3-Dichloropropane	U		0.00192	0.00549	1	03/21/2020 10:03	WG1447912
cis-1,3-Dichloropropene	U		0.000745	0.00275	1	03/21/2020 10:03	WG1447912
trans-1,3-Dichloropropene	U		0.00168	0.00549	1	03/21/2020 10:03	WG1447912
trans-1,4-Dichloro-2-butene	U		0.00154	0.00549	1	03/21/2020 10:03	WG1447912
2,2-Dichloropropane	U		0.000871	0.00275	1	03/21/2020 10:03	WG1447912
Di-isopropyl ether	U		0.000385	0.00110	1	03/21/2020 10:03	WG1447912
Ethylbenzene	U		0.000582	0.00275	1	03/21/2020 10:03	WG1447912
Hexachloro-1,3-butadiene	U		0.0140	0.0275	1	03/21/2020 10:03	WG1447912
2-Hexanone	U		0.0110	0.0275	1	03/21/2020 10:03	WG1447912
n-Hexane	U		0.00116	0.00549	1	03/21/2020 10:03	WG1447912

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

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Iodomethane	U		0.00665	0.0137	1	03/21/2020 10:03	WG1447912
Isopropylbenzene	U		0.000948	0.00275	1	03/21/2020 10:03	WG1447912
p-Isopropyltoluene	U		0.00256	0.00549	1	03/21/2020 10:03	WG1447912
2-Butanone (MEK)	0.0277	~~B~~	0.0137	0.0275	1	03/21/2020 10:03	WG1447912
Methylene Chloride	U		0.00730	0.0275	1	03/21/2020 10:03	WG1447912
4-Methyl-2-pentanone (MIBK)	U		0.0110	0.0275	1	03/21/2020 10:03	WG1447912
Methyl tert-butyl ether	U		0.000324	0.00110	1	03/21/2020 10:03	WG1447912
Naphthalene	0.00373	U ~~B J~~	0.00343	0.0137	1	03/21/2020 10:03	WG1447912
n-Propylbenzene	U		0.00130	0.00549	1	03/21/2020 10:03	WG1447912
Styrene	U		0.00300	0.0137	1	03/21/2020 10:03	WG1447912
1,1,1,2-Tetrachloroethane	U		0.000549	0.00275	1	03/21/2020 10:03	WG1447912
1,1,2,2-Tetrachloroethane	U		0.000429	0.00275	1	03/21/2020 10:03	WG1447912
1,1,2-Trichlorotrifluoroethane	U		0.000742	0.00275	1	03/21/2020 10:03	WG1447912
Tetrachloroethene	0.00327		0.000769	0.00275	1	03/21/2020 10:03	WG1447912
Toluene	U		0.00137	0.00549	1	03/21/2020 10:03	WG1447912
1,2,3-Trichlorobenzene	U		0.000687	0.0137	1	03/21/2020 10:03	WG1447912
1,2,4-Trichlorobenzene	U		0.00530	0.0137	1	03/21/2020 10:03	WG1447912
1,1,1-Trichloroethane	U		0.000302	0.00275	1	03/21/2020 10:03	WG1447912
1,1,2-Trichloroethane	U		0.000970	0.00275	1	03/21/2020 10:03	WG1447912
Trichloroethene	U		0.000440	0.00110	1	03/21/2020 10:03	WG1447912
Trichlorofluoromethane	U		0.000549	0.00275	1	03/21/2020 10:03	WG1447912
1,2,3-Trichloropropane	U		0.00560	0.0137	1	03/21/2020 10:03	WG1447912
1,2,4-Trimethylbenzene	U		0.00127	0.00549	1	03/21/2020 10:03	WG1447912
1,2,3-Trimethylbenzene	U		0.00126	0.00549	1	03/21/2020 10:03	WG1447912
1,3,5-Trimethylbenzene	U		0.00119	0.00549	1	03/21/2020 10:03	WG1447912
Vinyl acetate	U	UJ J0	0.00387	0.0137	1	03/21/2020 10:03	WG1447912
Vinyl chloride	U		0.000751	0.00275	1	03/21/2020 10:03	WG1447912
Xylenes, Total	U		0.00525	0.00714	1	03/21/2020 10:03	WG1447912
(S) Toluene-d8	*106*			*75.0-131*		*03/21/2020 10:03*	WG1447912
(S) 4-Bromofluorobenzene	*98.1*			*67.0-138*		*03/21/2020 10:03*	WG1447912
(S) 1,2-Dichloroethane-d4	*97.4*			*70.0-130*		*03/21/2020 10:03*	WG1447912

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Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	60.5		1	03/22/2020 03:01	WG1447722

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	U		1.40	4.13	25	03/20/2020 23:59	WG1447769
(S) a,a,a-Trifluorotoluene(FID)	*98.8*			*77.0-120*		*03/20/2020 23:59*	WG1447769

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

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	U		0.0226	0.0413	1	03/21/2020 10:22	WG1447912
Acrylonitrile	U		0.00314	0.0206	1	03/21/2020 10:22	WG1447912
Benzene	U		0.000661	0.00165	1	03/21/2020 10:22	WG1447912
Bromobenzene	U		0.00173	0.0206	1	03/21/2020 10:22	WG1447912
Bromodichloromethane	U		0.00130	0.00413	1	03/21/2020 10:22	WG1447912
Bromochloromethane	U		0.00187	0.00826	1	03/21/2020 10:22	WG1447912
Bromoform	U		0.00988	0.0413	1	03/21/2020 10:22	WG1447912
Bromomethane	U		0.00611	0.0206	1	03/21/2020 10:22	WG1447912
n-Butylbenzene	U		0.00634	0.0206	1	03/21/2020 10:22	WG1447912
sec-Butylbenzene	U		0.00418	0.0206	1	03/21/2020 10:22	WG1447912
tert-Butylbenzene	U		0.00256	0.00826	1	03/21/2020 10:22	WG1447912
Carbon disulfide	U		0.00671	0.0206	1	03/21/2020 10:22	WG1447912
Carbon tetrachloride	U		0.00178	0.00826	1	03/21/2020 10:22	WG1447912
Chlorobenzene	U		0.000946	0.00413	1	03/21/2020 10:22	WG1447912
Chlorodibromomethane	U		0.000743	0.00413	1	03/21/2020 10:22	WG1447912
Chloroethane	U		0.00178	0.00826	1	03/21/2020 10:22	WG1447912
Chloroform	0.00107	U ~~B J~~	0.000685	0.00413	1	03/21/2020 10:22	WG1447912
Chloromethane	U	UJ J0	0.00230	0.0206	1	03/21/2020 10:22	WG1447912
2-Chlorotoluene	U		0.00152	0.00413	1	03/21/2020 10:22	WG1447912
4-Chlorotoluene	U		0.00187	0.00826	1	03/21/2020 10:22	WG1447912
1,2-Dibromo-3-Chloropropane	U		0.00842	0.0413	1	03/21/2020 10:22	WG1447912
1,2-Dibromoethane	U		0.000867	0.00413	1	03/21/2020 10:22	WG1447912
Dibromomethane	U		0.00165	0.00826	1	03/21/2020 10:22	WG1447912
1,2-Dichlorobenzene	U		0.00239	0.00826	1	03/21/2020 10:22	WG1447912
1,3-Dichlorobenzene	U		0.00281	0.00826	1	03/21/2020 10:22	WG1447912
1,4-Dichlorobenzene	U		0.00325	0.00826	1	03/21/2020 10:22	WG1447912
Dichlorodifluoromethane	U		0.00135	0.00413	1	03/21/2020 10:22	WG1447912
1,1-Dichloroethane	U		0.000950	0.00413	1	03/21/2020 10:22	WG1447912
1,2-Dichloroethane	U		0.000784	0.00413	1	03/21/2020 10:22	WG1447912
1,1-Dichloroethene	U		0.000826	0.00413	1	03/21/2020 10:22	WG1447912
cis-1,2-Dichloroethene	U		0.00114	0.00413	1	03/21/2020 10:22	WG1447912
trans-1,2-Dichloroethene	U		0.00236	0.00826	1	03/21/2020 10:22	WG1447912
1,2-Dichloropropane	U		0.00210	0.00826	1	03/21/2020 10:22	WG1447912
1,1-Dichloropropene	U		0.00116	0.00413	1	03/21/2020 10:22	WG1447912
1,3-Dichloropropane	U		0.00289	0.00826	1	03/21/2020 10:22	WG1447912
cis-1,3-Dichloropropene	U		0.00112	0.00413	1	03/21/2020 10:22	WG1447912
trans-1,3-Dichloropropene	U		0.00253	0.00826	1	03/21/2020 10:22	WG1447912
trans-1,4-Dichloro-2-butene	U		0.00231	0.00826	1	03/21/2020 10:22	WG1447912
2,2-Dichloropropane	U		0.00131	0.00413	1	03/21/2020 10:22	WG1447912
Di-isopropyl ether	U		0.000578	0.00165	1	03/21/2020 10:22	WG1447912
Ethylbenzene	U		0.000875	0.00413	1	03/21/2020 10:22	WG1447912
Hexachloro-1,3-butadiene	U		0.0210	0.0413	1	03/21/2020 10:22	WG1447912
2-Hexanone	U		0.0165	0.0413	1	03/21/2020 10:22	WG1447912
n-Hexane	U		0.00175	0.00826	1	03/21/2020 10:22	WG1447912

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

Analyte	Result (dry) mg/kg		Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Iodomethane	U			0.00999	0.0206	1	03/21/2020 10:22	WG1447912
Isopropylbenzene	U			0.00143	0.00413	1	03/21/2020 10:22	WG1447912
p-Isopropyltoluene	U			0.00385	0.00826	1	03/21/2020 10:22	WG1447912
2-Butanone (MEK)	0.0337	U	~~B J~~	0.0206	0.0413	1	03/21/2020 10:22	WG1447912
Methylene Chloride	U			0.0110	0.0413	1	03/21/2020 10:22	WG1447912
4-Methyl-2-pentanone (MIBK)	U			0.0165	0.0413	1	03/21/2020 10:22	WG1447912
Methyl tert-butyl ether	U			0.000487	0.00165	1	03/21/2020 10:22	WG1447912
Naphthalene	U			0.00515	0.0206	1	03/21/2020 10:22	WG1447912
n-Propylbenzene	U			0.00195	0.00826	1	03/21/2020 10:22	WG1447912
Styrene	U			0.00451	0.0206	1	03/21/2020 10:22	WG1447912
1,1,1,2-Tetrachloroethane	U			0.000826	0.00413	1	03/21/2020 10:22	WG1447912
1,1,2,2-Tetrachloroethane	U			0.000644	0.00413	1	03/21/2020 10:22	WG1447912
1,1,2-Trichlorotrifluoroethane	U			0.00111	0.00413	1	03/21/2020 10:22	WG1447912
Tetrachloroethene	0.00401	J	J	0.00116	0.00413	1	03/21/2020 10:22	WG1447912
Toluene	U			0.00206	0.00826	1	03/21/2020 10:22	WG1447912
1,2,3-Trichlorobenzene	U			0.00103	0.0206	1	03/21/2020 10:22	WG1447912
1,2,4-Trichlorobenzene	U			0.00796	0.0206	1	03/21/2020 10:22	WG1447912
1,1,1-Trichloroethane	U			0.000454	0.00413	1	03/21/2020 10:22	WG1447912
1,1,2-Trichloroethane	U			0.00146	0.00413	1	03/21/2020 10:22	WG1447912
Trichloroethene	U			0.000661	0.00165	1	03/21/2020 10:22	WG1447912
Trichlorofluoromethane	U			0.000826	0.00413	1	03/21/2020 10:22	WG1447912
1,2,3-Trichloropropane	U			0.00842	0.0206	1	03/21/2020 10:22	WG1447912
1,2,4-Trimethylbenzene	U			0.00192	0.00826	1	03/21/2020 10:22	WG1447912
1,2,3-Trimethylbenzene	U			0.00190	0.00826	1	03/21/2020 10:22	WG1447912
1,3,5-Trimethylbenzene	U			0.00178	0.00826	1	03/21/2020 10:22	WG1447912
Vinyl acetate	U	UJ	J0	0.00581	0.0206	1	03/21/2020 10:22	WG1447912
Vinyl chloride	U			0.00113	0.00413	1	03/21/2020 10:22	WG1447912
Xylenes, Total	U			0.00789	0.0107	1	03/21/2020 10:22	WG1447912
(S) Toluene-d8	*105*				*75.0-131*		*03/21/2020 10:22*	WG1447912
(S) 4-Bromofluorobenzene	*98.5*				*67.0-138*		*03/21/2020 10:22*	WG1447912
(S) 1,2-Dichloroethane-d4	*96.6*				*70.0-130*		*03/21/2020 10:22*	WG1447912

JC 4/20/2020

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	59.8		1	03/22/2020 03:01	WG1447722

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result (dry) mg/kg		Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	1.72	U	~~J~~	1.67	4.94	29.5	03/21/2020 00:23	WG1447769
(S) a,a,a-Trifluorotoluene(FID)	*98.7*				*77.0-120*		*03/21/2020 00:23*	WG1447769

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

Analyte	Result (dry) mg/kg		Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	U			0.0326	0.0594	1.42	03/21/2020 10:41	WG1447912
Acrylonitrile	U			0.00452	0.0298	1.42	03/21/2020 10:41	WG1447912
Benzene	0.00356			0.000951	0.00238	1.42	03/21/2020 10:41	WG1447912
Bromobenzene	U			0.00249	0.0298	1.42	03/21/2020 10:41	WG1447912
Bromodichloromethane	U			0.00187	0.00594	1.42	03/21/2020 10:41	WG1447912
Bromochloromethane	U			0.00268	0.0119	1.42	03/21/2020 10:41	WG1447912
Bromoform	U			0.0142	0.0594	1.42	03/21/2020 10:41	WG1447912
Bromomethane	U			0.00879	0.0298	1.42	03/21/2020 10:41	WG1447912
n-Butylbenzene	U			0.00912	0.0298	1.42	03/21/2020 10:41	WG1447912
sec-Butylbenzene	U			0.00601	0.0298	1.42	03/21/2020 10:41	WG1447912
tert-Butylbenzene	U			0.00368	0.0119	1.42	03/21/2020 10:41	WG1447912
Carbon disulfide	U			0.00966	0.0298	1.42	03/21/2020 10:41	WG1447912
Carbon tetrachloride	U			0.00256	0.0119	1.42	03/21/2020 10:41	WG1447912
Chlorobenzene	U			0.00136	0.00594	1.42	03/21/2020 10:41	WG1447912
Chlorodibromomethane	U			0.00107	0.00594	1.42	03/21/2020 10:41	WG1447912
Chloroethane	U			0.00256	0.0119	1.42	03/21/2020 10:41	WG1447912
Chloroform	0.0159		~~B~~	0.000986	0.00594	1.42	03/21/2020 10:41	WG1447912
Chloromethane	U	UJ	J0	0.00330	0.0298	1.42	03/21/2020 10:41	WG1447912
2-Chlorotoluene	U			0.00219	0.00594	1.42	03/21/2020 10:41	WG1447912
4-Chlorotoluene	U			0.00268	0.0119	1.42	03/21/2020 10:41	WG1447912
1,2-Dibromo-3-Chloropropane	U			0.0121	0.0594	1.42	03/21/2020 10:41	WG1447912
1,2-Dibromoethane	U			0.00125	0.00594	1.42	03/21/2020 10:41	WG1447912
Dibromomethane	U			0.00238	0.0119	1.42	03/21/2020 10:41	WG1447912
1,2-Dichlorobenzene	U			0.00345	0.0119	1.42	03/21/2020 10:41	WG1447912
1,3-Dichlorobenzene	U			0.00403	0.0119	1.42	03/21/2020 10:41	WG1447912
1,4-Dichlorobenzene	U			0.00469	0.0119	1.42	03/21/2020 10:41	WG1447912
Dichlorodifluoromethane	U			0.00194	0.00594	1.42	03/21/2020 10:41	WG1447912
1,1-Dichloroethane	U			0.00137	0.00594	1.42	03/21/2020 10:41	WG1447912
1,2-Dichloroethane	U			0.00113	0.00594	1.42	03/21/2020 10:41	WG1447912
1,1-Dichloroethene	U			0.00119	0.00594	1.42	03/21/2020 10:41	WG1447912
cis-1,2-Dichloroethene	0.192			0.00164	0.00594	1.42	03/21/2020 10:41	WG1447912
trans-1,2-Dichloroethene	0.0162			0.00340	0.0119	1.42	03/21/2020 10:41	WG1447912
1,2-Dichloropropane	U			0.00301	0.0119	1.42	03/21/2020 10:41	WG1447912
1,1-Dichloropropene	U			0.00166	0.00594	1.42	03/21/2020 10:41	WG1447912
1,3-Dichloropropane	U			0.00417	0.0119	1.42	03/21/2020 10:41	WG1447912
cis-1,3-Dichloropropene	U			0.00161	0.00594	1.42	03/21/2020 10:41	WG1447912
trans-1,3-Dichloropropene	U			0.00363	0.0119	1.42	03/21/2020 10:41	WG1447912
trans-1,4-Dichloro-2-butene	U			0.00333	0.0119	1.42	03/21/2020 10:41	WG1447912
2,2-Dichloropropane	U			0.00189	0.00594	1.42	03/21/2020 10:41	WG1447912
Di-isopropyl ether	U			0.000832	0.00238	1.42	03/21/2020 10:41	WG1447912
Ethylbenzene	0.00517	J	J	0.00126	0.00594	1.42	03/21/2020 10:41	WG1447912
Hexachloro-1,3-butadiene	U			0.0301	0.0594	1.42	03/21/2020 10:41	WG1447912
2-Hexanone	U			0.0238	0.0594	1.42	03/21/2020 10:41	WG1447912
n-Hexane	0.00760	J	J	0.00253	0.0119	1.42	03/21/2020 10:41	WG1447912

JC 4/20/2020

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

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

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Iodomethane	U		0.0144	0.0298	1.42	03/21/2020 10:41	WG1447912
Isopropylbenzene	U		0.00206	0.00594	1.42	03/21/2020 10:41	WG1447912
p-Isopropyltoluene	0.0331		0.00554	0.0119	1.42	03/21/2020 10:41	WG1447912
2-Butanone (MEK)	0.0656	~~B~~	0.0298	0.0594	1.42	03/21/2020 10:41	WG1447912
Methylene Chloride	U		0.0158	0.0594	1.42	03/21/2020 10:41	WG1447912
4-Methyl-2-pentanone (MIBK)	U		0.0238	0.0594	1.42	03/21/2020 10:41	WG1447912
Methyl tert-butyl ether	U		0.000701	0.00238	1.42	03/21/2020 10:41	WG1447912
Naphthalene	0.0109 U	~~B J~~	0.00741	0.0298	1.42	03/21/2020 10:41	WG1447912
n-Propylbenzene	U		0.00281	0.0119	1.42	03/21/2020 10:41	WG1447912
Styrene	U		0.00649	0.0298	1.42	03/21/2020 10:41	WG1447912
1,1,1,2-Tetrachloroethane	U		0.00119	0.00594	1.42	03/21/2020 10:41	WG1447912
1,1,2,2-Tetrachloroethane	U		0.000927	0.00594	1.42	03/21/2020 10:41	WG1447912
1,1,2-Trichlorotrifluoroethane	U		0.00160	0.00594	1.42	03/21/2020 10:41	WG1447912
Tetrachloroethene	2.44		0.00166	0.00594	1.42	03/21/2020 10:41	WG1447912
Toluene	0.0644		0.00298	0.0119	1.42	03/21/2020 10:41	WG1447912
1,2,3-Trichlorobenzene	U		0.00149	0.0298	1.42	03/21/2020 10:41	WG1447912
1,2,4-Trichlorobenzene	U		0.0114	0.0298	1.42	03/21/2020 10:41	WG1447912
1,1,1-Trichloroethane	U		0.000654	0.00594	1.42	03/21/2020 10:41	WG1447912
1,1,2-Trichloroethane	U		0.00209	0.00594	1.42	03/21/2020 10:41	WG1447912
Trichloroethene	0.969		0.000951	0.00238	1.42	03/21/2020 10:41	WG1447912
Trichlorofluoromethane	U		0.00119	0.00594	1.42	03/21/2020 10:41	WG1447912
1,2,3-Trichloropropane	U		0.0121	0.0298	1.42	03/21/2020 10:41	WG1447912
1,2,4-Trimethylbenzene	0.00790 J	J	0.00276	0.0119	1.42	03/21/2020 10:41	WG1447912
1,2,3-Trimethylbenzene	0.00874 J	J	0.00273	0.0119	1.42	03/21/2020 10:41	WG1447912
1,3,5-Trimethylbenzene	0.00291 J	J	0.00256	0.0119	1.42	03/21/2020 10:41	WG1447912
Vinyl acetate	U UJ	J0	0.00837	0.0298	1.42	03/21/2020 10:41	WG1447912
Vinyl chloride	U		0.00162	0.00594	1.42	03/21/2020 10:41	WG1447912
Xylenes, Total	0.0251		0.0114	0.0154	1.42	03/21/2020 10:41	WG1447912
(S) Toluene-d8	*106*			*75.0-131*		*03/21/2020 10:41*	WG1447912
(S) 4-Bromofluorobenzene	*99.1*			*67.0-138*		*03/21/2020 10:41*	WG1447912
(S) 1,2-Dichloroethane-d4	*98.5*			*70.0-130*		*03/21/2020 10:41*	WG1447912

JC 4/20/2020

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

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	92.7		1	03/22/2020 03:01	WG1447722

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	1.13	U ~~J~~	0.915	2.70	25	03/21/2020 00:47	WG1447769
(S) a,a,a-Trifluorotoluene(FID)	*98.2*			*77.0-120*		*03/21/2020 00:47*	WG1447769

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

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	U		0.0148	0.0270	1	03/21/2020 11:00	WG1447912
Acrylonitrile	U		0.00205	0.0135	1	03/21/2020 11:00	WG1447912
Benzene	U		0.000432	0.00108	1	03/21/2020 11:00	WG1447912
Bromobenzene	U		0.00113	0.0135	1	03/21/2020 11:00	WG1447912
Bromodichloromethane	U		0.000850	0.00270	1	03/21/2020 11:00	WG1447912
Bromochloromethane	U		0.00122	0.00540	1	03/21/2020 11:00	WG1447912
Bromoform	U		0.00645	0.0270	1	03/21/2020 11:00	WG1447912
Bromomethane	U		0.00399	0.0135	1	03/21/2020 11:00	WG1447912
n-Butylbenzene	U		0.00414	0.0135	1	03/21/2020 11:00	WG1447912
sec-Butylbenzene	U		0.00273	0.0135	1	03/21/2020 11:00	WG1447912
tert-Butylbenzene	U		0.00167	0.00540	1	03/21/2020 11:00	WG1447912
Carbon disulfide	U		0.00438	0.0135	1	03/21/2020 11:00	WG1447912
Carbon tetrachloride	U		0.00117	0.00540	1	03/21/2020 11:00	WG1447912
Chlorobenzene	U		0.000618	0.00270	1	03/21/2020 11:00	WG1447912
Chlorodibromomethane	U		0.000486	0.00270	1	03/21/2020 11:00	WG1447912
Chloroethane	U		0.00117	0.00540	1	03/21/2020 11:00	WG1447912
Chloroform	0.000690	U ~~B J~~	0.000448	0.00270	1	03/21/2020 11:00	WG1447912
Chloromethane	U	UJ J0	0.00150	0.0135	1	03/21/2020 11:00	WG1447912
2-Chlorotoluene	U		0.000993	0.00270	1	03/21/2020 11:00	WG1447912
4-Chlorotoluene	U		0.00122	0.00540	1	03/21/2020 11:00	WG1447912
1,2-Dibromo-3-Chloropropane	U		0.00550	0.0270	1	03/21/2020 11:00	WG1447912
1,2-Dibromoethane	U		0.000567	0.00270	1	03/21/2020 11:00	WG1447912
Dibromomethane	U		0.00108	0.00540	1	03/21/2020 11:00	WG1447912
1,2-Dichlorobenzene	U		0.00156	0.00540	1	03/21/2020 11:00	WG1447912
1,3-Dichlorobenzene	U		0.00183	0.00540	1	03/21/2020 11:00	WG1447912
1,4-Dichlorobenzene	U		0.00213	0.00540	1	03/21/2020 11:00	WG1447912
Dichlorodifluoromethane	U		0.000883	0.00270	1	03/21/2020 11:00	WG1447912
1,1-Dichloroethane	U		0.000620	0.00270	1	03/21/2020 11:00	WG1447912
1,2-Dichloroethane	U		0.000513	0.00270	1	03/21/2020 11:00	WG1447912
1,1-Dichloroethene	U		0.000540	0.00270	1	03/21/2020 11:00	WG1447912
cis-1,2-Dichloroethene	0.00615		0.000745	0.00270	1	03/21/2020 11:00	WG1447912
trans-1,2-Dichloroethene	U		0.00154	0.00540	1	03/21/2020 11:00	WG1447912
1,2-Dichloropropane	U		0.00137	0.00540	1	03/21/2020 11:00	WG1447912
1,1-Dichloropropene	U		0.000755	0.00270	1	03/21/2020 11:00	WG1447912
1,3-Dichloropropane	U		0.00189	0.00540	1	03/21/2020 11:00	WG1447912
cis-1,3-Dichloropropene	U		0.000732	0.00270	1	03/21/2020 11:00	WG1447912
trans-1,3-Dichloropropene	U		0.00165	0.00540	1	03/21/2020 11:00	WG1447912
trans-1,4-Dichloro-2-butene	U		0.00151	0.00540	1	03/21/2020 11:00	WG1447912
2,2-Dichloropropane	U		0.000856	0.00270	1	03/21/2020 11:00	WG1447912
Di-isopropyl ether	U		0.000378	0.00108	1	03/21/2020 11:00	WG1447912
Ethylbenzene	U		0.000572	0.00270	1	03/21/2020 11:00	WG1447912
Hexachloro-1,3-butadiene	U		0.0137	0.0270	1	03/21/2020 11:00	WG1447912
2-Hexanone	U		0.0108	0.0270	1	03/21/2020 11:00	WG1447912
n-Hexane	U		0.00114	0.00540	1	03/21/2020 11:00	WG1447912

JC 4/20/2020

B-277-11

SAMPLE RESULTS - 05

Collected date/time: 03/18/20 08:35

L1200814

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

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Iodomethane	U		0.00653	0.0135	1	03/21/2020 11:00	WG1447912
Isopropylbenzene	U		0.000931	0.00270	1	03/21/2020 11:00	WG1447912
p-Isopropyltoluene	U		0.00251	0.00540	1	03/21/2020 11:00	WG1447912
2-Butanone (MEK)	0.0259	U ~~B J~~	0.0135	0.0270	1	03/21/2020 11:00	WG1447912
Methylene Chloride	U		0.00717	0.0270	1	03/21/2020 11:00	WG1447912
4-Methyl-2-pentanone (MIBK)	U		0.0108	0.0270	1	03/21/2020 11:00	WG1447912
Methyl tert-butyl ether	U		0.000318	0.00108	1	03/21/2020 11:00	WG1447912
Naphthalene	U		0.00337	0.0135	1	03/21/2020 11:00	WG1447912
n-Propylbenzene	U		0.00127	0.00540	1	03/21/2020 11:00	WG1447912
Styrene	U		0.00295	0.0135	1	03/21/2020 11:00	WG1447912
1,1,1,2-Tetrachloroethane	U		0.000540	0.00270	1	03/21/2020 11:00	WG1447912
1,1,2,2-Tetrachloroethane	U		0.000421	0.00270	1	03/21/2020 11:00	WG1447912
1,1,2-Trichlorotrifluoroethane	U		0.000728	0.00270	1	03/21/2020 11:00	WG1447912
Tetrachloroethene	0.00190	J J	0.000755	0.00270	1	03/21/2020 11:00	WG1447912
Toluene	U		0.00135	0.00540	1	03/21/2020 11:00	WG1447912
1,2,3-Trichlorobenzene	U		0.000674	0.0135	1	03/21/2020 11:00	WG1447912
1,2,4-Trichlorobenzene	U		0.00520	0.0135	1	03/21/2020 11:00	WG1447912
1,1,1-Trichloroethane	U		0.000297	0.00270	1	03/21/2020 11:00	WG1447912
1,1,2-Trichloroethane	U		0.000953	0.00270	1	03/21/2020 11:00	WG1447912
Trichloroethene	0.000747	J J	0.000432	0.00108	1	03/21/2020 11:00	WG1447912
Trichlorofluoromethane	U		0.000540	0.00270	1	03/21/2020 11:00	WG1447912
1,2,3-Trichloropropane	U		0.00550	0.0135	1	03/21/2020 11:00	WG1447912
1,2,4-Trimethylbenzene	U		0.00125	0.00540	1	03/21/2020 11:00	WG1447912
1,2,3-Trimethylbenzene	U		0.00124	0.00540	1	03/21/2020 11:00	WG1447912
1,3,5-Trimethylbenzene	U		0.00117	0.00540	1	03/21/2020 11:00	WG1447912
Vinyl acetate	U	UJ J0	0.00380	0.0135	1	03/21/2020 11:00	WG1447912
Vinyl chloride	U		0.000737	0.00270	1	03/21/2020 11:00	WG1447912
Xylenes, Total	U		0.00516	0.00701	1	03/21/2020 11:00	WG1447912
(S) Toluene-d8	*107*			*75.0-131*		*03/21/2020 11:00*	WG1447912
(S) 4-Bromofluorobenzene	*100*			*67.0-138*		*03/21/2020 11:00*	WG1447912
(S) 1,2-Dichloroethane-d4	*95.8*			*70.0-130*		*03/21/2020 11:00*	WG1447912

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

JC 4/20/2020

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	89.6		1	03/21/2020 19:42	WG1447726

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	U		0.946	2.79	25	03/21/2020 01:11	WG1447769
(S) a,a,a-Trifluorotoluene(FID)	*99.3*			*77.0-120*		*03/21/2020 01:11*	WG1447769

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

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	U		0.0153	0.0279	1	03/21/2020 11:19	WG1447912
Acrylonitrile	U		0.00212	0.0140	1	03/21/2020 11:19	WG1447912
Benzene	U		0.000446	0.00112	1	03/21/2020 11:19	WG1447912
Bromobenzene	U		0.00117	0.0140	1	03/21/2020 11:19	WG1447912
Bromodichloromethane	U		0.000880	0.00279	1	03/21/2020 11:19	WG1447912
Bromochloromethane	U		0.00126	0.00558	1	03/21/2020 11:19	WG1447912
Bromoform	U		0.00667	0.0279	1	03/21/2020 11:19	WG1447912
Bromomethane	U		0.00413	0.0140	1	03/21/2020 11:19	WG1447912
n-Butylbenzene	U		0.00429	0.0140	1	03/21/2020 11:19	WG1447912
sec-Butylbenzene	U		0.00282	0.0140	1	03/21/2020 11:19	WG1447912
tert-Butylbenzene	U		0.00173	0.00558	1	03/21/2020 11:19	WG1447912
Carbon disulfide	U		0.00453	0.0140	1	03/21/2020 11:19	WG1447912
Carbon tetrachloride	U		0.00121	0.00558	1	03/21/2020 11:19	WG1447912
Chlorobenzene	U		0.000640	0.00279	1	03/21/2020 11:19	WG1447912
Chlorodibromomethane	U		0.000502	0.00279	1	03/21/2020 11:19	WG1447912
Chloroethane	U		0.00121	0.00558	1	03/21/2020 11:19	WG1447912
Chloroform	0.00107 U	~~B J~~	0.000463	0.00279	1	03/21/2020 11:19	WG1447912
Chloromethane	U UJ	J0	0.00155	0.0140	1	03/21/2020 11:19	WG1447912
2-Chlorotoluene	U		0.00103	0.00279	1	03/21/2020 11:19	WG1447912
4-Chlorotoluene	U		0.00126	0.00558	1	03/21/2020 11:19	WG1447912
1,2-Dibromo-3-Chloropropane	U		0.00569	0.0279	1	03/21/2020 11:19	WG1447912
1,2-Dibromoethane	U		0.000586	0.00279	1	03/21/2020 11:19	WG1447912
Dibromomethane	U		0.00112	0.00558	1	03/21/2020 11:19	WG1447912
1,2-Dichlorobenzene	U		0.00162	0.00558	1	03/21/2020 11:19	WG1447912
1,3-Dichlorobenzene	U		0.00190	0.00558	1	03/21/2020 11:19	WG1447912
1,4-Dichlorobenzene	U		0.00220	0.00558	1	03/21/2020 11:19	WG1447912
Dichlorodifluoromethane	U		0.000913	0.00279	1	03/21/2020 11:19	WG1447912
1,1-Dichloroethane	U		0.000642	0.00279	1	03/21/2020 11:19	WG1447912
1,2-Dichloroethane	U		0.000530	0.00279	1	03/21/2020 11:19	WG1447912
1,1-Dichloroethene	U		0.000558	0.00279	1	03/21/2020 11:19	WG1447912
cis-1,2-Dichloroethene	U		0.000770	0.00279	1	03/21/2020 11:19	WG1447912
trans-1,2-Dichloroethene	U		0.00160	0.00558	1	03/21/2020 11:19	WG1447912
1,2-Dichloropropane	U		0.00142	0.00558	1	03/21/2020 11:19	WG1447912
1,1-Dichloropropene	U		0.000781	0.00279	1	03/21/2020 11:19	WG1447912
1,3-Dichloropropane	U		0.00195	0.00558	1	03/21/2020 11:19	WG1447912
cis-1,3-Dichloropropene	U		0.000757	0.00279	1	03/21/2020 11:19	WG1447912
trans-1,3-Dichloropropene	U		0.00171	0.00558	1	03/21/2020 11:19	WG1447912
trans-1,4-Dichloro-2-butene	U		0.00156	0.00558	1	03/21/2020 11:19	WG1447912
2,2-Dichloropropane	U		0.000885	0.00279	1	03/21/2020 11:19	WG1447912
Di-isopropyl ether	U		0.000391	0.00112	1	03/21/2020 11:19	WG1447912
Ethylbenzene	U		0.000592	0.00279	1	03/21/2020 11:19	WG1447912
Hexachloro-1,3-butadiene	U		0.0142	0.0279	1	03/21/2020 11:19	WG1447912
2-Hexanone	U		0.0112	0.0279	1	03/21/2020 11:19	WG1447912
n-Hexane	U		0.00118	0.00558	1	03/21/2020 11:19	WG1447912

JC 4/20/2020

B-278-3

Collected date/time: 03/18/20 09:40

SAMPLE RESULTS - 06

L1200814

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

Analyte	Result (dry) mg/kg		Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Iodomethane	U			0.00675	0.0140	1	03/21/2020 11:19	WG1447912
Isopropylbenzene	U			0.000963	0.00279	1	03/21/2020 11:19	WG1447912
p-Isopropyltoluene	U			0.00260	0.00558	1	03/21/2020 11:19	WG1447912
2-Butanone (MEK)	U			0.0140	0.0279	1	03/21/2020 11:19	WG1447912
Methylene Chloride	U			0.00741	0.0279	1	03/21/2020 11:19	WG1447912
4-Methyl-2-pentanone (MIBK)	U			0.0112	0.0279	1	03/21/2020 11:19	WG1447912
Methyl tert-butyl ether	U			0.000329	0.00112	1	03/21/2020 11:19	WG1447912
Naphthalene	0.00358	U	~~B J~~	0.00348	0.0140	1	03/21/2020 11:19	WG1447912
n-Propylbenzene	U			0.00132	0.00558	1	03/21/2020 11:19	WG1447912
Styrene	U			0.00305	0.0140	1	03/21/2020 11:19	WG1447912
1,1,1,2-Tetrachloroethane	U			0.000558	0.00279	1	03/21/2020 11:19	WG1447912
1,1,2,2-Tetrachloroethane	U			0.000435	0.00279	1	03/21/2020 11:19	WG1447912
1,1,2-Trichlorotrifluoroethane	U			0.000753	0.00279	1	03/21/2020 11:19	WG1447912
Tetrachloroethene	0.288			0.000781	0.00279	1	03/21/2020 11:19	WG1447912
Toluene	U			0.00140	0.00558	1	03/21/2020 11:19	WG1447912
1,2,3-Trichlorobenzene	U			0.000698	0.0140	1	03/21/2020 11:19	WG1447912
1,2,4-Trichlorobenzene	U			0.00538	0.0140	1	03/21/2020 11:19	WG1447912
1,1,1-Trichloroethane	U			0.000307	0.00279	1	03/21/2020 11:19	WG1447912
1,1,2-Trichloroethane	U			0.000986	0.00279	1	03/21/2020 11:19	WG1447912
Trichloroethene	0.00194			0.000446	0.00112	1	03/21/2020 11:19	WG1447912
Trichlorofluoromethane	U			0.000558	0.00279	1	03/21/2020 11:19	WG1447912
1,2,3-Trichloropropane	U			0.00569	0.0140	1	03/21/2020 11:19	WG1447912
1,2,4-Trimethylbenzene	U			0.00129	0.00558	1	03/21/2020 11:19	WG1447912
1,2,3-Trimethylbenzene	U			0.00128	0.00558	1	03/21/2020 11:19	WG1447912
1,3,5-Trimethylbenzene	U			0.00121	0.00558	1	03/21/2020 11:19	WG1447912
Vinyl acetate	U	UJ	J0	0.00393	0.0140	1	03/21/2020 11:19	WG1447912
Vinyl chloride	U			0.000762	0.00279	1	03/21/2020 11:19	WG1447912
Xylenes, Total	U			0.00534	0.00725	1	03/21/2020 11:19	WG1447912
(S) Toluene-d8	*105*				*75.0-131*		*03/21/2020 11:19*	WG1447912
(S) 4-Bromofluorobenzene	*99.1*				*67.0-138*		*03/21/2020 11:19*	WG1447912
(S) 1,2-Dichloroethane-d4	*97.7*				*70.0-130*		*03/21/2020 11:19*	WG1447912

JC 4/20/2020

SAMPLE RESULTS - 07

L1200814

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	90.2		1	03/21/2020 19:42	WG1447726

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	U		0.940	2.77	25	03/21/2020 01:35	WG1447769
(S) a,a,a-Trifluorotoluene(FID)	*99.7*			*77.0-120*		*03/21/2020 01:35*	WG1447769

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

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	U		0.0152	0.0277	1	03/21/2020 11:38	WG1447912
Acrylonitrile	U		0.00211	0.0139	1	03/21/2020 11:38	WG1447912
Benzene	U		0.000444	0.00111	1	03/21/2020 11:38	WG1447912
Bromobenzene	U		0.00116	0.0139	1	03/21/2020 11:38	WG1447912
Bromodichloromethane	U		0.000874	0.00277	1	03/21/2020 11:38	WG1447912
Bromochloromethane	U		0.00125	0.00554	1	03/21/2020 11:38	WG1447912
Bromoform	U		0.00663	0.0277	1	03/21/2020 11:38	WG1447912
Bromomethane	U		0.00410	0.0139	1	03/21/2020 11:38	WG1447912
n-Butylbenzene	U		0.00426	0.0139	1	03/21/2020 11:38	WG1447912
sec-Butylbenzene	U		0.00281	0.0139	1	03/21/2020 11:38	WG1447912
tert-Butylbenzene	U		0.00172	0.00554	1	03/21/2020 11:38	WG1447912
Carbon disulfide	U		0.00450	0.0139	1	03/21/2020 11:38	WG1447912
Carbon tetrachloride	U		0.00120	0.00554	1	03/21/2020 11:38	WG1447912
Chlorobenzene	U		0.000635	0.00277	1	03/21/2020 11:38	WG1447912
Chlorodibromomethane	U		0.000499	0.00277	1	03/21/2020 11:38	WG1447912
Chloroethane	U		0.00120	0.00554	1	03/21/2020 11:38	WG1447912
Chloroform	0.000823	U ~~BJ~~	0.000460	0.00277	1	03/21/2020 11:38	WG1447912
Chloromethane	U	UJ J0	0.00154	0.0139	1	03/21/2020 11:38	WG1447912
2-Chlorotoluene	U		0.00102	0.00277	1	03/21/2020 11:38	WG1447912
4-Chlorotoluene	U		0.00125	0.00554	1	03/21/2020 11:38	WG1447912
1,2-Dibromo-3-Chloropropane	U		0.00566	0.0277	1	03/21/2020 11:38	WG1447912
1,2-Dibromoethane	U		0.000582	0.00277	1	03/21/2020 11:38	WG1447912
Dibromomethane	U		0.00111	0.00554	1	03/21/2020 11:38	WG1447912
1,2-Dichlorobenzene	U		0.00161	0.00554	1	03/21/2020 11:38	WG1447912
1,3-Dichlorobenzene	U		0.00189	0.00554	1	03/21/2020 11:38	WG1447912
1,4-Dichlorobenzene	U		0.00218	0.00554	1	03/21/2020 11:38	WG1447912
Dichlorodifluoromethane	U		0.000907	0.00277	1	03/21/2020 11:38	WG1447912
1,1-Dichloroethane	U		0.000638	0.00277	1	03/21/2020 11:38	WG1447912
1,2-Dichloroethane	U		0.000527	0.00277	1	03/21/2020 11:38	WG1447912
1,1-Dichloroethene	U		0.000554	0.00277	1	03/21/2020 11:38	WG1447912
cis-1,2-Dichloroethene	U		0.000765	0.00277	1	03/21/2020 11:38	WG1447912
trans-1,2-Dichloroethene	U		0.00159	0.00554	1	03/21/2020 11:38	WG1447912
1,2-Dichloropropane	U		0.00141	0.00554	1	03/21/2020 11:38	WG1447912
1,1-Dichloropropene	U		0.000776	0.00277	1	03/21/2020 11:38	WG1447912
1,3-Dichloropropane	U		0.00194	0.00554	1	03/21/2020 11:38	WG1447912
cis-1,3-Dichloropropene	U		0.000752	0.00277	1	03/21/2020 11:38	WG1447912
trans-1,3-Dichloropropene	U		0.00170	0.00554	1	03/21/2020 11:38	WG1447912
trans-1,4-Dichloro-2-butene	U		0.00155	0.00554	1	03/21/2020 11:38	WG1447912
2,2-Dichloropropane	U		0.000879	0.00277	1	03/21/2020 11:38	WG1447912
Di-isopropyl ether	U		0.000388	0.00111	1	03/21/2020 11:38	WG1447912
Ethylbenzene	U		0.000588	0.00277	1	03/21/2020 11:38	WG1447912
Hexachloro-1,3-butadiene	U		0.0141	0.0277	1	03/21/2020 11:38	WG1447912
2-Hexanone	U		0.0111	0.0277	1	03/21/2020 11:38	WG1447912
n-Hexane	U		0.00118	0.00554	1	03/21/2020 11:38	WG1447912

JC 4/20/2020

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

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Iodomethane	U		0.00671	0.0139	1	03/21/2020 11:38	WG1447912
Isopropylbenzene	U		0.000957	0.00277	1	03/21/2020 11:38	WG1447912
p-Isopropyltoluene	U		0.00258	0.00554	1	03/21/2020 11:38	WG1447912
2-Butanone (MEK)	0.0225	U ~~B J~~	0.0139	0.0277	1	03/21/2020 11:38	WG1447912
Methylene Chloride	U		0.00736	0.0277	1	03/21/2020 11:38	WG1447912
4-Methyl-2-pentanone (MIBK)	U		0.0111	0.0277	1	03/21/2020 11:38	WG1447912
Methyl tert-butyl ether	U		0.000327	0.00111	1	03/21/2020 11:38	WG1447912
Naphthalene	U		0.00346	0.0139	1	03/21/2020 11:38	WG1447912
n-Propylbenzene	U		0.00131	0.00554	1	03/21/2020 11:38	WG1447912
Styrene	U		0.00303	0.0139	1	03/21/2020 11:38	WG1447912
1,1,1,2-Tetrachloroethane	U		0.000554	0.00277	1	03/21/2020 11:38	WG1447912
1,1,2,2-Tetrachloroethane	U		0.000432	0.00277	1	03/21/2020 11:38	WG1447912
1,1,2-Trichlorotrifluoroethane	U		0.000749	0.00277	1	03/21/2020 11:38	WG1447912
Tetrachloroethene	0.00924		0.000776	0.00277	1	03/21/2020 11:38	WG1447912
Toluene	U		0.00139	0.00554	1	03/21/2020 11:38	WG1447912
1,2,3-Trichlorobenzene	U		0.000693	0.0139	1	03/21/2020 11:38	WG1447912
1,2,4-Trichlorobenzene	U		0.00534	0.0139	1	03/21/2020 11:38	WG1447912
1,1,1-Trichloroethane	U		0.000305	0.00277	1	03/21/2020 11:38	WG1447912
1,1,2-Trichloroethane	U		0.000979	0.00277	1	03/21/2020 11:38	WG1447912
Trichloroethene	U		0.000444	0.00111	1	03/21/2020 11:38	WG1447912
Trichlorofluoromethane	U		0.000554	0.00277	1	03/21/2020 11:38	WG1447912
1,2,3-Trichloropropane	U		0.00566	0.0139	1	03/21/2020 11:38	WG1447912
1,2,4-Trimethylbenzene	U		0.00129	0.00554	1	03/21/2020 11:38	WG1447912
1,2,3-Trimethylbenzene	U		0.00128	0.00554	1	03/21/2020 11:38	WG1447912
1,3,5-Trimethylbenzene	U		0.00120	0.00554	1	03/21/2020 11:38	WG1447912
Vinyl acetate	U	UJ J0	0.00390	0.0139	1	03/21/2020 11:38	WG1447912
Vinyl chloride	U		0.000757	0.00277	1	03/21/2020 11:38	WG1447912
Xylenes, Total	U		0.00530	0.00721	1	03/21/2020 11:38	WG1447912
(S) Toluene-d8	*104*			*75.0-131*		*03/21/2020 11:38*	WG1447912
(S) 4-Bromofluorobenzene	*99.8*			*67.0-138*		*03/21/2020 11:38*	WG1447912
(S) 1,2-Dichloroethane-d4	*98.0*			*70.0-130*		*03/21/2020 11:38*	WG1447912

JC 4/20/2020

B-279-3

Collected date/time: 03/18/20 10:20

SAMPLE RESULTS - 08

L1200814

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

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	88.2		1	03/21/2020 19:42	WG1447726

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	U		0.962	2.84	25	03/21/2020 01:59	WG1447769
(S) a,a,a-Trifluorotoluene(FID)	*98.4*			*77.0-120*		*03/21/2020 01:59*	WG1447769

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

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	U		0.0155	0.0284	1	03/21/2020 11:57	WG1447912
Acrylonitrile	U		0.00216	0.0142	1	03/21/2020 11:57	WG1447912
Benzene	U		0.000454	0.00113	1	03/21/2020 11:57	WG1447912
Bromobenzene	U		0.00119	0.0142	1	03/21/2020 11:57	WG1447912
Bromodichloromethane	U		0.000894	0.00284	1	03/21/2020 11:57	WG1447912
Bromochloromethane	U		0.00128	0.00567	1	03/21/2020 11:57	WG1447912
Bromoform	U		0.00678	0.0284	1	03/21/2020 11:57	WG1447912
Bromomethane	U		0.00420	0.0142	1	03/21/2020 11:57	WG1447912
n-Butylbenzene	U		0.00436	0.0142	1	03/21/2020 11:57	WG1447912
sec-Butylbenzene	U		0.00287	0.0142	1	03/21/2020 11:57	WG1447912
tert-Butylbenzene	U		0.00176	0.00567	1	03/21/2020 11:57	WG1447912
Carbon disulfide	U		0.00460	0.0142	1	03/21/2020 11:57	WG1447912
Carbon tetrachloride	U		0.00122	0.00567	1	03/21/2020 11:57	WG1447912
Chlorobenzene	U		0.000650	0.00284	1	03/21/2020 11:57	WG1447912
Chlorodibromomethane	U		0.000510	0.00284	1	03/21/2020 11:57	WG1447912
Chloroethane	U		0.00122	0.00567	1	03/21/2020 11:57	WG1447912
Chloroform	0.000845	U ~~B J~~	0.000471	0.00284	1	03/21/2020 11:57	WG1447912
Chloromethane	U	UJ J0	0.00158	0.0142	1	03/21/2020 11:57	WG1447912
2-Chlorotoluene	U		0.00104	0.00284	1	03/21/2020 11:57	WG1447912
4-Chlorotoluene	U		0.00128	0.00567	1	03/21/2020 11:57	WG1447912
1,2-Dibromo-3-Chloropropane	U		0.00578	0.0284	1	03/21/2020 11:57	WG1447912
1,2-Dibromoethane	U		0.000595	0.00284	1	03/21/2020 11:57	WG1447912
Dibromomethane	U		0.00113	0.00567	1	03/21/2020 11:57	WG1447912
1,2-Dichlorobenzene	U		0.00164	0.00567	1	03/21/2020 11:57	WG1447912
1,3-Dichlorobenzene	U		0.00193	0.00567	1	03/21/2020 11:57	WG1447912
1,4-Dichlorobenzene	U		0.00223	0.00567	1	03/21/2020 11:57	WG1447912
Dichlorodifluoromethane	U		0.000928	0.00284	1	03/21/2020 11:57	WG1447912
1,1-Dichloroethane	U		0.000652	0.00284	1	03/21/2020 11:57	WG1447912
1,2-Dichloroethane	U		0.000539	0.00284	1	03/21/2020 11:57	WG1447912
1,1-Dichloroethene	U		0.000567	0.00284	1	03/21/2020 11:57	WG1447912
cis-1,2-Dichloroethene	0.00101	J J	0.000783	0.00284	1	03/21/2020 11:57	WG1447912
trans-1,2-Dichloroethene	U		0.00162	0.00567	1	03/21/2020 11:57	WG1447912
1,2-Dichloropropane	U		0.00144	0.00567	1	03/21/2020 11:57	WG1447912
1,1-Dichloropropene	U		0.000794	0.00284	1	03/21/2020 11:57	WG1447912
1,3-Dichloropropane	U		0.00198	0.00567	1	03/21/2020 11:57	WG1447912
cis-1,3-Dichloropropene	U		0.000769	0.00284	1	03/21/2020 11:57	WG1447912
trans-1,3-Dichloropropene	U		0.00174	0.00567	1	03/21/2020 11:57	WG1447912
trans-1,4-Dichloro-2-butene	U		0.00159	0.00567	1	03/21/2020 11:57	WG1447912
2,2-Dichloropropane	U		0.000899	0.00284	1	03/21/2020 11:57	WG1447912
Di-isopropyl ether	U		0.000397	0.00113	1	03/21/2020 11:57	WG1447912
Ethylbenzene	U		0.000601	0.00284	1	03/21/2020 11:57	WG1447912
Hexachloro-1,3-butadiene	U		0.0144	0.0284	1	03/21/2020 11:57	WG1447912
2-Hexanone	U		0.0113	0.0284	1	03/21/2020 11:57	WG1447912
n-Hexane	U		0.00120	0.00567	1	03/21/2020 11:57	WG1447912

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B-279-3

Collected date/time: 03/18/20 10:20

SAMPLE RESULTS - 08

L1200814

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

Analyte	Result (dry) mg/kg		Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Iodomethane	U			0.00686	0.0142	1	03/21/2020 11:57	WG1447912
Isopropylbenzene	U			0.000979	0.00284	1	03/21/2020 11:57	WG1447912
p-Isopropyltoluene	U			0.00264	0.00567	1	03/21/2020 11:57	WG1447912
2-Butanone (MEK)	0.0202	U	~~B J~~	0.0142	0.0284	1	03/21/2020 11:57	WG1447912
Methylene Chloride	U			0.00753	0.0284	1	03/21/2020 11:57	WG1447912
4-Methyl-2-pentanone (MIBK)	U			0.0113	0.0284	1	03/21/2020 11:57	WG1447912
Methyl tert-butyl ether	U			0.000335	0.00113	1	03/21/2020 11:57	WG1447912
Naphthalene	0.00366	U	~~B J~~	0.00354	0.0142	1	03/21/2020 11:57	WG1447912
n-Propylbenzene	U			0.00134	0.00567	1	03/21/2020 11:57	WG1447912
Styrene	U			0.00310	0.0142	1	03/21/2020 11:57	WG1447912
1,1,1,2-Tetrachloroethane	U			0.000567	0.00284	1	03/21/2020 11:57	WG1447912
1,1,2,2-Tetrachloroethane	U			0.000442	0.00284	1	03/21/2020 11:57	WG1447912
1,1,2-Trichlorotrifluoroethane	U			0.000766	0.00284	1	03/21/2020 11:57	WG1447912
Tetrachloroethene	0.235			0.000794	0.00284	1	03/21/2020 11:57	WG1447912
Toluene	U			0.00142	0.00567	1	03/21/2020 11:57	WG1447912
1,2,3-Trichlorobenzene	U			0.000709	0.0142	1	03/21/2020 11:57	WG1447912
1,2,4-Trichlorobenzene	U			0.00547	0.0142	1	03/21/2020 11:57	WG1447912
1,1,1-Trichloroethane	U			0.000312	0.00284	1	03/21/2020 11:57	WG1447912
1,1,2-Trichloroethane	U			0.00100	0.00284	1	03/21/2020 11:57	WG1447912
Trichloroethene	0.0119			0.000454	0.00113	1	03/21/2020 11:57	WG1447912
Trichlorofluoromethane	U			0.000567	0.00284	1	03/21/2020 11:57	WG1447912
1,2,3-Trichloropropane	U			0.00578	0.0142	1	03/21/2020 11:57	WG1447912
1,2,4-Trimethylbenzene	U			0.00132	0.00567	1	03/21/2020 11:57	WG1447912
1,2,3-Trimethylbenzene	U			0.00130	0.00567	1	03/21/2020 11:57	WG1447912
1,3,5-Trimethylbenzene	U			0.00122	0.00567	1	03/21/2020 11:57	WG1447912
Vinyl acetate	U	UJ	J0	0.00399	0.0142	1	03/21/2020 11:57	WG1447912
Vinyl chloride	U			0.000775	0.00284	1	03/21/2020 11:57	WG1447912
Xylenes, Total	U			0.00542	0.00737	1	03/21/2020 11:57	WG1447912
(S) Toluene-d8	*107*				*75.0-131*		*03/21/2020 11:57*	WG1447912
(S) 4-Bromofluorobenzene	*99.7*				*67.0-138*		*03/21/2020 11:57*	WG1447912
(S) 1,2-Dichloroethane-d4	*97.6*				*70.0-130*		*03/21/2020 11:57*	WG1447912

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SAMPLE RESULTS - 09

L1200814

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	89.4		1	03/21/2020 19:42	WG1447726

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	U		0.948	2.80	25	03/21/2020 11:37	WG1447775
(S) a,a,a-Trifluorotoluene(FID)	*98.3*			*77.0-120*		*03/21/2020 11:37*	WG1447775

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

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	U		0.0153	0.0280	1	03/21/2020 12:16	WG1447912
Acrylonitrile	U		0.00212	0.0140	1	03/21/2020 12:16	WG1447912
Benzene	U		0.000447	0.00112	1	03/21/2020 12:16	WG1447912
Bromobenzene	U		0.00117	0.0140	1	03/21/2020 12:16	WG1447912
Bromodichloromethane	U		0.000881	0.00280	1	03/21/2020 12:16	WG1447912
Bromochloromethane	U		0.00126	0.00559	1	03/21/2020 12:16	WG1447912
Bromoform	U		0.00669	0.0280	1	03/21/2020 12:16	WG1447912
Bromomethane	U		0.00414	0.0140	1	03/21/2020 12:16	WG1447912
n-Butylbenzene	U		0.00429	0.0140	1	03/21/2020 12:16	WG1447912
sec-Butylbenzene	U		0.00283	0.0140	1	03/21/2020 12:16	WG1447912
tert-Butylbenzene	U		0.00173	0.00559	1	03/21/2020 12:16	WG1447912
Carbon disulfide	U		0.00454	0.0140	1	03/21/2020 12:16	WG1447912
Carbon tetrachloride	U		0.00121	0.00559	1	03/21/2020 12:16	WG1447912
Chlorobenzene	U		0.000641	0.00280	1	03/21/2020 12:16	WG1447912
Chlorodibromomethane	U		0.000503	0.00280	1	03/21/2020 12:16	WG1447912
Chloroethane	U		0.00121	0.00559	1	03/21/2020 12:16	WG1447912
Chloroform	0.000819	U ~~B J~~	0.000464	0.00280	1	03/21/2020 12:16	WG1447912
Chloromethane	U	UJ J0	0.00155	0.0140	1	03/21/2020 12:16	WG1447912
2-Chlorotoluene	U		0.00103	0.00280	1	03/21/2020 12:16	WG1447912
4-Chlorotoluene	U		0.00126	0.00559	1	03/21/2020 12:16	WG1447912
1,2-Dibromo-3-Chloropropane	U		0.00570	0.0280	1	03/21/2020 12:16	WG1447912
1,2-Dibromoethane	U		0.000587	0.00280	1	03/21/2020 12:16	WG1447912
Dibromomethane	U		0.00112	0.00559	1	03/21/2020 12:16	WG1447912
1,2-Dichlorobenzene	U		0.00162	0.00559	1	03/21/2020 12:16	WG1447912
1,3-Dichlorobenzene	U		0.00190	0.00559	1	03/21/2020 12:16	WG1447912
1,4-Dichlorobenzene	U		0.00220	0.00559	1	03/21/2020 12:16	WG1447912
Dichlorodifluoromethane	U		0.000915	0.00280	1	03/21/2020 12:16	WG1447912
1,1-Dichloroethane	U		0.000643	0.00280	1	03/21/2020 12:16	WG1447912
1,2-Dichloroethane	U		0.000531	0.00280	1	03/21/2020 12:16	WG1447912
1,1-Dichloroethene	U		0.000559	0.00280	1	03/21/2020 12:16	WG1447912
cis-1,2-Dichloroethene	U		0.000772	0.00280	1	03/21/2020 12:16	WG1447912
trans-1,2-Dichloroethene	U		0.00160	0.00559	1	03/21/2020 12:16	WG1447912
1,2-Dichloropropane	U		0.00142	0.00559	1	03/21/2020 12:16	WG1447912
1,1-Dichloropropene	U		0.000783	0.00280	1	03/21/2020 12:16	WG1447912
1,3-Dichloropropane	U		0.00196	0.00559	1	03/21/2020 12:16	WG1447912
cis-1,3-Dichloropropene	U		0.000758	0.00280	1	03/21/2020 12:16	WG1447912
trans-1,3-Dichloropropene	U		0.00171	0.00559	1	03/21/2020 12:16	WG1447912
trans-1,4-Dichloro-2-butene	U		0.00157	0.00559	1	03/21/2020 12:16	WG1447912
2,2-Dichloropropane	U		0.000887	0.00280	1	03/21/2020 12:16	WG1447912
Di-isopropyl ether	U		0.000391	0.00112	1	03/21/2020 12:16	WG1447912
Ethylbenzene	U		0.000593	0.00280	1	03/21/2020 12:16	WG1447912
Hexachloro-1,3-butadiene	U		0.0142	0.0280	1	03/21/2020 12:16	WG1447912
2-Hexanone	U		0.0112	0.0280	1	03/21/2020 12:16	WG1447912
n-Hexane	U		0.00119	0.00559	1	03/21/2020 12:16	WG1447912

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

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Iodomethane	U		0.00677	0.0140	1	03/21/2020 12:16	WG1447912
Isopropylbenzene	U		0.000965	0.00280	1	03/21/2020 12:16	WG1447912
p-Isopropyltoluene	U		0.00261	0.00559	1	03/21/2020 12:16	WG1447912
2-Butanone (MEK)	0.0161	U ~~B J~~	0.0140	0.0280	1	03/21/2020 12:16	WG1447912
Methylene Chloride	U		0.00742	0.0280	1	03/21/2020 12:16	WG1447912
4-Methyl-2-pentanone (MIBK)	U		0.0112	0.0280	1	03/21/2020 12:16	WG1447912
Methyl tert-butyl ether	U		0.000330	0.00112	1	03/21/2020 12:16	WG1447912
Naphthalene	U		0.00349	0.0140	1	03/21/2020 12:16	WG1447912
n-Propylbenzene	U		0.00132	0.00559	1	03/21/2020 12:16	WG1447912
Styrene	U		0.00305	0.0140	1	03/21/2020 12:16	WG1447912
1,1,1,2-Tetrachloroethane	U		0.000559	0.00280	1	03/21/2020 12:16	WG1447912
1,1,2,2-Tetrachloroethane	U		0.000436	0.00280	1	03/21/2020 12:16	WG1447912
1,1,2-Trichlorotrifluoroethane	U		0.000755	0.00280	1	03/21/2020 12:16	WG1447912
Tetrachloroethene	0.277		0.000783	0.00280	1	03/21/2020 12:16	WG1447912
Toluene	U		0.00140	0.00559	1	03/21/2020 12:16	WG1447912
1,2,3-Trichlorobenzene	U		0.000699	0.0140	1	03/21/2020 12:16	WG1447912
1,2,4-Trichlorobenzene	U		0.00539	0.0140	1	03/21/2020 12:16	WG1447912
1,1,1-Trichloroethane	U		0.000308	0.00280	1	03/21/2020 12:16	WG1447912
1,1,2-Trichloroethane	U		0.000987	0.00280	1	03/21/2020 12:16	WG1447912
Trichloroethene	0.00906		0.000447	0.00112	1	03/21/2020 12:16	WG1447912
Trichlorofluoromethane	U		0.000559	0.00280	1	03/21/2020 12:16	WG1447912
1,2,3-Trichloropropane	U		0.00570	0.0140	1	03/21/2020 12:16	WG1447912
1,2,4-Trimethylbenzene	U		0.00130	0.00559	1	03/21/2020 12:16	WG1447912
1,2,3-Trimethylbenzene	U		0.00129	0.00559	1	03/21/2020 12:16	WG1447912
1,3,5-Trimethylbenzene	U		0.00121	0.00559	1	03/21/2020 12:16	WG1447912
Vinyl acetate	U	UJ J0	0.00394	0.0140	1	03/21/2020 12:16	WG1447912
Vinyl chloride	U		0.000764	0.00280	1	03/21/2020 12:16	WG1447912
Xylenes, Total	U		0.00534	0.00727	1	03/21/2020 12:16	WG1447912
(S) Toluene-d8	*105*			*75.0-131*		*03/21/2020 12:16*	WG1447912
(S) 4-Bromofluorobenzene	*96.8*			*67.0-138*		*03/21/2020 12:16*	WG1447912
(S) 1,2-Dichloroethane-d4	*100*			*70.0-130*		*03/21/2020 12:16*	WG1447912

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Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	92.0		1	03/21/2020 19:42	WG1447726

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	U		0.921	2.72	25	03/21/2020 12:06	WG1447775
(S) a,a,a-Trifluorotoluene(FID)	*100*			*77.0-120*		*03/21/2020 12:06*	WG1447775

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

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	U		0.0149	0.0272	1	03/21/2020 12:35	WG1447912
Acrylonitrile	U		0.00206	0.0136	1	03/21/2020 12:35	WG1447912
Benzene	U		0.000435	0.00109	1	03/21/2020 12:35	WG1447912
Bromobenzene	U		0.00114	0.0136	1	03/21/2020 12:35	WG1447912
Bromodichloromethane	U		0.000856	0.00272	1	03/21/2020 12:35	WG1447912
Bromochloromethane	U		0.00123	0.00543	1	03/21/2020 12:35	WG1447912
Bromoform	U		0.00650	0.0272	1	03/21/2020 12:35	WG1447912
Bromomethane	U		0.00402	0.0136	1	03/21/2020 12:35	WG1447912
n-Butylbenzene	U		0.00417	0.0136	1	03/21/2020 12:35	WG1447912
sec-Butylbenzene	U		0.00275	0.0136	1	03/21/2020 12:35	WG1447912
tert-Butylbenzene	U		0.00168	0.00543	1	03/21/2020 12:35	WG1447912
Carbon disulfide	U		0.00441	0.0136	1	03/21/2020 12:35	WG1447912
Carbon tetrachloride	U		0.00117	0.00543	1	03/21/2020 12:35	WG1447912
Chlorobenzene	U		0.000623	0.00272	1	03/21/2020 12:35	WG1447912
Chlorodibromomethane	U		0.000489	0.00272	1	03/21/2020 12:35	WG1447912
Chloroethane	U		0.00117	0.00543	1	03/21/2020 12:35	WG1447912
Chloroform	U		0.000451	0.00272	1	03/21/2020 12:35	WG1447912
Chloromethane	U UJ	J0	0.00151	0.0136	1	03/21/2020 12:35	WG1447912
2-Chlorotoluene	U		0.00100	0.00272	1	03/21/2020 12:35	WG1447912
4-Chlorotoluene	U		0.00123	0.00543	1	03/21/2020 12:35	WG1447912
1,2-Dibromo-3-Chloropropane	U		0.00554	0.0272	1	03/21/2020 12:35	WG1447912
1,2-Dibromoethane	U		0.000570	0.00272	1	03/21/2020 12:35	WG1447912
Dibromomethane	U		0.00109	0.00543	1	03/21/2020 12:35	WG1447912
1,2-Dichlorobenzene	U		0.00158	0.00543	1	03/21/2020 12:35	WG1447912
1,3-Dichlorobenzene	U		0.00185	0.00543	1	03/21/2020 12:35	WG1447912
1,4-Dichlorobenzene	U		0.00214	0.00543	1	03/21/2020 12:35	WG1447912
Dichlorodifluoromethane	U		0.000889	0.00272	1	03/21/2020 12:35	WG1447912
1,1-Dichloroethane	U		0.000625	0.00272	1	03/21/2020 12:35	WG1447912
1,2-Dichloroethane	U		0.000516	0.00272	1	03/21/2020 12:35	WG1447912
1,1-Dichloroethene	U		0.000543	0.00272	1	03/21/2020 12:35	WG1447912
cis-1,2-Dichloroethene	U		0.000750	0.00272	1	03/21/2020 12:35	WG1447912
trans-1,2-Dichloroethene	U		0.00155	0.00543	1	03/21/2020 12:35	WG1447912
1,2-Dichloropropane	U		0.00138	0.00543	1	03/21/2020 12:35	WG1447912
1,1-Dichloropropene	U		0.000761	0.00272	1	03/21/2020 12:35	WG1447912
1,3-Dichloropropane	U		0.00190	0.00543	1	03/21/2020 12:35	WG1447912
cis-1,3-Dichloropropene	U		0.000737	0.00272	1	03/21/2020 12:35	WG1447912
trans-1,3-Dichloropropene	U		0.00166	0.00543	1	03/21/2020 12:35	WG1447912
trans-1,4-Dichloro-2-butene	U		0.00152	0.00543	1	03/21/2020 12:35	WG1447912
2,2-Dichloropropane	U		0.000862	0.00272	1	03/21/2020 12:35	WG1447912
Di-isopropyl ether	U		0.000380	0.00109	1	03/21/2020 12:35	WG1447912
Ethylbenzene	U		0.000576	0.00272	1	03/21/2020 12:35	WG1447912
Hexachloro-1,3-butadiene	U		0.0138	0.0272	1	03/21/2020 12:35	WG1447912
2-Hexanone	U		0.0109	0.0272	1	03/21/2020 12:35	WG1447912
n-Hexane	U		0.00115	0.00543	1	03/21/2020 12:35	WG1447912

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

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Iodomethane	U		0.00657	0.0136	1	03/21/2020 12:35	WG1447912
Isopropylbenzene	U		0.000938	0.00272	1	03/21/2020 12:35	WG1447912
p-Isopropyltoluene	U		0.00253	0.00543	1	03/21/2020 12:35	WG1447912
2-Butanone (MEK)	0.0185	U ~~B J~~	0.0136	0.0272	1	03/21/2020 12:35	WG1447912
Methylene Chloride	U		0.00721	0.0272	1	03/21/2020 12:35	WG1447912
4-Methyl-2-pentanone (MIBK)	U		0.0109	0.0272	1	03/21/2020 12:35	WG1447912
Methyl tert-butyl ether	U		0.000321	0.00109	1	03/21/2020 12:35	WG1447912
Naphthalene	U		0.00339	0.0136	1	03/21/2020 12:35	WG1447912
n-Propylbenzene	U		0.00128	0.00543	1	03/21/2020 12:35	WG1447912
Styrene	U		0.00297	0.0136	1	03/21/2020 12:35	WG1447912
1,1,1,2-Tetrachloroethane	U		0.000543	0.00272	1	03/21/2020 12:35	WG1447912
1,1,2,2-Tetrachloroethane	U		0.000424	0.00272	1	03/21/2020 12:35	WG1447912
1,1,2-Trichlorotrifluoroethane	U		0.000733	0.00272	1	03/21/2020 12:35	WG1447912
Tetrachloroethene	0.0349		0.000761	0.00272	1	03/21/2020 12:35	WG1447912
Toluene	U		0.00136	0.00543	1	03/21/2020 12:35	WG1447912
1,2,3-Trichlorobenzene	U		0.000679	0.0136	1	03/21/2020 12:35	WG1447912
1,2,4-Trichlorobenzene	U		0.00524	0.0136	1	03/21/2020 12:35	WG1447912
1,1,1-Trichloroethane	U		0.000299	0.00272	1	03/21/2020 12:35	WG1447912
1,1,2-Trichloroethane	U		0.000959	0.00272	1	03/21/2020 12:35	WG1447912
Trichloroethene	U		0.000435	0.00109	1	03/21/2020 12:35	WG1447912
Trichlorofluoromethane	U		0.000543	0.00272	1	03/21/2020 12:35	WG1447912
1,2,3-Trichloropropane	U		0.00554	0.0136	1	03/21/2020 12:35	WG1447912
1,2,4-Trimethylbenzene	U		0.00126	0.00543	1	03/21/2020 12:35	WG1447912
1,2,3-Trimethylbenzene	U		0.00125	0.00543	1	03/21/2020 12:35	WG1447912
1,3,5-Trimethylbenzene	U		0.00117	0.00543	1	03/21/2020 12:35	WG1447912
Vinyl acetate	U	UJ J0	0.00382	0.0136	1	03/21/2020 12:35	WG1447912
Vinyl chloride	U		0.000742	0.00272	1	03/21/2020 12:35	WG1447912
Xylenes, Total	U		0.00519	0.00706	1	03/21/2020 12:35	WG1447912
(S) Toluene-d8	*103*			*75.0-131*		*03/21/2020 12:35*	WG1447912
(S) 4-Bromofluorobenzene	*99.5*			*67.0-138*		*03/21/2020 12:35*	WG1447912
(S) 1,2-Dichloroethane-d4	*99.6*			*70.0-130*		*03/21/2020 12:35*	WG1447912

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Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	96.6		1	03/21/2020 19:42	WG1447726

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	U		0.878	2.59	25	03/21/2020 12:30	WG1447775
(S) a,a,a-Trifluorotoluene(FID)	*96.7*			*77.0-120*		*03/21/2020 12:30*	WG1447775

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

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	U		0.0142	0.0259	1	03/21/2020 12:54	WG1447912
Acrylonitrile	U		0.00197	0.0129	1	03/21/2020 12:54	WG1447912
Benzene	U		0.000414	0.00104	1	03/21/2020 12:54	WG1447912
Bromobenzene	U		0.00109	0.0129	1	03/21/2020 12:54	WG1447912
Bromodichloromethane	U		0.000816	0.00259	1	03/21/2020 12:54	WG1447912
Bromochloromethane	U		0.00117	0.00518	1	03/21/2020 12:54	WG1447912
Bromoform	U		0.00619	0.0259	1	03/21/2020 12:54	WG1447912
Bromomethane	U		0.00383	0.0129	1	03/21/2020 12:54	WG1447912
n-Butylbenzene	U		0.00398	0.0129	1	03/21/2020 12:54	WG1447912
sec-Butylbenzene	U		0.00262	0.0129	1	03/21/2020 12:54	WG1447912
tert-Butylbenzene	U		0.00161	0.00518	1	03/21/2020 12:54	WG1447912
Carbon disulfide	U		0.00421	0.0129	1	03/21/2020 12:54	WG1447912
Carbon tetrachloride	U		0.00112	0.00518	1	03/21/2020 12:54	WG1447912
Chlorobenzene	U		0.000593	0.00259	1	03/21/2020 12:54	WG1447912
Chlorodibromomethane	U		0.000466	0.00259	1	03/21/2020 12:54	WG1447912
Chloroethane	U		0.00112	0.00518	1	03/21/2020 12:54	WG1447912
Chloroform	U		0.000430	0.00259	1	03/21/2020 12:54	WG1447912
Chloromethane	U UJ	J0	0.00144	0.0129	1	03/21/2020 12:54	WG1447912
2-Chlorotoluene	U		0.000953	0.00259	1	03/21/2020 12:54	WG1447912
4-Chlorotoluene	U		0.00117	0.00518	1	03/21/2020 12:54	WG1447912
1,2-Dibromo-3-Chloropropane	U		0.00528	0.0259	1	03/21/2020 12:54	WG1447912
1,2-Dibromoethane	U		0.000544	0.00259	1	03/21/2020 12:54	WG1447912
Dibromomethane	U		0.00104	0.00518	1	03/21/2020 12:54	WG1447912
1,2-Dichlorobenzene	U		0.00150	0.00518	1	03/21/2020 12:54	WG1447912
1,3-Dichlorobenzene	U		0.00176	0.00518	1	03/21/2020 12:54	WG1447912
1,4-Dichlorobenzene	U		0.00204	0.00518	1	03/21/2020 12:54	WG1447912
Dichlorodifluoromethane	U		0.000847	0.00259	1	03/21/2020 12:54	WG1447912
1,1-Dichloroethane	U		0.000596	0.00259	1	03/21/2020 12:54	WG1447912
1,2-Dichloroethane	U		0.000492	0.00259	1	03/21/2020 12:54	WG1447912
1,1-Dichloroethene	U		0.000518	0.00259	1	03/21/2020 12:54	WG1447912
cis-1,2-Dichloroethene	U		0.000715	0.00259	1	03/21/2020 12:54	WG1447912
trans-1,2-Dichloroethene	U		0.00148	0.00518	1	03/21/2020 12:54	WG1447912
1,2-Dichloropropane	U		0.00132	0.00518	1	03/21/2020 12:54	WG1447912
1,1-Dichloropropene	U		0.000725	0.00259	1	03/21/2020 12:54	WG1447912
1,3-Dichloropropane	U		0.00181	0.00518	1	03/21/2020 12:54	WG1447912
cis-1,3-Dichloropropene	U		0.000702	0.00259	1	03/21/2020 12:54	WG1447912
trans-1,3-Dichloropropene	U		0.00158	0.00518	1	03/21/2020 12:54	WG1447912
trans-1,4-Dichloro-2-butene	U		0.00145	0.00518	1	03/21/2020 12:54	WG1447912
2,2-Dichloropropane	U		0.000821	0.00259	1	03/21/2020 12:54	WG1447912
Di-isopropyl ether	U		0.000363	0.00104	1	03/21/2020 12:54	WG1447912
Ethylbenzene	U		0.000549	0.00259	1	03/21/2020 12:54	WG1447912
Hexachloro-1,3-butadiene	U		0.0132	0.0259	1	03/21/2020 12:54	WG1447912
2-Hexanone	U		0.0104	0.0259	1	03/21/2020 12:54	WG1447912
n-Hexane	U		0.00110	0.00518	1	03/21/2020 12:54	WG1447912

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

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Iodomethane	U		0.00627	0.0129	1	03/21/2020 12:54	WG1447912
Isopropylbenzene	U		0.000894	0.00259	1	03/21/2020 12:54	WG1447912
p-Isopropyltoluene	U		0.00241	0.00518	1	03/21/2020 12:54	WG1447912
2-Butanone (MEK)	0.0308	B	0.0129	0.0259	1	03/21/2020 12:54	WG1447912
Methylene Chloride	U		0.00688	0.0259	1	03/21/2020 12:54	WG1447912
4-Methyl-2-pentanone (MIBK)	U		0.0104	0.0259	1	03/21/2020 12:54	WG1447912
Methyl tert-butyl ether	U		0.000306	0.00104	1	03/21/2020 12:54	WG1447912
Naphthalene	U		0.00323	0.0129	1	03/21/2020 12:54	WG1447912
n-Propylbenzene	U		0.00122	0.00518	1	03/21/2020 12:54	WG1447912
Styrene	U		0.00283	0.0129	1	03/21/2020 12:54	WG1447912
1,1,1,2-Tetrachloroethane	U		0.000518	0.00259	1	03/21/2020 12:54	WG1447912
1,1,2,2-Tetrachloroethane	U		0.000404	0.00259	1	03/21/2020 12:54	WG1447912
1,1,2-Trichlorotrifluoroethane	U		0.000699	0.00259	1	03/21/2020 12:54	WG1447912
Tetrachloroethene	0.00185 J	J	0.000725	0.00259	1	03/21/2020 12:54	WG1447912
Toluene	U		0.00129	0.00518	1	03/21/2020 12:54	WG1447912
1,2,3-Trichlorobenzene	U		0.000647	0.0129	1	03/21/2020 12:54	WG1447912
1,2,4-Trichlorobenzene	U		0.00499	0.0129	1	03/21/2020 12:54	WG1447912
1,1,1-Trichloroethane	U		0.000285	0.00259	1	03/21/2020 12:54	WG1447912
1,1,2-Trichloroethane	U		0.000915	0.00259	1	03/21/2020 12:54	WG1447912
Trichloroethene	U		0.000414	0.00104	1	03/21/2020 12:54	WG1447912
Trichlorofluoromethane	U		0.000518	0.00259	1	03/21/2020 12:54	WG1447912
1,2,3-Trichloropropane	U		0.00528	0.0129	1	03/21/2020 12:54	WG1447912
1,2,4-Trimethylbenzene	U		0.00120	0.00518	1	03/21/2020 12:54	WG1447912
1,2,3-Trimethylbenzene	U		0.00119	0.00518	1	03/21/2020 12:54	WG1447912
1,3,5-Trimethylbenzene	U		0.00112	0.00518	1	03/21/2020 12:54	WG1447912
Vinyl acetate	U UJ	J0	0.00365	0.0129	1	03/21/2020 12:54	WG1447912
Vinyl chloride	U		0.000707	0.00259	1	03/21/2020 12:54	WG1447912
Xylenes, Total	U		0.00495	0.00673	1	03/21/2020 12:54	WG1447912
(S) Toluene-d8	*107*			*75.0-131*		*03/21/2020 12:54*	WG1447912
(S) 4-Bromofluorobenzene	*100*			*67.0-138*		*03/21/2020 12:54*	WG1447912
(S) 1,2-Dichloroethane-d4	*99.6*			*70.0-130*		*03/21/2020 12:54*	WG1447912

JC 4/20/2020

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

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	91.9		1	03/21/2020 19:42	WG1447726

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	U		0.923	2.72	25	03/21/2020 12:54	WG1447775
(S) a,a,a-Trifluorotoluene(FID)	*99.6*			*77.0-120*		*03/21/2020 12:54*	WG1447775

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

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	U		0.0149	0.0272	1	03/21/2020 13:13	WG1447912
Acrylonitrile	U		0.00207	0.0136	1	03/21/2020 13:13	WG1447912
Benzene	U		0.000435	0.00109	1	03/21/2020 13:13	WG1447912
Bromobenzene	U		0.00114	0.0136	1	03/21/2020 13:13	WG1447912
Bromodichloromethane	U		0.000857	0.00272	1	03/21/2020 13:13	WG1447912
Bromochloromethane	U		0.00123	0.00544	1	03/21/2020 13:13	WG1447912
Bromoform	U		0.00651	0.0272	1	03/21/2020 13:13	WG1447912
Bromomethane	U		0.00403	0.0136	1	03/21/2020 13:13	WG1447912
n-Butylbenzene	U		0.00418	0.0136	1	03/21/2020 13:13	WG1447912
sec-Butylbenzene	U		0.00275	0.0136	1	03/21/2020 13:13	WG1447912
tert-Butylbenzene	U		0.00169	0.00544	1	03/21/2020 13:13	WG1447912
Carbon disulfide	U		0.00442	0.0136	1	03/21/2020 13:13	WG1447912
Carbon tetrachloride	U		0.00118	0.00544	1	03/21/2020 13:13	WG1447912
Chlorobenzene	U		0.000623	0.00272	1	03/21/2020 13:13	WG1447912
Chlorodibromomethane	U		0.000490	0.00272	1	03/21/2020 13:13	WG1447912
Chloroethane	U		0.00118	0.00544	1	03/21/2020 13:13	WG1447912
Chloroform	U		0.000452	0.00272	1	03/21/2020 13:13	WG1447912
Chloromethane	U UJ	J0	0.00151	0.0136	1	03/21/2020 13:13	WG1447912
2-Chlorotoluene	U		0.00100	0.00272	1	03/21/2020 13:13	WG1447912
4-Chlorotoluene	U		0.00123	0.00544	1	03/21/2020 13:13	WG1447912
1,2-Dibromo-3-Chloropropane	U		0.00555	0.0272	1	03/21/2020 13:13	WG1447912
1,2-Dibromoethane	U		0.000571	0.00272	1	03/21/2020 13:13	WG1447912
Dibromomethane	U		0.00109	0.00544	1	03/21/2020 13:13	WG1447912
1,2-Dichlorobenzene	U		0.00158	0.00544	1	03/21/2020 13:13	WG1447912
1,3-Dichlorobenzene	U		0.00185	0.00544	1	03/21/2020 13:13	WG1447912
1,4-Dichlorobenzene	U		0.00214	0.00544	1	03/21/2020 13:13	WG1447912
Dichlorodifluoromethane	U		0.000890	0.00272	1	03/21/2020 13:13	WG1447912
1,1-Dichloroethane	U		0.000626	0.00272	1	03/21/2020 13:13	WG1447912
1,2-Dichloroethane	U		0.000517	0.00272	1	03/21/2020 13:13	WG1447912
1,1-Dichloroethene	U		0.000544	0.00272	1	03/21/2020 13:13	WG1447912
cis-1,2-Dichloroethene	U		0.000751	0.00272	1	03/21/2020 13:13	WG1447912
trans-1,2-Dichloroethene	U		0.00156	0.00544	1	03/21/2020 13:13	WG1447912
1,2-Dichloropropane	U		0.00138	0.00544	1	03/21/2020 13:13	WG1447912
1,1-Dichloropropene	U		0.000762	0.00272	1	03/21/2020 13:13	WG1447912
1,3-Dichloropropane	U		0.00190	0.00544	1	03/21/2020 13:13	WG1447912
cis-1,3-Dichloropropene	U		0.000738	0.00272	1	03/21/2020 13:13	WG1447912
trans-1,3-Dichloropropene	U		0.00166	0.00544	1	03/21/2020 13:13	WG1447912
trans-1,4-Dichloro-2-butene	U		0.00152	0.00544	1	03/21/2020 13:13	WG1447912
2,2-Dichloropropane	U		0.000863	0.00272	1	03/21/2020 13:13	WG1447912
Di-isopropyl ether	U		0.000381	0.00109	1	03/21/2020 13:13	WG1447912
Ethylbenzene	U		0.000577	0.00272	1	03/21/2020 13:13	WG1447912
Hexachloro-1,3-butadiene	U		0.0138	0.0272	1	03/21/2020 13:13	WG1447912
2-Hexanone	U		0.0109	0.0272	1	03/21/2020 13:13	WG1447912
n-Hexane	U		0.00115	0.00544	1	03/21/2020 13:13	WG1447912

JC 4/20/2020

B-280-6

Collected date/time: 03/18/20 11:23

SAMPLE RESULTS - 12

L1200814

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

Analyte	Result (dry) mg/kg		Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Iodomethane	U			0.00658	0.0136	1	03/21/2020 13:13	WG1447912
Isopropylbenzene	U			0.000939	0.00272	1	03/21/2020 13:13	WG1447912
p-Isopropyltoluene	U			0.00254	0.00544	1	03/21/2020 13:13	WG1447912
2-Butanone (MEK)	0.0211	U	~~B J~~	0.0136	0.0272	1	03/21/2020 13:13	WG1447912
Methylene Chloride	U			0.00722	0.0272	1	03/21/2020 13:13	WG1447912
4-Methyl-2-pentanone (MIBK)	U			0.0109	0.0272	1	03/21/2020 13:13	WG1447912
Methyl tert-butyl ether	U			0.000321	0.00109	1	03/21/2020 13:13	WG1447912
Naphthalene	U			0.00339	0.0136	1	03/21/2020 13:13	WG1447912
n-Propylbenzene	U			0.00128	0.00544	1	03/21/2020 13:13	WG1447912
Styrene	U			0.00297	0.0136	1	03/21/2020 13:13	WG1447912
1,1,1,2-Tetrachloroethane	U			0.000544	0.00272	1	03/21/2020 13:13	WG1447912
1,1,2,2-Tetrachloroethane	U			0.000424	0.00272	1	03/21/2020 13:13	WG1447912
1,1,2-Trichlorotrifluoroethane	U			0.000734	0.00272	1	03/21/2020 13:13	WG1447912
Tetrachloroethene	0.00510			0.000762	0.00272	1	03/21/2020 13:13	WG1447912
Toluene	U			0.00136	0.00544	1	03/21/2020 13:13	WG1447912
1,2,3-Trichlorobenzene	U			0.000680	0.0136	1	03/21/2020 13:13	WG1447912
1,2,4-Trichlorobenzene	U			0.00524	0.0136	1	03/21/2020 13:13	WG1447912
1,1,1-Trichloroethane	U			0.000299	0.00272	1	03/21/2020 13:13	WG1447912
1,1,2-Trichloroethane	U			0.000961	0.00272	1	03/21/2020 13:13	WG1447912
Trichloroethene	U			0.000435	0.00109	1	03/21/2020 13:13	WG1447912
Trichlorofluoromethane	U			0.000544	0.00272	1	03/21/2020 13:13	WG1447912
1,2,3-Trichloropropane	U			0.00555	0.0136	1	03/21/2020 13:13	WG1447912
1,2,4-Trimethylbenzene	U			0.00126	0.00544	1	03/21/2020 13:13	WG1447912
1,2,3-Trimethylbenzene	U			0.00125	0.00544	1	03/21/2020 13:13	WG1447912
1,3,5-Trimethylbenzene	U			0.00118	0.00544	1	03/21/2020 13:13	WG1447912
Vinyl acetate	U	UJ	J0	0.00383	0.0136	1	03/21/2020 13:13	WG1447912
Vinyl chloride	U			0.000743	0.00272	1	03/21/2020 13:13	WG1447912
Xylenes, Total	U			0.00520	0.00707	1	03/21/2020 13:13	WG1447912
(S) Toluene-d8	*109*				*75.0-131*		*03/21/2020 13:13*	WG1447912
(S) 4-Bromofluorobenzene	*101*				*67.0-138*		*03/21/2020 13:13*	WG1447912
(S) 1,2-Dichloroethane-d4	*97.8*				*70.0-130*		*03/21/2020 13:13*	WG1447912

JC 4/20/2020

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

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	95.7		1	03/21/2020 19:42	WG1447726

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	U		0.887	2.61	25	03/21/2020 13:18	WG1447775
(S) a,a,a-Trifluorotoluene(FID)	*99.2*			*77.0-120*		*03/21/2020 13:18*	WG1447775

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

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	U		0.0143	0.0261	1	03/21/2020 13:32	WG1447912
Acrylonitrile	U		0.00199	0.0131	1	03/21/2020 13:32	WG1447912
Benzene	U		0.000418	0.00105	1	03/21/2020 13:32	WG1447912
Bromobenzene	U		0.00110	0.0131	1	03/21/2020 13:32	WG1447912
Bromodichloromethane	U		0.000824	0.00261	1	03/21/2020 13:32	WG1447912
Bromochloromethane	U		0.00118	0.00523	1	03/21/2020 13:32	WG1447912
Bromoform	U		0.00625	0.0261	1	03/21/2020 13:32	WG1447912
Bromomethane	U		0.00387	0.0131	1	03/21/2020 13:32	WG1447912
n-Butylbenzene	U		0.00401	0.0131	1	03/21/2020 13:32	WG1447912
sec-Butylbenzene	U		0.00264	0.0131	1	03/21/2020 13:32	WG1447912
tert-Butylbenzene	U		0.00162	0.00523	1	03/21/2020 13:32	WG1447912
Carbon disulfide	U		0.00424	0.0131	1	03/21/2020 13:32	WG1447912
Carbon tetrachloride	U		0.00113	0.00523	1	03/21/2020 13:32	WG1447912
Chlorobenzene	U		0.000599	0.00261	1	03/21/2020 13:32	WG1447912
Chlorodibromomethane	U		0.000470	0.00261	1	03/21/2020 13:32	WG1447912
Chloroethane	U		0.00113	0.00523	1	03/21/2020 13:32	WG1447912
Chloroform	0.000784	U ~~B J~~	0.000434	0.00261	1	03/21/2020 13:32	WG1447912
Chloromethane	U	UJ J0	0.00145	0.0131	1	03/21/2020 13:32	WG1447912
2-Chlorotoluene	U		0.000962	0.00261	1	03/21/2020 13:32	WG1447912
4-Chlorotoluene	U		0.00118	0.00523	1	03/21/2020 13:32	WG1447912
1,2-Dibromo-3-Chloropropane	U		0.00533	0.0261	1	03/21/2020 13:32	WG1447912
1,2-Dibromoethane	U		0.000549	0.00261	1	03/21/2020 13:32	WG1447912
Dibromomethane	U		0.00105	0.00523	1	03/21/2020 13:32	WG1447912
1,2-Dichlorobenzene	U		0.00152	0.00523	1	03/21/2020 13:32	WG1447912
1,3-Dichlorobenzene	U		0.00178	0.00523	1	03/21/2020 13:32	WG1447912
1,4-Dichlorobenzene	U		0.00206	0.00523	1	03/21/2020 13:32	WG1447912
Dichlorodifluoromethane	U		0.000855	0.00261	1	03/21/2020 13:32	WG1447912
1,1-Dichloroethane	U		0.000601	0.00261	1	03/21/2020 13:32	WG1447912
1,2-Dichloroethane	U		0.000497	0.00261	1	03/21/2020 13:32	WG1447912
1,1-Dichloroethene	U		0.000523	0.00261	1	03/21/2020 13:32	WG1447912
cis-1,2-Dichloroethene	U		0.000721	0.00261	1	03/21/2020 13:32	WG1447912
trans-1,2-Dichloroethene	U		0.00149	0.00523	1	03/21/2020 13:32	WG1447912
1,2-Dichloropropane	U		0.00133	0.00523	1	03/21/2020 13:32	WG1447912
1,1-Dichloropropene	U		0.000732	0.00261	1	03/21/2020 13:32	WG1447912
1,3-Dichloropropane	U		0.00183	0.00523	1	03/21/2020 13:32	WG1447912
cis-1,3-Dichloropropene	U		0.000709	0.00261	1	03/21/2020 13:32	WG1447912
trans-1,3-Dichloropropene	U		0.00160	0.00523	1	03/21/2020 13:32	WG1447912
trans-1,4-Dichloro-2-butene	U		0.00146	0.00523	1	03/21/2020 13:32	WG1447912
2,2-Dichloropropane	U		0.000829	0.00261	1	03/21/2020 13:32	WG1447912
Di-isopropyl ether	U		0.000366	0.00105	1	03/21/2020 13:32	WG1447912
Ethylbenzene	U		0.000554	0.00261	1	03/21/2020 13:32	WG1447912
Hexachloro-1,3-butadiene	U		0.0133	0.0261	1	03/21/2020 13:32	WG1447912
2-Hexanone	U		0.0105	0.0261	1	03/21/2020 13:32	WG1447912
n-Hexane	U		0.00111	0.00523	1	03/21/2020 13:32	WG1447912

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

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Iodomethane	U		0.00632	0.0131	1	03/21/2020 13:32	WG1447912
Isopropylbenzene	U		0.000902	0.00261	1	03/21/2020 13:32	WG1447912
p-Isopropyltoluene	U		0.00244	0.00523	1	03/21/2020 13:32	WG1447912
2-Butanone (MEK)	0.0132	U ~~B J~~	0.0131	0.0261	1	03/21/2020 13:32	WG1447912
Methylene Chloride	U		0.00694	0.0261	1	03/21/2020 13:32	WG1447912
4-Methyl-2-pentanone (MIBK)	U		0.0105	0.0261	1	03/21/2020 13:32	WG1447912
Methyl tert-butyl ether	U		0.000308	0.00105	1	03/21/2020 13:32	WG1447912
Naphthalene	0.00433	U ~~B J~~	0.00326	0.0131	1	03/21/2020 13:32	WG1447912
n-Propylbenzene	U		0.00123	0.00523	1	03/21/2020 13:32	WG1447912
Styrene	U		0.00285	0.0131	1	03/21/2020 13:32	WG1447912
1,1,1,2-Tetrachloroethane	U		0.000523	0.00261	1	03/21/2020 13:32	WG1447912
1,1,2,2-Tetrachloroethane	U		0.000408	0.00261	1	03/21/2020 13:32	WG1447912
1,1,2-Trichlorotrifluoroethane	U		0.000706	0.00261	1	03/21/2020 13:32	WG1447912
Tetrachloroethene	0.0103		0.000732	0.00261	1	03/21/2020 13:32	WG1447912
Toluene	U		0.00131	0.00523	1	03/21/2020 13:32	WG1447912
1,2,3-Trichlorobenzene	U		0.000653	0.0131	1	03/21/2020 13:32	WG1447912
1,2,4-Trichlorobenzene	U		0.00504	0.0131	1	03/21/2020 13:32	WG1447912
1,1,1-Trichloroethane	U		0.000287	0.00261	1	03/21/2020 13:32	WG1447912
1,1,2-Trichloroethane	U		0.000923	0.00261	1	03/21/2020 13:32	WG1447912
Trichloroethene	U		0.000418	0.00105	1	03/21/2020 13:32	WG1447912
Trichlorofluoromethane	U		0.000523	0.00261	1	03/21/2020 13:32	WG1447912
1,2,3-Trichloropropane	U		0.00533	0.0131	1	03/21/2020 13:32	WG1447912
1,2,4-Trimethylbenzene	U		0.00121	0.00523	1	03/21/2020 13:32	WG1447912
1,2,3-Trimethylbenzene	0.00170	J J	0.00120	0.00523	1	03/21/2020 13:32	WG1447912
1,3,5-Trimethylbenzene	U		0.00113	0.00523	1	03/21/2020 13:32	WG1447912
Vinyl acetate	U	UJ J0	0.00368	0.0131	1	03/21/2020 13:32	WG1447912
Vinyl chloride	U		0.000714	0.00261	1	03/21/2020 13:32	WG1447912
Xylenes, Total	U		0.00500	0.00680	1	03/21/2020 13:32	WG1447912
(S) Toluene-d8	*107*			*75.0-131*		*03/21/2020 13:32*	WG1447912
(S) 4-Bromofluorobenzene	*99.7*			*67.0-138*		*03/21/2020 13:32*	WG1447912
(S) 1,2-Dichloroethane-d4	*97.0*			*70.0-130*		*03/21/2020 13:32*	WG1447912

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Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	88.2		1	03/21/2020 19:42	WG1447726

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	U		0.961	2.83	25	03/21/2020 13:42	WG1447775
(S) a,a,a-Trifluorotoluene(FID)	*100*			*77.0-120*		*03/21/2020 13:42*	WG1447775

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

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	U		0.0155	0.0283	1	03/21/2020 13:51	WG1447912
Acrylonitrile	U		0.00215	0.0142	1	03/21/2020 13:51	WG1447912
Benzene	U		0.000453	0.00113	1	03/21/2020 13:51	WG1447912
Bromobenzene	U		0.00119	0.0142	1	03/21/2020 13:51	WG1447912
Bromodichloromethane	U		0.000893	0.00283	1	03/21/2020 13:51	WG1447912
Bromochloromethane	U		0.00128	0.00567	1	03/21/2020 13:51	WG1447912
Bromoform	U		0.00678	0.0283	1	03/21/2020 13:51	WG1447912
Bromomethane	U		0.00419	0.0142	1	03/21/2020 13:51	WG1447912
n-Butylbenzene	U		0.00435	0.0142	1	03/21/2020 13:51	WG1447912
sec-Butylbenzene	U		0.00287	0.0142	1	03/21/2020 13:51	WG1447912
tert-Butylbenzene	U		0.00176	0.00567	1	03/21/2020 13:51	WG1447912
Carbon disulfide	U		0.00460	0.0142	1	03/21/2020 13:51	WG1447912
Carbon tetrachloride	U		0.00122	0.00567	1	03/21/2020 13:51	WG1447912
Chlorobenzene	U		0.000649	0.00283	1	03/21/2020 13:51	WG1447912
Chlorodibromomethane	U		0.000510	0.00283	1	03/21/2020 13:51	WG1447912
Chloroethane	U		0.00122	0.00567	1	03/21/2020 13:51	WG1447912
Chloroform	U		0.000470	0.00283	1	03/21/2020 13:51	WG1447912
Chloromethane	U UJ	J0	0.00158	0.0142	1	03/21/2020 13:51	WG1447912
2-Chlorotoluene	U		0.00104	0.00283	1	03/21/2020 13:51	WG1447912
4-Chlorotoluene	U		0.00128	0.00567	1	03/21/2020 13:51	WG1447912
1,2-Dibromo-3-Chloropropane	U		0.00578	0.0283	1	03/21/2020 13:51	WG1447912
1,2-Dibromoethane	U		0.000595	0.00283	1	03/21/2020 13:51	WG1447912
Dibromomethane	U		0.00113	0.00567	1	03/21/2020 13:51	WG1447912
1,2-Dichlorobenzene	U		0.00164	0.00567	1	03/21/2020 13:51	WG1447912
1,3-Dichlorobenzene	U		0.00193	0.00567	1	03/21/2020 13:51	WG1447912
1,4-Dichlorobenzene	U		0.00223	0.00567	1	03/21/2020 13:51	WG1447912
Dichlorodifluoromethane	U		0.000927	0.00283	1	03/21/2020 13:51	WG1447912
1,1-Dichloroethane	U		0.000652	0.00283	1	03/21/2020 13:51	WG1447912
1,2-Dichloroethane	U		0.000538	0.00283	1	03/21/2020 13:51	WG1447912
1,1-Dichloroethene	U		0.000567	0.00283	1	03/21/2020 13:51	WG1447912
cis-1,2-Dichloroethene	U		0.000782	0.00283	1	03/21/2020 13:51	WG1447912
trans-1,2-Dichloroethene	U		0.00162	0.00567	1	03/21/2020 13:51	WG1447912
1,2-Dichloropropane	U		0.00144	0.00567	1	03/21/2020 13:51	WG1447912
1,1-Dichloropropene	U		0.000793	0.00283	1	03/21/2020 13:51	WG1447912
1,3-Dichloropropane	U		0.00198	0.00567	1	03/21/2020 13:51	WG1447912
cis-1,3-Dichloropropene	U		0.000768	0.00283	1	03/21/2020 13:51	WG1447912
trans-1,3-Dichloropropene	U		0.00173	0.00567	1	03/21/2020 13:51	WG1447912
trans-1,4-Dichloro-2-butene	U		0.00159	0.00567	1	03/21/2020 13:51	WG1447912
2,2-Dichloropropane	U		0.000899	0.00283	1	03/21/2020 13:51	WG1447912
Di-isopropyl ether	U		0.000397	0.00113	1	03/21/2020 13:51	WG1447912
Ethylbenzene	U		0.000601	0.00283	1	03/21/2020 13:51	WG1447912
Hexachloro-1,3-butadiene	U		0.0144	0.0283	1	03/21/2020 13:51	WG1447912
2-Hexanone	U		0.0113	0.0283	1	03/21/2020 13:51	WG1447912
n-Hexane	U		0.00120	0.00567	1	03/21/2020 13:51	WG1447912

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

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Iodomethane	U		0.00686	0.0142	1	03/21/2020 13:51	WG1447912
Isopropylbenzene	U		0.000978	0.00283	1	03/21/2020 13:51	WG1447912
p-Isopropyltoluene	U		0.00264	0.00567	1	03/21/2020 13:51	WG1447912
2-Butanone (MEK)	0.0228	U ~~B J~~	0.0142	0.0283	1	03/21/2020 13:51	WG1447912
Methylene Chloride	U		0.00753	0.0283	1	03/21/2020 13:51	WG1447912
4-Methyl-2-pentanone (MIBK)	U		0.0113	0.0283	1	03/21/2020 13:51	WG1447912
Methyl tert-butyl ether	U		0.000334	0.00113	1	03/21/2020 13:51	WG1447912
Naphthalene	0.00373	U ~~B J~~	0.00354	0.0142	1	03/21/2020 13:51	WG1447912
n-Propylbenzene	U		0.00134	0.00567	1	03/21/2020 13:51	WG1447912
Styrene	U		0.00309	0.0142	1	03/21/2020 13:51	WG1447912
1,1,1,2-Tetrachloroethane	U		0.000567	0.00283	1	03/21/2020 13:51	WG1447912
1,1,2,2-Tetrachloroethane	U		0.000442	0.00283	1	03/21/2020 13:51	WG1447912
1,1,2-Trichlorotrifluoroethane	U		0.000765	0.00283	1	03/21/2020 13:51	WG1447912
Tetrachloroethene	0.0143		0.000793	0.00283	1	03/21/2020 13:51	WG1447912
Toluene	U		0.00142	0.00567	1	03/21/2020 13:51	WG1447912
1,2,3-Trichlorobenzene	U		0.000708	0.0142	1	03/21/2020 13:51	WG1447912
1,2,4-Trichlorobenzene	U		0.00546	0.0142	1	03/21/2020 13:51	WG1447912
1,1,1-Trichloroethane	U		0.000312	0.00283	1	03/21/2020 13:51	WG1447912
1,1,2-Trichloroethane	U		0.00100	0.00283	1	03/21/2020 13:51	WG1447912
Trichloroethene	U		0.000453	0.00113	1	03/21/2020 13:51	WG1447912
Trichlorofluoromethane	U		0.000567	0.00283	1	03/21/2020 13:51	WG1447912
1,2,3-Trichloropropane	U		0.00578	0.0142	1	03/21/2020 13:51	WG1447912
1,2,4-Trimethylbenzene	U		0.00131	0.00567	1	03/21/2020 13:51	WG1447912
1,2,3-Trimethylbenzene	U		0.00130	0.00567	1	03/21/2020 13:51	WG1447912
1,3,5-Trimethylbenzene	U		0.00122	0.00567	1	03/21/2020 13:51	WG1447912
Vinyl acetate	U	UJ J0	0.00399	0.0142	1	03/21/2020 13:51	WG1447912
Vinyl chloride	U		0.000774	0.00283	1	03/21/2020 13:51	WG1447912
Xylenes, Total	U		0.00542	0.00737	1	03/21/2020 13:51	WG1447912
(S) Toluene-d8	*106*			*75.0-131*		*03/21/2020 13:51*	WG1447912
(S) 4-Bromofluorobenzene	*100*			*67.0-138*		*03/21/2020 13:51*	WG1447912
(S) 1,2-Dichloroethane-d4	*99.9*			*70.0-130*		*03/21/2020 13:51*	WG1447912

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Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	87.7		1	03/21/2020 19:42	WG1447726

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	U		0.967	2.85	25	03/21/2020 14:06	WG1447775
(S) a,a,a-Trifluorotoluene(FID)	*99.1*			*77.0-120*		*03/21/2020 14:06*	WG1447775

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

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	U		0.0156	0.0285	1	03/21/2020 14:10	WG1447912
Acrylonitrile	U		0.00217	0.0143	1	03/21/2020 14:10	WG1447912
Benzene	U		0.000456	0.00114	1	03/21/2020 14:10	WG1447912
Bromobenzene	U		0.00120	0.0143	1	03/21/2020 14:10	WG1447912
Bromodichloromethane	U		0.000898	0.00285	1	03/21/2020 14:10	WG1447912
Bromochloromethane	U		0.00129	0.00570	1	03/21/2020 14:10	WG1447912
Bromoform	U		0.00682	0.0285	1	03/21/2020 14:10	WG1447912
Bromomethane	U		0.00422	0.0143	1	03/21/2020 14:10	WG1447912
n-Butylbenzene	U		0.00438	0.0143	1	03/21/2020 14:10	WG1447912
sec-Butylbenzene	U		0.00288	0.0143	1	03/21/2020 14:10	WG1447912
tert-Butylbenzene	U		0.00177	0.00570	1	03/21/2020 14:10	WG1447912
Carbon disulfide	U		0.00463	0.0143	1	03/21/2020 14:10	WG1447912
Carbon tetrachloride	U		0.00123	0.00570	1	03/21/2020 14:10	WG1447912
Chlorobenzene	U		0.000653	0.00285	1	03/21/2020 14:10	WG1447912
Chlorodibromomethane	U		0.000513	0.00285	1	03/21/2020 14:10	WG1447912
Chloroethane	U		0.00123	0.00570	1	03/21/2020 14:10	WG1447912
Chloroform	U		0.000473	0.00285	1	03/21/2020 14:10	WG1447912
Chloromethane	U UJ	J0	0.00158	0.0143	1	03/21/2020 14:10	WG1447912
2-Chlorotoluene	U		0.00105	0.00285	1	03/21/2020 14:10	WG1447912
4-Chlorotoluene	U		0.00129	0.00570	1	03/21/2020 14:10	WG1447912
1,2-Dibromo-3-Chloropropane	U		0.00581	0.0285	1	03/21/2020 14:10	WG1447912
1,2-Dibromoethane	U		0.000599	0.00285	1	03/21/2020 14:10	WG1447912
Dibromomethane	U		0.00114	0.00570	1	03/21/2020 14:10	WG1447912
1,2-Dichlorobenzene	U		0.00165	0.00570	1	03/21/2020 14:10	WG1447912
1,3-Dichlorobenzene	U		0.00194	0.00570	1	03/21/2020 14:10	WG1447912
1,4-Dichlorobenzene	U		0.00225	0.00570	1	03/21/2020 14:10	WG1447912
Dichlorodifluoromethane	U		0.000933	0.00285	1	03/21/2020 14:10	WG1447912
1,1-Dichloroethane	U		0.000656	0.00285	1	03/21/2020 14:10	WG1447912
1,2-Dichloroethane	U		0.000542	0.00285	1	03/21/2020 14:10	WG1447912
1,1-Dichloroethene	U		0.000570	0.00285	1	03/21/2020 14:10	WG1447912
cis-1,2-Dichloroethene	U		0.000787	0.00285	1	03/21/2020 14:10	WG1447912
trans-1,2-Dichloroethene	U		0.00163	0.00570	1	03/21/2020 14:10	WG1447912
1,2-Dichloropropane	U		0.00145	0.00570	1	03/21/2020 14:10	WG1447912
1,1-Dichloropropene	U		0.000798	0.00285	1	03/21/2020 14:10	WG1447912
1,3-Dichloropropane	U		0.00200	0.00570	1	03/21/2020 14:10	WG1447912
cis-1,3-Dichloropropene	U		0.000773	0.00285	1	03/21/2020 14:10	WG1447912
trans-1,3-Dichloropropene	U		0.00174	0.00570	1	03/21/2020 14:10	WG1447912
trans-1,4-Dichloro-2-butene	U		0.00160	0.00570	1	03/21/2020 14:10	WG1447912
2,2-Dichloropropane	U		0.000904	0.00285	1	03/21/2020 14:10	WG1447912
Di-isopropyl ether	U		0.000399	0.00114	1	03/21/2020 14:10	WG1447912
Ethylbenzene	U		0.000604	0.00285	1	03/21/2020 14:10	WG1447912
Hexachloro-1,3-butadiene	U		0.0145	0.0285	1	03/21/2020 14:10	WG1447912
2-Hexanone	U		0.0114	0.0285	1	03/21/2020 14:10	WG1447912
n-Hexane	U		0.00121	0.00570	1	03/21/2020 14:10	WG1447912

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

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Iodomethane	U		0.00690	0.0143	1	03/21/2020 14:10	WG1447912
Isopropylbenzene	U		0.000984	0.00285	1	03/21/2020 14:10	WG1447912
p-Isopropyltoluene	U		0.00266	0.00570	1	03/21/2020 14:10	WG1447912
2-Butanone (MEK)	0.0154 U	~~B J~~	0.0143	0.0285	1	03/21/2020 14:10	WG1447912
Methylene Chloride	U		0.00757	0.0285	1	03/21/2020 14:10	WG1447912
4-Methyl-2-pentanone (MIBK)	U		0.0114	0.0285	1	03/21/2020 14:10	WG1447912
Methyl tert-butyl ether	U		0.000336	0.00114	1	03/21/2020 14:10	WG1447912
Naphthalene	0.00367 U	~~B J~~	0.00356	0.0143	1	03/21/2020 14:10	WG1447912
n-Propylbenzene	U		0.00135	0.00570	1	03/21/2020 14:10	WG1447912
Styrene	U		0.00311	0.0143	1	03/21/2020 14:10	WG1447912
1,1,1,2-Tetrachloroethane	U		0.000570	0.00285	1	03/21/2020 14:10	WG1447912
1,1,2,2-Tetrachloroethane	U		0.000445	0.00285	1	03/21/2020 14:10	WG1447912
1,1,2-Trichlorotrifluoroethane	U		0.000770	0.00285	1	03/21/2020 14:10	WG1447912
Tetrachloroethene	0.00386		0.000798	0.00285	1	03/21/2020 14:10	WG1447912
Toluene	U		0.00143	0.00570	1	03/21/2020 14:10	WG1447912
1,2,3-Trichlorobenzene	U		0.000713	0.0143	1	03/21/2020 14:10	WG1447912
1,2,4-Trichlorobenzene	U		0.00550	0.0143	1	03/21/2020 14:10	WG1447912
1,1,1-Trichloroethane	U		0.000314	0.00285	1	03/21/2020 14:10	WG1447912
1,1,2-Trichloroethane	U		0.00101	0.00285	1	03/21/2020 14:10	WG1447912
Trichloroethene	U		0.000456	0.00114	1	03/21/2020 14:10	WG1447912
Trichlorofluoromethane	U		0.000570	0.00285	1	03/21/2020 14:10	WG1447912
1,2,3-Trichloropropane	U		0.00581	0.0143	1	03/21/2020 14:10	WG1447912
1,2,4-Trimethylbenzene	U		0.00132	0.00570	1	03/21/2020 14:10	WG1447912
1,2,3-Trimethylbenzene	U		0.00131	0.00570	1	03/21/2020 14:10	WG1447912
1,3,5-Trimethylbenzene	U		0.00123	0.00570	1	03/21/2020 14:10	WG1447912
Vinyl acetate	U UJ	J0	0.00401	0.0143	1	03/21/2020 14:10	WG1447912
Vinyl chloride	U		0.000779	0.00285	1	03/21/2020 14:10	WG1447912
Xylenes, Total	U		0.00545	0.00741	1	03/21/2020 14:10	WG1447912
(S) Toluene-d8	*105*			*75.0-131*		*03/21/2020 14:10*	WG1447912
(S) 4-Bromofluorobenzene	*96.9*			*67.0-138*		*03/21/2020 14:10*	WG1447912
(S) 1,2-Dichloroethane-d4	*97.4*			*70.0-130*		*03/21/2020 14:10*	WG1447912

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

JC 4/20/2020

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

Total Solids by Method 2540 G-2011

	Result	Qualifier	Dilution	Analysis	Batch
Analyte	%			date / time	
Total Solids	90.5		1	03/21/2020 19:16	WG1447729

Volatile Organic Compounds (GC) by Method NWTPHGX

	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg		date / time	
Gasoline Range Organics-NWTPH	U		0.937	2.76	25	03/21/2020 14:29	WG1447775
(S) a,a,a-Trifluorotoluene(FID)	*98.9*			*77.0-120*		*03/21/2020 14:29*	WG1447775

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

	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg		date / time	
Acetone	U	~~J3~~	0.0151	0.0276	1	03/21/2020 14:37	WG1447922
Acrylonitrile	U		0.00210	0.0138	1	03/21/2020 14:37	WG1447922
Benzene	U		0.000442	0.00110	1	03/21/2020 14:37	WG1447922
Bromobenzene	U		0.00116	0.0138	1	03/21/2020 14:37	WG1447922
Bromodichloromethane	U		0.000870	0.00276	1	03/21/2020 14:37	WG1447922
Bromochloromethane	U	~~J4~~	0.00125	0.00552	1	03/21/2020 14:37	WG1447922
Bromoform	U		0.00661	0.0276	1	03/21/2020 14:37	WG1447922
Bromomethane	U		0.00409	0.0138	1	03/21/2020 14:37	WG1447922
n-Butylbenzene	U		0.00424	0.0138	1	03/21/2020 14:37	WG1447922
sec-Butylbenzene	U		0.00279	0.0138	1	03/21/2020 14:37	WG1447922
tert-Butylbenzene	U		0.00171	0.00552	1	03/21/2020 14:37	WG1447922
Carbon disulfide	U		0.00448	0.0138	1	03/21/2020 14:37	WG1447922
Carbon tetrachloride	U		0.00119	0.00552	1	03/21/2020 14:37	WG1447922
Chlorobenzene	U		0.000633	0.00276	1	03/21/2020 14:37	WG1447922
Chlorodibromomethane	U		0.000497	0.00276	1	03/21/2020 14:37	WG1447922
Chloroethane	U		0.00119	0.00552	1	03/21/2020 14:37	WG1447922
Chloroform	U		0.000458	0.00276	1	03/21/2020 14:37	WG1447922
Chloromethane	U		0.00154	0.0138	1	03/21/2020 14:37	WG1447922
2-Chlorotoluene	U		0.00102	0.00276	1	03/21/2020 14:37	WG1447922
4-Chlorotoluene	U		0.00125	0.00552	1	03/21/2020 14:37	WG1447922
1,2-Dibromo-3-Chloropropane	U		0.00563	0.0276	1	03/21/2020 14:37	WG1447922
1,2-Dibromoethane	U		0.000580	0.00276	1	03/21/2020 14:37	WG1447922
Dibromomethane	U		0.00110	0.00552	1	03/21/2020 14:37	WG1447922
1,2-Dichlorobenzene	U		0.00160	0.00552	1	03/21/2020 14:37	WG1447922
1,3-Dichlorobenzene	U		0.00188	0.00552	1	03/21/2020 14:37	WG1447922
1,4-Dichlorobenzene	U		0.00218	0.00552	1	03/21/2020 14:37	WG1447922
Dichlorodifluoromethane	U		0.000904	0.00276	1	03/21/2020 14:37	WG1447922
1,1-Dichloroethane	U		0.000635	0.00276	1	03/21/2020 14:37	WG1447922
1,2-Dichloroethane	U		0.000525	0.00276	1	03/21/2020 14:37	WG1447922
1,1-Dichloroethene	U		0.000552	0.00276	1	03/21/2020 14:37	WG1447922
cis-1,2-Dichloroethene	U		0.000762	0.00276	1	03/21/2020 14:37	WG1447922
trans-1,2-Dichloroethene	U		0.00158	0.00552	1	03/21/2020 14:37	WG1447922
1,2-Dichloropropane	U		0.00140	0.00552	1	03/21/2020 14:37	WG1447922
1,1-Dichloropropene	U		0.000773	0.00276	1	03/21/2020 14:37	WG1447922
1,3-Dichloropropane	U		0.00193	0.00552	1	03/21/2020 14:37	WG1447922
cis-1,3-Dichloropropene	U		0.000749	0.00276	1	03/21/2020 14:37	WG1447922
trans-1,3-Dichloropropene	U		0.00169	0.00552	1	03/21/2020 14:37	WG1447922
trans-1,4-Dichloro-2-butene	U		0.00155	0.00552	1	03/21/2020 14:37	WG1447922
2,2-Dichloropropane	U		0.000876	0.00276	1	03/21/2020 14:37	WG1447922
Di-isopropyl ether	U		0.000387	0.00110	1	03/21/2020 14:37	WG1447922
Ethylbenzene	U		0.000585	0.00276	1	03/21/2020 14:37	WG1447922
Hexachloro-1,3-butadiene	U		0.0140	0.0276	1	03/21/2020 14:37	WG1447922
2-Hexanone	U		0.0110	0.0276	1	03/21/2020 14:37	WG1447922
n-Hexane	U		0.00117	0.00552	1	03/21/2020 14:37	WG1447922

JC 4/20/2020

B-282-4

Collected date/time: 03/18/20 12:30

SAMPLE RESULTS - 16

L1200814

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

Analyte	Result (dry) mg/kg		Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Iodomethane	U			0.00668	0.0138	1	03/21/2020 14:37	WG1447922
Isopropylbenzene	U			0.000953	0.00276	1	03/21/2020 14:37	WG1447922
p-Isopropyltoluene	U			0.00257	0.00552	1	03/21/2020 14:37	WG1447922
2-Butanone (MEK)	0.0154	U	~~B J~~	0.0138	0.0276	1	03/21/2020 14:37	WG1447922
Methylene Chloride	U			0.00733	0.0276	1	03/21/2020 14:37	WG1447922
4-Methyl-2-pentanone (MIBK)	U			0.0110	0.0276	1	03/21/2020 14:37	WG1447922
Methyl tert-butyl ether	U			0.000326	0.00110	1	03/21/2020 14:37	WG1447922
Naphthalene	U			0.00345	0.0138	1	03/21/2020 14:37	WG1447922
n-Propylbenzene	U			0.00130	0.00552	1	03/21/2020 14:37	WG1447922
Styrene	U			0.00302	0.0138	1	03/21/2020 14:37	WG1447922
1,1,1,2-Tetrachloroethane	U			0.000552	0.00276	1	03/21/2020 14:37	WG1447922
1,1,2,2-Tetrachloroethane	U			0.000431	0.00276	1	03/21/2020 14:37	WG1447922
1,1,2-Trichlorotrifluoroethane	U			0.000746	0.00276	1	03/21/2020 14:37	WG1447922
Tetrachloroethene	0.00214	J	J	0.000773	0.00276	1	03/21/2020 14:37	WG1447922
Toluene	U			0.00138	0.00552	1	03/21/2020 14:37	WG1447922
1,2,3-Trichlorobenzene	U			0.000690	0.0138	1	03/21/2020 14:37	WG1447922
1,2,4-Trichlorobenzene	U			0.00532	0.0138	1	03/21/2020 14:37	WG1447922
1,1,1-Trichloroethane	U			0.000304	0.00276	1	03/21/2020 14:37	WG1447922
1,1,2-Trichloroethane	U			0.000975	0.00276	1	03/21/2020 14:37	WG1447922
Trichloroethene	U			0.000442	0.00110	1	03/21/2020 14:37	WG1447922
Trichlorofluoromethane	U			0.000552	0.00276	1	03/21/2020 14:37	WG1447922
1,2,3-Trichloropropane	U			0.00563	0.0138	1	03/21/2020 14:37	WG1447922
1,2,4-Trimethylbenzene	U			0.00128	0.00552	1	03/21/2020 14:37	WG1447922
1,2,3-Trimethylbenzene	U			0.00127	0.00552	1	03/21/2020 14:37	WG1447922
1,3,5-Trimethylbenzene	U			0.00119	0.00552	1	03/21/2020 14:37	WG1447922
Vinyl acetate	U	UJ	J0	0.00389	0.0138	1	03/21/2020 14:37	WG1447922
Vinyl chloride	U			0.000754	0.00276	1	03/21/2020 14:37	WG1447922
Xylenes, Total	U			0.00528	0.00718	1	03/21/2020 14:37	WG1447922
(S) Toluene-d8	*114*				*75.0-131*		*03/21/2020 14:37*	WG1447922
(S) 4-Bromofluorobenzene	*94.2*				*67.0-138*		*03/21/2020 14:37*	WG1447922
(S) 1,2-Dichloroethane-d4	*92.1*				*70.0-130*		*03/21/2020 14:37*	WG1447922

JC 4/20/2020

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	94.0		1	03/21/2020 19:16	WG1447729

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	U		0.903	2.66	25	03/21/2020 15:18	WG1447775
(S) a,a,a-Trifluorotoluene(FID)	*101*			*77.0-120*		*03/21/2020 15:18*	WG1447775

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

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	U	~~J3~~	0.0146	0.0266	1	03/21/2020 14:56	WG1447922
Acrylonitrile	U		0.00202	0.0133	1	03/21/2020 14:56	WG1447922
Benzene	U		0.000426	0.00106	1	03/21/2020 14:56	WG1447922
Bromobenzene	U		0.00112	0.0133	1	03/21/2020 14:56	WG1447922
Bromodichloromethane	U		0.000839	0.00266	1	03/21/2020 14:56	WG1447922
Bromochloromethane	U	~~J4~~	0.00120	0.00532	1	03/21/2020 14:56	WG1447922
Bromoform	U		0.00636	0.0266	1	03/21/2020 14:56	WG1447922
Bromomethane	U		0.00394	0.0133	1	03/21/2020 14:56	WG1447922
n-Butylbenzene	U		0.00409	0.0133	1	03/21/2020 14:56	WG1447922
sec-Butylbenzene	U		0.00269	0.0133	1	03/21/2020 14:56	WG1447922
tert-Butylbenzene	U		0.00165	0.00532	1	03/21/2020 14:56	WG1447922
Carbon disulfide	U		0.00432	0.0133	1	03/21/2020 14:56	WG1447922
Carbon tetrachloride	U		0.00115	0.00532	1	03/21/2020 14:56	WG1447922
Chlorobenzene	U		0.000610	0.00266	1	03/21/2020 14:56	WG1447922
Chlorodibromomethane	U		0.000479	0.00266	1	03/21/2020 14:56	WG1447922
Chloroethane	U		0.00115	0.00532	1	03/21/2020 14:56	WG1447922
Chloroform	U		0.000442	0.00266	1	03/21/2020 14:56	WG1447922
Chloromethane	U		0.00148	0.0133	1	03/21/2020 14:56	WG1447922
2-Chlorotoluene	U		0.000979	0.00266	1	03/21/2020 14:56	WG1447922
4-Chlorotoluene	U		0.00120	0.00532	1	03/21/2020 14:56	WG1447922
1,2-Dibromo-3-Chloropropane	U		0.00543	0.0266	1	03/21/2020 14:56	WG1447922
1,2-Dibromoethane	U		0.000559	0.00266	1	03/21/2020 14:56	WG1447922
Dibromomethane	U		0.00106	0.00532	1	03/21/2020 14:56	WG1447922
1,2-Dichlorobenzene	U		0.00154	0.00532	1	03/21/2020 14:56	WG1447922
1,3-Dichlorobenzene	U		0.00181	0.00532	1	03/21/2020 14:56	WG1447922
1,4-Dichlorobenzene	U		0.00210	0.00532	1	03/21/2020 14:56	WG1447922
Dichlorodifluoromethane	U		0.000871	0.00266	1	03/21/2020 14:56	WG1447922
1,1-Dichloroethane	U		0.000612	0.00266	1	03/21/2020 14:56	WG1447922
1,2-Dichloroethane	U		0.000506	0.00266	1	03/21/2020 14:56	WG1447922
1,1-Dichloroethene	U		0.000532	0.00266	1	03/21/2020 14:56	WG1447922
cis-1,2-Dichloroethene	U		0.000734	0.00266	1	03/21/2020 14:56	WG1447922
trans-1,2-Dichloroethene	U		0.00152	0.00532	1	03/21/2020 14:56	WG1447922
1,2-Dichloropropane	U		0.00135	0.00532	1	03/21/2020 14:56	WG1447922
1,1-Dichloropropene	U		0.000745	0.00266	1	03/21/2020 14:56	WG1447922
1,3-Dichloropropane	U		0.00186	0.00532	1	03/21/2020 14:56	WG1447922
cis-1,3-Dichloropropene	U		0.000722	0.00266	1	03/21/2020 14:56	WG1447922
trans-1,3-Dichloropropene	U		0.00163	0.00532	1	03/21/2020 14:56	WG1447922
trans-1,4-Dichloro-2-butene	U		0.00149	0.00532	1	03/21/2020 14:56	WG1447922
2,2-Dichloropropane	U		0.000844	0.00266	1	03/21/2020 14:56	WG1447922
Di-isopropyl ether	U		0.000372	0.00106	1	03/21/2020 14:56	WG1447922
Ethylbenzene	U		0.000564	0.00266	1	03/21/2020 14:56	WG1447922
Hexachloro-1,3-butadiene	U		0.0135	0.0266	1	03/21/2020 14:56	WG1447922
2-Hexanone	U		0.0106	0.0266	1	03/21/2020 14:56	WG1447922
n-Hexane	U		0.00113	0.00532	1	03/21/2020 14:56	WG1447922

JC 4/20/2020

B-971-5

Collected date/time: 03/18/20 13:30

SAMPLE RESULTS - 17

L1200814

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

Analyte	Result (dry) mg/kg		Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Iodomethane	U			0.00644	0.0133	1	03/21/2020 14:56	WG1447922
Isopropylbenzene	U			0.000918	0.00266	1	03/21/2020 14:56	WG1447922
p-Isopropyltoluene	U			0.00248	0.00532	1	03/21/2020 14:56	WG1447922
2-Butanone (MEK)	U			0.0133	0.0266	1	03/21/2020 14:56	WG1447922
Methylene Chloride	U			0.00707	0.0266	1	03/21/2020 14:56	WG1447922
4-Methyl-2-pentanone (MIBK)	U			0.0106	0.0266	1	03/21/2020 14:56	WG1447922
Methyl tert-butyl ether	U			0.000314	0.00106	1	03/21/2020 14:56	WG1447922
Naphthalene	U			0.00332	0.0133	1	03/21/2020 14:56	WG1447922
n-Propylbenzene	U			0.00126	0.00532	1	03/21/2020 14:56	WG1447922
Styrene	U			0.00291	0.0133	1	03/21/2020 14:56	WG1447922
1,1,1,2-Tetrachloroethane	U			0.000532	0.00266	1	03/21/2020 14:56	WG1447922
1,1,2,2-Tetrachloroethane	U			0.000415	0.00266	1	03/21/2020 14:56	WG1447922
1,1,2-Trichlorotrifluoroethane	U			0.000718	0.00266	1	03/21/2020 14:56	WG1447922
Tetrachloroethene	0.00200	J	J	0.000745	0.00266	1	03/21/2020 14:56	WG1447922
Toluene	U			0.00133	0.00532	1	03/21/2020 14:56	WG1447922
1,2,3-Trichlorobenzene	U			0.000665	0.0133	1	03/21/2020 14:56	WG1447922
1,2,4-Trichlorobenzene	U			0.00513	0.0133	1	03/21/2020 14:56	WG1447922
1,1,1-Trichloroethane	U			0.000293	0.00266	1	03/21/2020 14:56	WG1447922
1,1,2-Trichloroethane	U			0.000940	0.00266	1	03/21/2020 14:56	WG1447922
Trichloroethene	U			0.000426	0.00106	1	03/21/2020 14:56	WG1447922
Trichlorofluoromethane	U			0.000532	0.00266	1	03/21/2020 14:56	WG1447922
1,2,3-Trichloropropane	U			0.00543	0.0133	1	03/21/2020 14:56	WG1447922
1,2,4-Trimethylbenzene	U			0.00123	0.00532	1	03/21/2020 14:56	WG1447922
1,2,3-Trimethylbenzene	U			0.00122	0.00532	1	03/21/2020 14:56	WG1447922
1,3,5-Trimethylbenzene	U			0.00115	0.00532	1	03/21/2020 14:56	WG1447922
Vinyl acetate	U	UJ	J0	0.00375	0.0133	1	03/21/2020 14:56	WG1447922
Vinyl chloride	U			0.000727	0.00266	1	03/21/2020 14:56	WG1447922
Xylenes, Total	U			0.00509	0.00692	1	03/21/2020 14:56	WG1447922
(S) Toluene-d8	*112*				*75.0-131*		*03/21/2020 14:56*	WG1447922
(S) 4-Bromofluorobenzene	*92.9*				*67.0-138*		*03/21/2020 14:56*	WG1447922
(S) 1,2-Dichloroethane-d4	*94.0*				*70.0-130*		*03/21/2020 14:56*	WG1447922

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

JC 4/20/2020

B-268-1

Collected date/time: 03/17/20 07:55

SAMPLE RESULTS - 01

L1200909

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	80.6		1	03/22/2020 02:30	WG1447739

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	U		1.05	3.10	25	03/21/2020 23:52	WG1447924
(S) a,a,a-Trifluorotoluene(FID)	*98.2*			*77.0-120*		*03/21/2020 23:52*	WG1447924

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

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	U	~~J3~~	0.0170	0.0310	1	03/21/2020 15:14	WG1447922
Acrylonitrile	U		0.00236	0.0155	1	03/21/2020 15:14	WG1447922
Benzene	U		0.000496	0.00124	1	03/21/2020 15:14	WG1447922
Bromobenzene	U		0.00130	0.0155	1	03/21/2020 15:14	WG1447922
Bromodichloromethane	U		0.000977	0.00310	1	03/21/2020 15:14	WG1447922
Bromochloromethane	U	~~J4~~	0.00140	0.00620	1	03/21/2020 15:14	WG1447922
Bromoform	U		0.00742	0.0310	1	03/21/2020 15:14	WG1447922
Bromomethane	U		0.00459	0.0155	1	03/21/2020 15:14	WG1447922
n-Butylbenzene	U		0.00476	0.0155	1	03/21/2020 15:14	WG1447922
sec-Butylbenzene	U		0.00314	0.0155	1	03/21/2020 15:14	WG1447922
tert-Butylbenzene	U		0.00192	0.00620	1	03/21/2020 15:14	WG1447922
Carbon disulfide	U		0.00504	0.0155	1	03/21/2020 15:14	WG1447922
Carbon tetrachloride	U		0.00134	0.00620	1	03/21/2020 15:14	WG1447922
Chlorobenzene	U		0.000711	0.00310	1	03/21/2020 15:14	WG1447922
Chlorodibromomethane	U		0.000558	0.00310	1	03/21/2020 15:14	WG1447922
Chloroethane	U		0.00134	0.00620	1	03/21/2020 15:14	WG1447922
Chloroform	U		0.000515	0.00310	1	03/21/2020 15:14	WG1447922
Chloromethane	U		0.00172	0.0155	1	03/21/2020 15:14	WG1447922
2-Chlorotoluene	U		0.00114	0.00310	1	03/21/2020 15:14	WG1447922
4-Chlorotoluene	U		0.00140	0.00620	1	03/21/2020 15:14	WG1447922
1,2-Dibromo-3-Chloropropane	U		0.00633	0.0310	1	03/21/2020 15:14	WG1447922
1,2-Dibromoethane	U		0.000651	0.00310	1	03/21/2020 15:14	WG1447922
Dibromomethane	U		0.00124	0.00620	1	03/21/2020 15:14	WG1447922
1,2-Dichlorobenzene	U		0.00180	0.00620	1	03/21/2020 15:14	WG1447922
1,3-Dichlorobenzene	U		0.00211	0.00620	1	03/21/2020 15:14	WG1447922
1,4-Dichlorobenzene	U		0.00244	0.00620	1	03/21/2020 15:14	WG1447922
Dichlorodifluoromethane	U		0.00101	0.00310	1	03/21/2020 15:14	WG1447922
1,1-Dichloroethane	U		0.000713	0.00310	1	03/21/2020 15:14	WG1447922
1,2-Dichloroethane	U		0.000589	0.00310	1	03/21/2020 15:14	WG1447922
1,1-Dichloroethene	U		0.000620	0.00310	1	03/21/2020 15:14	WG1447922
cis-1,2-Dichloroethene	U		0.000856	0.00310	1	03/21/2020 15:14	WG1447922
trans-1,2-Dichloroethene	U		0.00177	0.00620	1	03/21/2020 15:14	WG1447922
1,2-Dichloropropane	U		0.00158	0.00620	1	03/21/2020 15:14	WG1447922
1,1-Dichloropropene	U		0.000868	0.00310	1	03/21/2020 15:14	WG1447922
1,3-Dichloropropane	U		0.00217	0.00620	1	03/21/2020 15:14	WG1447922
cis-1,3-Dichloropropene	U		0.000841	0.00310	1	03/21/2020 15:14	WG1447922
trans-1,3-Dichloropropene	U		0.00190	0.00620	1	03/21/2020 15:14	WG1447922
trans-1,4-Dichloro-2-butene	U		0.00174	0.00620	1	03/21/2020 15:14	WG1447922
2,2-Dichloropropane	U		0.000984	0.00310	1	03/21/2020 15:14	WG1447922
Di-isopropyl ether	U		0.000434	0.00124	1	03/21/2020 15:14	WG1447922
Ethylbenzene	U		0.000657	0.00310	1	03/21/2020 15:14	WG1447922
Hexachloro-1,3-butadiene	U		0.0158	0.0310	1	03/21/2020 15:14	WG1447922
2-Hexanone	U		0.0124	0.0310	1	03/21/2020 15:14	WG1447922
n-Hexane	U		0.00131	0.00620	1	03/21/2020 15:14	WG1447922

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

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Iodomethane	U		0.00750	0.0155	1	03/21/2020 15:14	WG1447922
Isopropylbenzene	U		0.00107	0.00310	1	03/21/2020 15:14	WG1447922
p-Isopropyltoluene	U		0.00289	0.00620	1	03/21/2020 15:14	WG1447922
2-Butanone (MEK)	U		0.0155	0.0310	1	03/21/2020 15:14	WG1447922
Methylene Chloride	U		0.00824	0.0310	1	03/21/2020 15:14	WG1447922
4-Methyl-2-pentanone (MIBK)	U		0.0124	0.0310	1	03/21/2020 15:14	WG1447922
Methyl tert-butyl ether	U		0.000366	0.00124	1	03/21/2020 15:14	WG1447922
Naphthalene	U		0.00387	0.0155	1	03/21/2020 15:14	WG1447922
n-Propylbenzene	U		0.00146	0.00620	1	03/21/2020 15:14	WG1447922
Styrene	U		0.00339	0.0155	1	03/21/2020 15:14	WG1447922
1,1,1,2-Tetrachloroethane	U		0.000620	0.00310	1	03/21/2020 15:14	WG1447922
1,1,2,2-Tetrachloroethane	U		0.000484	0.00310	1	03/21/2020 15:14	WG1447922
1,1,2-Trichlorotrifluoroethane	U		0.000837	0.00310	1	03/21/2020 15:14	WG1447922
Tetrachloroethene	0.00381		0.000868	0.00310	1	03/21/2020 15:14	WG1447922
Toluene	U		0.00155	0.00620	1	03/21/2020 15:14	WG1447922
1,2,3-Trichlorobenzene	U		0.000775	0.0155	1	03/21/2020 15:14	WG1447922
1,2,4-Trichlorobenzene	U		0.00598	0.0155	1	03/21/2020 15:14	WG1447922
1,1,1-Trichloroethane	U		0.000341	0.00310	1	03/21/2020 15:14	WG1447922
1,1,2-Trichloroethane	U		0.00110	0.00310	1	03/21/2020 15:14	WG1447922
Trichloroethene	U		0.000496	0.00124	1	03/21/2020 15:14	WG1447922
Trichlorofluoromethane	U		0.000620	0.00310	1	03/21/2020 15:14	WG1447922
1,2,3-Trichloropropane	U		0.00633	0.0155	1	03/21/2020 15:14	WG1447922
1,2,4-Trimethylbenzene	U		0.00144	0.00620	1	03/21/2020 15:14	WG1447922
1,2,3-Trimethylbenzene	U		0.00143	0.00620	1	03/21/2020 15:14	WG1447922
1,3,5-Trimethylbenzene	U		0.00134	0.00620	1	03/21/2020 15:14	WG1447922
Vinyl acetate	U UJ	J0	0.00437	0.0155	1	03/21/2020 15:14	WG1447922
Vinyl chloride	U		0.000847	0.00310	1	03/21/2020 15:14	WG1447922
Xylenes, Total	U		0.00593	0.00806	1	03/21/2020 15:14	WG1447922
(S) Toluene-d8	*113*			*75.0-131*		*03/21/2020 15:14*	WG1447922
(S) 4-Bromofluorobenzene	*91.0*			*67.0-138*		*03/21/2020 15:14*	WG1447922
(S) 1,2-Dichloroethane-d4	*90.0*			*70.0-130*		*03/21/2020 15:14*	WG1447922

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Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	91.6		1	03/22/2020 02:30	WG1447739

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	U		0.926	2.73	25	03/22/2020 00:16	WG1447924
(S) a,a,a-Trifluorotoluene(FID)	*99.3*			*77.0-120*		*03/22/2020 00:16*	WG1447924

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

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	U	~~J3~~	0.0150	0.0273	1	03/21/2020 15:33	WG1447922
Acrylonitrile	U		0.00207	0.0137	1	03/21/2020 15:33	WG1447922
Benzene	0.000755 J	J	0.000437	0.00109	1	03/21/2020 15:33	WG1447922
Bromobenzene	U		0.00115	0.0137	1	03/21/2020 15:33	WG1447922
Bromodichloromethane	U		0.000861	0.00273	1	03/21/2020 15:33	WG1447922
Bromochloromethane	U	~~J4~~	0.00123	0.00546	1	03/21/2020 15:33	WG1447922
Bromoform	U		0.00653	0.0273	1	03/21/2020 15:33	WG1447922
Bromomethane	U		0.00404	0.0137	1	03/21/2020 15:33	WG1447922
n-Butylbenzene	U		0.00419	0.0137	1	03/21/2020 15:33	WG1447922
sec-Butylbenzene	U		0.00276	0.0137	1	03/21/2020 15:33	WG1447922
tert-Butylbenzene	U		0.00169	0.00546	1	03/21/2020 15:33	WG1447922
Carbon disulfide	U		0.00443	0.0137	1	03/21/2020 15:33	WG1447922
Carbon tetrachloride	U		0.00118	0.00546	1	03/21/2020 15:33	WG1447922
Chlorobenzene	U		0.000626	0.00273	1	03/21/2020 15:33	WG1447922
Chlorodibromomethane	U		0.000491	0.00273	1	03/21/2020 15:33	WG1447922
Chloroethane	U		0.00118	0.00546	1	03/21/2020 15:33	WG1447922
Chloroform	U		0.000453	0.00273	1	03/21/2020 15:33	WG1447922
Chloromethane	U		0.00152	0.0137	1	03/21/2020 15:33	WG1447922
2-Chlorotoluene	U		0.00100	0.00273	1	03/21/2020 15:33	WG1447922
4-Chlorotoluene	U		0.00123	0.00546	1	03/21/2020 15:33	WG1447922
1,2-Dibromo-3-Chloropropane	U		0.00557	0.0273	1	03/21/2020 15:33	WG1447922
1,2-Dibromoethane	U		0.000573	0.00273	1	03/21/2020 15:33	WG1447922
Dibromomethane	U		0.00109	0.00546	1	03/21/2020 15:33	WG1447922
1,2-Dichlorobenzene	U		0.00158	0.00546	1	03/21/2020 15:33	WG1447922
1,3-Dichlorobenzene	U		0.00186	0.00546	1	03/21/2020 15:33	WG1447922
1,4-Dichlorobenzene	U		0.00215	0.00546	1	03/21/2020 15:33	WG1447922
Dichlorodifluoromethane	U		0.000893	0.00273	1	03/21/2020 15:33	WG1447922
1,1-Dichloroethane	U		0.000628	0.00273	1	03/21/2020 15:33	WG1447922
1,2-Dichloroethane	U		0.000519	0.00273	1	03/21/2020 15:33	WG1447922
1,1-Dichloroethene	U		0.000546	0.00273	1	03/21/2020 15:33	WG1447922
cis-1,2-Dichloroethene	U		0.000754	0.00273	1	03/21/2020 15:33	WG1447922
trans-1,2-Dichloroethene	U		0.00156	0.00546	1	03/21/2020 15:33	WG1447922
1,2-Dichloropropane	U		0.00139	0.00546	1	03/21/2020 15:33	WG1447922
1,1-Dichloropropene	U		0.000764	0.00273	1	03/21/2020 15:33	WG1447922
1,3-Dichloropropane	U		0.00191	0.00546	1	03/21/2020 15:33	WG1447922
cis-1,3-Dichloropropene	U		0.000740	0.00273	1	03/21/2020 15:33	WG1447922
trans-1,3-Dichloropropene	U		0.00167	0.00546	1	03/21/2020 15:33	WG1447922
trans-1,4-Dichloro-2-butene	U		0.00153	0.00546	1	03/21/2020 15:33	WG1447922
2,2-Dichloropropane	U		0.000866	0.00273	1	03/21/2020 15:33	WG1447922
Di-isopropyl ether	U		0.000382	0.00109	1	03/21/2020 15:33	WG1447922
Ethylbenzene	0.00356		0.000579	0.00273	1	03/21/2020 15:33	WG1447922
Hexachloro-1,3-butadiene	U		0.0139	0.0273	1	03/21/2020 15:33	WG1447922
2-Hexanone	U		0.0109	0.0273	1	03/21/2020 15:33	WG1447922
n-Hexane	0.00615		0.00116	0.00546	1	03/21/2020 15:33	WG1447922

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

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Iodomethane	U		0.00661	0.0137	1	03/21/2020 15:33	WG1447922
Isopropylbenzene	0.00112 J	J	0.000942	0.00273	1	03/21/2020 15:33	WG1447922
p-Isopropyltoluene	U		0.00254	0.00546	1	03/21/2020 15:33	WG1447922
2-Butanone (MEK)	U		0.0137	0.0273	1	03/21/2020 15:33	WG1447922
Methylene Chloride	U		0.00725	0.0273	1	03/21/2020 15:33	WG1447922
4-Methyl-2-pentanone (MIBK)	U		0.0109	0.0273	1	03/21/2020 15:33	WG1447922
Methyl tert-butyl ether	U		0.000322	0.00109	1	03/21/2020 15:33	WG1447922
Naphthalene	0.00867 J	J	0.00341	0.0137	1	03/21/2020 15:33	WG1447922
n-Propylbenzene	0.00159 J	J	0.00129	0.00546	1	03/21/2020 15:33	WG1447922
Styrene	U		0.00298	0.0137	1	03/21/2020 15:33	WG1447922
1,1,1,2-Tetrachloroethane	U		0.000546	0.00273	1	03/21/2020 15:33	WG1447922
1,1,2,2-Tetrachloroethane	U		0.000426	0.00273	1	03/21/2020 15:33	WG1447922
1,1,2-Trichlorotrifluoroethane	U		0.000737	0.00273	1	03/21/2020 15:33	WG1447922
Tetrachloroethene	U		0.000764	0.00273	1	03/21/2020 15:33	WG1447922
Toluene	0.0161		0.00137	0.00546	1	03/21/2020 15:33	WG1447922
1,2,3-Trichlorobenzene	U		0.000683	0.0137	1	03/21/2020 15:33	WG1447922
1,2,4-Trichlorobenzene	U		0.00526	0.0137	1	03/21/2020 15:33	WG1447922
1,1,1-Trichloroethane	U		0.000300	0.00273	1	03/21/2020 15:33	WG1447922
1,1,2-Trichloroethane	U		0.000964	0.00273	1	03/21/2020 15:33	WG1447922
Trichloroethene	U		0.000437	0.00109	1	03/21/2020 15:33	WG1447922
Trichlorofluoromethane	U		0.000546	0.00273	1	03/21/2020 15:33	WG1447922
1,2,3-Trichloropropane	U		0.00557	0.0137	1	03/21/2020 15:33	WG1447922
1,2,4-Trimethylbenzene	0.0187		0.00127	0.00546	1	03/21/2020 15:33	WG1447922
1,2,3-Trimethylbenzene	0.0140		0.00126	0.00546	1	03/21/2020 15:33	WG1447922
1,3,5-Trimethylbenzene	0.00742		0.00118	0.00546	1	03/21/2020 15:33	WG1447922
Vinyl acetate	U UJ	J0	0.00384	0.0137	1	03/21/2020 15:33	WG1447922
Vinyl chloride	U		0.000746	0.00273	1	03/21/2020 15:33	WG1447922
Xylenes, Total	0.0659		0.00522	0.00710	1	03/21/2020 15:33	WG1447922
(S) Toluene-d8	*114*			*75.0-131*		*03/21/2020 15:33*	WG1447922
(S) 4-Bromofluorobenzene	*92.9*			*67.0-138*		*03/21/2020 15:33*	WG1447922
(S) 1,2-Dichloroethane-d4	*85.9*			*70.0-130*		*03/21/2020 15:33*	WG1447922

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

JC 4/20/2020

B-270-2
Collected date/time: 03/17/20 09:15

SAMPLE RESULTS - 03

L1200909

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	82.7		1	03/22/2020 02:30	WG1447739

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	82.5 Z, J+		1.03	3.02	25	03/22/2020 00:40	WG1447924
(S) a,a,a-Trifluorotoluene(FID)	*98.4*			*77.0-120*		*03/22/2020 00:40*	WG1447924

Sample Narrative:

L1200909-03 WG1447924: Chromatographic pattern most closely resembles diesel fuel.

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

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	U	~~J3~~	0.0166	0.0302	1	03/21/2020 15:52	WG1447922
Acrylonitrile	U		0.00230	0.0151	1	03/21/2020 15:52	WG1447922
Benzene	U		0.000484	0.00121	1	03/21/2020 15:52	WG1447922
Bromobenzene	U		0.00127	0.0151	1	03/21/2020 15:52	WG1447922
Bromodichloromethane	U		0.000953	0.00302	1	03/21/2020 15:52	WG1447922
Bromochloromethane	U	~~J4~~	0.00137	0.00605	1	03/21/2020 15:52	WG1447922
Bromoform	U		0.00723	0.0302	1	03/21/2020 15:52	WG1447922
Bromomethane	U		0.00448	0.0151	1	03/21/2020 15:52	WG1447922
n-Butylbenzene	0.0254		0.00464	0.0151	1	03/21/2020 15:52	WG1447922
sec-Butylbenzene	0.0275		0.00306	0.0151	1	03/21/2020 15:52	WG1447922
tert-Butylbenzene	U		0.00187	0.00605	1	03/21/2020 15:52	WG1447922
Carbon disulfide	U		0.00491	0.0151	1	03/21/2020 15:52	WG1447922
Carbon tetrachloride	U		0.00131	0.00605	1	03/21/2020 15:52	WG1447922
Chlorobenzene	U		0.000693	0.00302	1	03/21/2020 15:52	WG1447922
Chlorodibromomethane	U		0.000544	0.00302	1	03/21/2020 15:52	WG1447922
Chloroethane	U		0.00131	0.00605	1	03/21/2020 15:52	WG1447922
Chloroform	U		0.000502	0.00302	1	03/21/2020 15:52	WG1447922
Chloromethane	U		0.00168	0.0151	1	03/21/2020 15:52	WG1447922
2-Chlorotoluene	U		0.00111	0.00302	1	03/21/2020 15:52	WG1447922
4-Chlorotoluene	U		0.00137	0.00605	1	03/21/2020 15:52	WG1447922
1,2-Dibromo-3-Chloropropane	U		0.00617	0.0302	1	03/21/2020 15:52	WG1447922
1,2-Dibromoethane	U		0.000635	0.00302	1	03/21/2020 15:52	WG1447922
Dibromomethane	U		0.00121	0.00605	1	03/21/2020 15:52	WG1447922
1,2-Dichlorobenzene	U		0.00175	0.00605	1	03/21/2020 15:52	WG1447922
1,3-Dichlorobenzene	U		0.00206	0.00605	1	03/21/2020 15:52	WG1447922
1,4-Dichlorobenzene	U		0.00238	0.00605	1	03/21/2020 15:52	WG1447922
Dichlorodifluoromethane	U		0.000989	0.00302	1	03/21/2020 15:52	WG1447922
1,1-Dichloroethane	U		0.000695	0.00302	1	03/21/2020 15:52	WG1447922
1,2-Dichloroethane	U		0.000575	0.00302	1	03/21/2020 15:52	WG1447922
1,1-Dichloroethene	U		0.000605	0.00302	1	03/21/2020 15:52	WG1447922
cis-1,2-Dichloroethene	U		0.000835	0.00302	1	03/21/2020 15:52	WG1447922
trans-1,2-Dichloroethene	U		0.00173	0.00605	1	03/21/2020 15:52	WG1447922
1,2-Dichloropropane	U		0.00154	0.00605	1	03/21/2020 15:52	WG1447922
1,1-Dichloropropene	U		0.000847	0.00302	1	03/21/2020 15:52	WG1447922
1,3-Dichloropropane	U		0.00212	0.00605	1	03/21/2020 15:52	WG1447922
cis-1,3-Dichloropropene	U		0.000820	0.00302	1	03/21/2020 15:52	WG1447922
trans-1,3-Dichloropropene	U		0.00185	0.00605	1	03/21/2020 15:52	WG1447922
trans-1,4-Dichloro-2-butene	U		0.00169	0.00605	1	03/21/2020 15:52	WG1447922
2,2-Dichloropropane	U		0.000959	0.00302	1	03/21/2020 15:52	WG1447922
Di-isopropyl ether	U		0.000423	0.00121	1	03/21/2020 15:52	WG1447922
Ethylbenzene	0.00163 J	J	0.000641	0.00302	1	03/21/2020 15:52	WG1447922

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

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

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Hexachloro-1,3-butadiene	U		0.0154	0.0302	1	03/21/2020 15:52	WG1447922
2-Hexanone	U		0.0121	0.0302	1	03/21/2020 15:52	WG1447922
n-Hexane	U		0.00128	0.00605	1	03/21/2020 15:52	WG1447922
Iodomethane	U		0.00732	0.0151	1	03/21/2020 15:52	WG1447922
Isopropylbenzene	0.00347		0.00104	0.00302	1	03/21/2020 15:52	WG1447922
p-Isopropyltoluene	0.0129		0.00282	0.00605	1	03/21/2020 15:52	WG1447922
2-Butanone (MEK)	U		0.0151	0.0302	1	03/21/2020 15:52	WG1447922
Methylene Chloride	U		0.00803	0.0302	1	03/21/2020 15:52	WG1447922
4-Methyl-2-pentanone (MIBK)	U		0.0121	0.0302	1	03/21/2020 15:52	WG1447922
Methyl tert-butyl ether	U		0.000357	0.00121	1	03/21/2020 15:52	WG1447922
Naphthalene	U		0.00377	0.0151	1	03/21/2020 15:52	WG1447922
n-Propylbenzene	0.00824		0.00143	0.00605	1	03/21/2020 15:52	WG1447922
Styrene	U		0.00330	0.0151	1	03/21/2020 15:52	WG1447922
1,1,1,2-Tetrachloroethane	U		0.000605	0.00302	1	03/21/2020 15:52	WG1447922
1,1,2,2-Tetrachloroethane	U		0.000472	0.00302	1	03/21/2020 15:52	WG1447922
1,1,2-Trichlorotrifluoroethane	U		0.000816	0.00302	1	03/21/2020 15:52	WG1447922
Tetrachloroethene	U		0.000847	0.00302	1	03/21/2020 15:52	WG1447922
Toluene	U		0.00151	0.00605	1	03/21/2020 15:52	WG1447922
1,2,3-Trichlorobenzene	U		0.000756	0.0151	1	03/21/2020 15:52	WG1447922
1,2,4-Trichlorobenzene	U		0.00583	0.0151	1	03/21/2020 15:52	WG1447922
1,1,1-Trichloroethane	U		0.000333	0.00302	1	03/21/2020 15:52	WG1447922
1,1,2-Trichloroethane	U		0.00107	0.00302	1	03/21/2020 15:52	WG1447922
Trichloroethene	U		0.000484	0.00121	1	03/21/2020 15:52	WG1447922
Trichlorofluoromethane	U		0.000605	0.00302	1	03/21/2020 15:52	WG1447922
1,2,3-Trichloropropane	U		0.00617	0.0151	1	03/21/2020 15:52	WG1447922
1,2,4-Trimethylbenzene	0.0133		0.00140	0.00605	1	03/21/2020 15:52	WG1447922
1,2,3-Trimethylbenzene	0.166		0.00139	0.00605	1	03/21/2020 15:52	WG1447922
1,3,5-Trimethylbenzene	0.0947		0.00131	0.00605	1	03/21/2020 15:52	WG1447922
Vinyl acetate	U	UJ J0	0.00426	0.0151	1	03/21/2020 15:52	WG1447922
Vinyl chloride	U		0.000826	0.00302	1	03/21/2020 15:52	WG1447922
Xylenes, Total	0.0269		0.00578	0.00786	1	03/21/2020 15:52	WG1447922
(S) Toluene-d8	*110*			*75.0-131*		*03/21/2020 15:52*	WG1447922
(S) 4-Bromofluorobenzene	*112*			*67.0-138*		*03/21/2020 15:52*	WG1447922
(S) 1,2-Dichloroethane-d4	*91.9*			*70.0-130*		*03/21/2020 15:52*	WG1447922

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

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Diesel Range Organics (DRO)	114		1.61	4.84	1	03/25/2020 13:05	WG1448873
Residual Range Organics (RRO)	U		4.03	12.1	1	03/25/2020 13:05	WG1448873
(S) o-Terphenyl	*46.6*			*18.0-148*		*03/25/2020 13:05*	WG1448873

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Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	93.1		1	03/22/2020 02:30	WG1447739

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	U		0.910	2.68	25	03/22/2020 01:04	WG1447924
(S) a,a,a-Trifluorotoluene(FID)	*99.4*			*77.0-120*		*03/22/2020 01:04*	WG1447924

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

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	0.0272	~~J3~~	0.0147	0.0268	1	03/21/2020 16:11	WG1447922
Acrylonitrile	U		0.00204	0.0134	1	03/21/2020 16:11	WG1447922
Benzene	0.000639 J	J	0.000429	0.00107	1	03/21/2020 16:11	WG1447922
Bromobenzene	U		0.00113	0.0134	1	03/21/2020 16:11	WG1447922
Bromodichloromethane	U		0.000846	0.00268	1	03/21/2020 16:11	WG1447922
Bromochloromethane	U	~~J4~~	0.00121	0.00537	1	03/21/2020 16:11	WG1447922
Bromoform	U		0.00642	0.0268	1	03/21/2020 16:11	WG1447922
Bromomethane	U		0.00397	0.0134	1	03/21/2020 16:11	WG1447922
n-Butylbenzene	U		0.00412	0.0134	1	03/21/2020 16:11	WG1447922
sec-Butylbenzene	U		0.00272	0.0134	1	03/21/2020 16:11	WG1447922
tert-Butylbenzene	U		0.00166	0.00537	1	03/21/2020 16:11	WG1447922
Carbon disulfide	U		0.00436	0.0134	1	03/21/2020 16:11	WG1447922
Carbon tetrachloride	U		0.00116	0.00537	1	03/21/2020 16:11	WG1447922
Chlorobenzene	U		0.000615	0.00268	1	03/21/2020 16:11	WG1447922
Chlorodibromomethane	U		0.000483	0.00268	1	03/21/2020 16:11	WG1447922
Chloroethane	U		0.00116	0.00537	1	03/21/2020 16:11	WG1447922
Chloroform	U		0.000446	0.00268	1	03/21/2020 16:11	WG1447922
Chloromethane	U		0.00149	0.0134	1	03/21/2020 16:11	WG1447922
2-Chlorotoluene	U		0.000988	0.00268	1	03/21/2020 16:11	WG1447922
4-Chlorotoluene	U		0.00121	0.00537	1	03/21/2020 16:11	WG1447922
1,2-Dibromo-3-Chloropropane	U		0.00548	0.0268	1	03/21/2020 16:11	WG1447922
1,2-Dibromoethane	U		0.000564	0.00268	1	03/21/2020 16:11	WG1447922
Dibromomethane	U		0.00107	0.00537	1	03/21/2020 16:11	WG1447922
1,2-Dichlorobenzene	U		0.00156	0.00537	1	03/21/2020 16:11	WG1447922
1,3-Dichlorobenzene	U		0.00183	0.00537	1	03/21/2020 16:11	WG1447922
1,4-Dichlorobenzene	U		0.00212	0.00537	1	03/21/2020 16:11	WG1447922
Dichlorodifluoromethane	U		0.000878	0.00268	1	03/21/2020 16:11	WG1447922
1,1-Dichloroethane	U		0.000617	0.00268	1	03/21/2020 16:11	WG1447922
1,2-Dichloroethane	U		0.000510	0.00268	1	03/21/2020 16:11	WG1447922
1,1-Dichloroethene	U		0.000537	0.00268	1	03/21/2020 16:11	WG1447922
cis-1,2-Dichloroethene	U		0.000741	0.00268	1	03/21/2020 16:11	WG1447922
trans-1,2-Dichloroethene	U		0.00154	0.00537	1	03/21/2020 16:11	WG1447922
1,2-Dichloropropane	U		0.00136	0.00537	1	03/21/2020 16:11	WG1447922
1,1-Dichloropropene	U		0.000752	0.00268	1	03/21/2020 16:11	WG1447922
1,3-Dichloropropane	U		0.00188	0.00537	1	03/21/2020 16:11	WG1447922
cis-1,3-Dichloropropene	U		0.000728	0.00268	1	03/21/2020 16:11	WG1447922
trans-1,3-Dichloropropene	U		0.00164	0.00537	1	03/21/2020 16:11	WG1447922
trans-1,4-Dichloro-2-butene	U		0.00150	0.00537	1	03/21/2020 16:11	WG1447922
2,2-Dichloropropane	U		0.000851	0.00268	1	03/21/2020 16:11	WG1447922
Di-isopropyl ether	U		0.000376	0.00107	1	03/21/2020 16:11	WG1447922
Ethylbenzene	U		0.000569	0.00268	1	03/21/2020 16:11	WG1447922
Hexachloro-1,3-butadiene	U		0.0136	0.0268	1	03/21/2020 16:11	WG1447922
2-Hexanone	U		0.0107	0.0268	1	03/21/2020 16:11	WG1447922
n-Hexane	U		0.00114	0.00537	1	03/21/2020 16:11	WG1447922

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

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Iodomethane	U		0.00650	0.0134	1	03/21/2020 16:11	WG1447922
Isopropylbenzene	U		0.000927	0.00268	1	03/21/2020 16:11	WG1447922
p-Isopropyltoluene	U		0.00250	0.00537	1	03/21/2020 16:11	WG1447922
2-Butanone (MEK)	0.0458	~~B~~	0.0134	0.0268	1	03/21/2020 16:11	WG1447922
Methylene Chloride	U		0.00713	0.0268	1	03/21/2020 16:11	WG1447922
4-Methyl-2-pentanone (MIBK)	U		0.0107	0.0268	1	03/21/2020 16:11	WG1447922
Methyl tert-butyl ether	U		0.000317	0.00107	1	03/21/2020 16:11	WG1447922
Naphthalene	U		0.00335	0.0134	1	03/21/2020 16:11	WG1447922
n-Propylbenzene	U		0.00127	0.00537	1	03/21/2020 16:11	WG1447922
Styrene	U		0.00293	0.0134	1	03/21/2020 16:11	WG1447922
1,1,1,2-Tetrachloroethane	U		0.000537	0.00268	1	03/21/2020 16:11	WG1447922
1,1,2,2-Tetrachloroethane	U		0.000419	0.00268	1	03/21/2020 16:11	WG1447922
1,1,2-Trichlorotrifluoroethane	U		0.000725	0.00268	1	03/21/2020 16:11	WG1447922
Tetrachloroethene	0.00661		0.000752	0.00268	1	03/21/2020 16:11	WG1447922
Toluene	0.00144 J	J	0.00134	0.00537	1	03/21/2020 16:11	WG1447922
1,2,3-Trichlorobenzene	U		0.000671	0.0134	1	03/21/2020 16:11	WG1447922
1,2,4-Trichlorobenzene	U		0.00518	0.0134	1	03/21/2020 16:11	WG1447922
1,1,1-Trichloroethane	U		0.000295	0.00268	1	03/21/2020 16:11	WG1447922
1,1,2-Trichloroethane	U		0.000948	0.00268	1	03/21/2020 16:11	WG1447922
Trichloroethene	U		0.000429	0.00107	1	03/21/2020 16:11	WG1447922
Trichlorofluoromethane	U		0.000537	0.00268	1	03/21/2020 16:11	WG1447922
1,2,3-Trichloropropane	U		0.00548	0.0134	1	03/21/2020 16:11	WG1447922
1,2,4-Trimethylbenzene	U		0.00125	0.00537	1	03/21/2020 16:11	WG1447922
1,2,3-Trimethylbenzene	0.00126 J	J	0.00123	0.00537	1	03/21/2020 16:11	WG1447922
1,3,5-Trimethylbenzene	U		0.00116	0.00537	1	03/21/2020 16:11	WG1447922
Vinyl acetate	U UJ	J0	0.00378	0.0134	1	03/21/2020 16:11	WG1447922
Vinyl chloride	U		0.000733	0.00268	1	03/21/2020 16:11	WG1447922
Xylenes, Total	U		0.00513	0.00698	1	03/21/2020 16:11	WG1447922
(S) Toluene-d8	*114*			*75.0-131*		*03/21/2020 16:11*	WG1447922
(S) 4-Bromofluorobenzene	*95.1*			*67.0-138*		*03/21/2020 16:11*	WG1447922
(S) 1,2-Dichloroethane-d4	*86.1*			*70.0-130*		*03/21/2020 16:11*	WG1447922

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

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	84.8		1	03/22/2020 02:30	WG1447739

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	U		1.00	2.95	25	03/22/2020 01:28	WG1447924
(S) a,a,a-Trifluorotoluene(FID)	*98.9*			*77.0-120*		*03/22/2020 01:28*	WG1447924

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

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	U	~~J3~~	0.0162	0.0295	1	03/21/2020 16:30	WG1447922
Acrylonitrile	U		0.00224	0.0147	1	03/21/2020 16:30	WG1447922
Benzene	0.182		0.000472	0.00118	1	03/21/2020 16:30	WG1447922
Bromobenzene	U		0.00124	0.0147	1	03/21/2020 16:30	WG1447922
Bromodichloromethane	U		0.000929	0.00295	1	03/21/2020 16:30	WG1447922
Bromochloromethane	U	~~J4~~	0.00133	0.00590	1	03/21/2020 16:30	WG1447922
Bromoform	U		0.00705	0.0295	1	03/21/2020 16:30	WG1447922
Bromomethane	U		0.00436	0.0147	1	03/21/2020 16:30	WG1447922
n-Butylbenzene	U		0.00453	0.0147	1	03/21/2020 16:30	WG1447922
sec-Butylbenzene	U		0.00298	0.0147	1	03/21/2020 16:30	WG1447922
tert-Butylbenzene	U		0.00183	0.00590	1	03/21/2020 16:30	WG1447922
Carbon disulfide	U		0.00479	0.0147	1	03/21/2020 16:30	WG1447922
Carbon tetrachloride	U		0.00127	0.00590	1	03/21/2020 16:30	WG1447922
Chlorobenzene	U		0.000676	0.00295	1	03/21/2020 16:30	WG1447922
Chlorodibromomethane	U		0.000531	0.00295	1	03/21/2020 16:30	WG1447922
Chloroethane	U		0.00127	0.00590	1	03/21/2020 16:30	WG1447922
Chloroform	U		0.000489	0.00295	1	03/21/2020 16:30	WG1447922
Chloromethane	U		0.00164	0.0147	1	03/21/2020 16:30	WG1447922
2-Chlorotoluene	U		0.00108	0.00295	1	03/21/2020 16:30	WG1447922
4-Chlorotoluene	U		0.00133	0.00590	1	03/21/2020 16:30	WG1447922
1,2-Dibromo-3-Chloropropane	U		0.00601	0.0295	1	03/21/2020 16:30	WG1447922
1,2-Dibromoethane	U		0.000619	0.00295	1	03/21/2020 16:30	WG1447922
Dibromomethane	U		0.00118	0.00590	1	03/21/2020 16:30	WG1447922
1,2-Dichlorobenzene	U		0.00171	0.00590	1	03/21/2020 16:30	WG1447922
1,3-Dichlorobenzene	U		0.00200	0.00590	1	03/21/2020 16:30	WG1447922
1,4-Dichlorobenzene	U		0.00232	0.00590	1	03/21/2020 16:30	WG1447922
Dichlorodifluoromethane	U		0.000964	0.00295	1	03/21/2020 16:30	WG1447922
1,1-Dichloroethane	U		0.000678	0.00295	1	03/21/2020 16:30	WG1447922
1,2-Dichloroethane	U		0.000560	0.00295	1	03/21/2020 16:30	WG1447922
1,1-Dichloroethene	U		0.000590	0.00295	1	03/21/2020 16:30	WG1447922
cis-1,2-Dichloroethene	U		0.000814	0.00295	1	03/21/2020 16:30	WG1447922
trans-1,2-Dichloroethene	U		0.00169	0.00590	1	03/21/2020 16:30	WG1447922
1,2-Dichloropropane	U		0.00150	0.00590	1	03/21/2020 16:30	WG1447922
1,1-Dichloropropene	U		0.000825	0.00295	1	03/21/2020 16:30	WG1447922
1,3-Dichloropropane	U		0.00206	0.00590	1	03/21/2020 16:30	WG1447922
cis-1,3-Dichloropropene	U		0.000799	0.00295	1	03/21/2020 16:30	WG1447922
trans-1,3-Dichloropropene	U		0.00180	0.00590	1	03/21/2020 16:30	WG1447922
trans-1,4-Dichloro-2-butene	U		0.00165	0.00590	1	03/21/2020 16:30	WG1447922
2,2-Dichloropropane	U		0.000935	0.00295	1	03/21/2020 16:30	WG1447922
Di-isopropyl ether	U		0.000413	0.00118	1	03/21/2020 16:30	WG1447922
Ethylbenzene	0.00311		0.000625	0.00295	1	03/21/2020 16:30	WG1447922
Hexachloro-1,3-butadiene	U		0.0150	0.0295	1	03/21/2020 16:30	WG1447922
2-Hexanone	U		0.0118	0.0295	1	03/21/2020 16:30	WG1447922
n-Hexane	0.0355		0.00125	0.00590	1	03/21/2020 16:30	WG1447922

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

Analyte	Result (dry) mg/kg		Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Iodomethane	U			0.00713	0.0147	1	03/21/2020 16:30	WG1447922
Isopropylbenzene	U			0.00102	0.00295	1	03/21/2020 16:30	WG1447922
p-Isopropyltoluene	U			0.00275	0.00590	1	03/21/2020 16:30	WG1447922
2-Butanone (MEK)	U			0.0147	0.0295	1	03/21/2020 16:30	WG1447922
Methylene Chloride	U			0.00783	0.0295	1	03/21/2020 16:30	WG1447922
4-Methyl-2-pentanone (MIBK)	U			0.0118	0.0295	1	03/21/2020 16:30	WG1447922
Methyl tert-butyl ether	U			0.000348	0.00118	1	03/21/2020 16:30	WG1447922
Naphthalene	0.0129	J	J	0.00368	0.0147	1	03/21/2020 16:30	WG1447922
n-Propylbenzene	U			0.00139	0.00590	1	03/21/2020 16:30	WG1447922
Styrene	U			0.00322	0.0147	1	03/21/2020 16:30	WG1447922
1,1,1,2-Tetrachloroethane	U			0.000590	0.00295	1	03/21/2020 16:30	WG1447922
1,1,2,2-Tetrachloroethane	U			0.000460	0.00295	1	03/21/2020 16:30	WG1447922
1,1,2-Trichlorotrifluoroethane	U			0.000796	0.00295	1	03/21/2020 16:30	WG1447922
Tetrachloroethene	0.0126			0.000825	0.00295	1	03/21/2020 16:30	WG1447922
Toluene	0.0400			0.00147	0.00590	1	03/21/2020 16:30	WG1447922
1,2,3-Trichlorobenzene	U			0.000737	0.0147	1	03/21/2020 16:30	WG1447922
1,2,4-Trichlorobenzene	U			0.00568	0.0147	1	03/21/2020 16:30	WG1447922
1,1,1-Trichloroethane	U			0.000324	0.00295	1	03/21/2020 16:30	WG1447922
1,1,2-Trichloroethane	U			0.00104	0.00295	1	03/21/2020 16:30	WG1447922
Trichloroethene	U			0.000472	0.00118	1	03/21/2020 16:30	WG1447922
Trichlorofluoromethane	U			0.000590	0.00295	1	03/21/2020 16:30	WG1447922
1,2,3-Trichloropropane	U			0.00601	0.0147	1	03/21/2020 16:30	WG1447922
1,2,4-Trimethylbenzene	0.00304	J	J	0.00137	0.00590	1	03/21/2020 16:30	WG1447922
1,2,3-Trimethylbenzene	0.00395		J	0.00136	0.00590	1	03/21/2020 16:30	WG1447922
1,3,5-Trimethylbenzene	0.00162		J	0.00127	0.00590	1	03/21/2020 16:30	WG1447922
Vinyl acetate	U	UJ	J0	0.00415	0.0147	1	03/21/2020 16:30	WG1447922
Vinyl chloride	U			0.000805	0.00295	1	03/21/2020 16:30	WG1447922
Xylenes, Total	0.0141			0.00564	0.00766	1	03/21/2020 16:30	WG1447922
(S) Toluene-d8	*115*				*75.0-131*		*03/21/2020 16:30*	WG1447922
(S) 4-Bromofluorobenzene	*92.4*				*67.0-138*		*03/21/2020 16:30*	WG1447922
(S) 1,2-Dichloroethane-d4	*92.7*				*70.0-130*		*03/21/2020 16:30*	WG1447922

JC 4/20/2020

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	80.8		1	03/22/2020 02:30	WG1447739

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	U		1.05	3.09	25	03/22/2020 01:52	WG1447924
(S) a,a,a-Trifluorotoluene(FID)	*99.3*			*77.0-120*		*03/22/2020 01:52*	WG1447924

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

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	U	~~J3~~	0.0170	0.0309	1	03/21/2020 16:49	WG1447922
Acrylonitrile	U		0.00235	0.0155	1	03/21/2020 16:49	WG1447922
Benzene	0.0257		0.000495	0.00124	1	03/21/2020 16:49	WG1447922
Bromobenzene	U		0.00130	0.0155	1	03/21/2020 16:49	WG1447922
Bromodichloromethane	U		0.000975	0.00309	1	03/21/2020 16:49	WG1447922
Bromochloromethane	U	~~J4~~	0.00140	0.00619	1	03/21/2020 16:49	WG1447922
Bromoform	U		0.00740	0.0309	1	03/21/2020 16:49	WG1447922
Bromomethane	U		0.00458	0.0155	1	03/21/2020 16:49	WG1447922
n-Butylbenzene	U		0.00475	0.0155	1	03/21/2020 16:49	WG1447922
sec-Butylbenzene	U		0.00313	0.0155	1	03/21/2020 16:49	WG1447922
tert-Butylbenzene	U		0.00192	0.00619	1	03/21/2020 16:49	WG1447922
Carbon disulfide	U		0.00502	0.0155	1	03/21/2020 16:49	WG1447922
Carbon tetrachloride	U		0.00134	0.00619	1	03/21/2020 16:49	WG1447922
Chlorobenzene	U		0.000709	0.00309	1	03/21/2020 16:49	WG1447922
Chlorodibromomethane	U		0.000557	0.00309	1	03/21/2020 16:49	WG1447922
Chloroethane	U		0.00134	0.00619	1	03/21/2020 16:49	WG1447922
Chloroform	U		0.000514	0.00309	1	03/21/2020 16:49	WG1447922
Chloromethane	U		0.00172	0.0155	1	03/21/2020 16:49	WG1447922
2-Chlorotoluene	U		0.00114	0.00309	1	03/21/2020 16:49	WG1447922
4-Chlorotoluene	U		0.00140	0.00619	1	03/21/2020 16:49	WG1447922
1,2-Dibromo-3-Chloropropane	U		0.00631	0.0309	1	03/21/2020 16:49	WG1447922
1,2-Dibromoethane	U		0.000650	0.00309	1	03/21/2020 16:49	WG1447922
Dibromomethane	U		0.00124	0.00619	1	03/21/2020 16:49	WG1447922
1,2-Dichlorobenzene	U		0.00179	0.00619	1	03/21/2020 16:49	WG1447922
1,3-Dichlorobenzene	U		0.00210	0.00619	1	03/21/2020 16:49	WG1447922
1,4-Dichlorobenzene	U		0.00244	0.00619	1	03/21/2020 16:49	WG1447922
Dichlorodifluoromethane	U		0.00101	0.00309	1	03/21/2020 16:49	WG1447922
1,1-Dichloroethane	U		0.000712	0.00309	1	03/21/2020 16:49	WG1447922
1,2-Dichloroethane	U		0.000588	0.00309	1	03/21/2020 16:49	WG1447922
1,1-Dichloroethene	U		0.000619	0.00309	1	03/21/2020 16:49	WG1447922
cis-1,2-Dichloroethene	U		0.000854	0.00309	1	03/21/2020 16:49	WG1447922
trans-1,2-Dichloroethene	U		0.00177	0.00619	1	03/21/2020 16:49	WG1447922
1,2-Dichloropropane	U		0.00157	0.00619	1	03/21/2020 16:49	WG1447922
1,1-Dichloropropene	U		0.000866	0.00309	1	03/21/2020 16:49	WG1447922
1,3-Dichloropropane	U		0.00217	0.00619	1	03/21/2020 16:49	WG1447922
cis-1,3-Dichloropropene	U		0.000839	0.00309	1	03/21/2020 16:49	WG1447922
trans-1,3-Dichloropropene	U		0.00189	0.00619	1	03/21/2020 16:49	WG1447922
trans-1,4-Dichloro-2-butene	U		0.00173	0.00619	1	03/21/2020 16:49	WG1447922
2,2-Dichloropropane	U		0.000981	0.00309	1	03/21/2020 16:49	WG1447922
Di-isopropyl ether	U		0.000433	0.00124	1	03/21/2020 16:49	WG1447922
Ethylbenzene	0.00103	J J	0.000656	0.00309	1	03/21/2020 16:49	WG1447922
Hexachloro-1,3-butadiene	U		0.0157	0.0309	1	03/21/2020 16:49	WG1447922
2-Hexanone	U		0.0124	0.0309	1	03/21/2020 16:49	WG1447922
n-Hexane	0.00902		0.00131	0.00619	1	03/21/2020 16:49	WG1447922

JC 4/20/2020

B-272-6

Collected date/time: 03/17/20 10:55

SAMPLE RESULTS - 06

L1200909

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

Analyte	Result (dry) mg/kg		Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Iodomethane	U			0.00749	0.0155	1	03/21/2020 16:49	WG1447922
Isopropylbenzene	U			0.00107	0.00309	1	03/21/2020 16:49	WG1447922
p-Isopropyltoluene	U			0.00288	0.00619	1	03/21/2020 16:49	WG1447922
2-Butanone (MEK)	0.0249	U	~~B J~~	0.0155	0.0309	1	03/21/2020 16:49	WG1447922
Methylene Chloride	U			0.00822	0.0309	1	03/21/2020 16:49	WG1447922
4-Methyl-2-pentanone (MIBK)	U			0.0124	0.0309	1	03/21/2020 16:49	WG1447922
Methyl tert-butyl ether	U			0.000365	0.00124	1	03/21/2020 16:49	WG1447922
Naphthalene	U			0.00386	0.0155	1	03/21/2020 16:49	WG1447922
n-Propylbenzene	U			0.00146	0.00619	1	03/21/2020 16:49	WG1447922
Styrene	U			0.00338	0.0155	1	03/21/2020 16:49	WG1447922
1,1,1,2-Tetrachloroethane	U			0.000619	0.00309	1	03/21/2020 16:49	WG1447922
1,1,2,2-Tetrachloroethane	U			0.000483	0.00309	1	03/21/2020 16:49	WG1447922
1,1,2-Trichlorotrifluoroethane	U			0.000835	0.00309	1	03/21/2020 16:49	WG1447922
Tetrachloroethene	0.0126			0.000866	0.00309	1	03/21/2020 16:49	WG1447922
Toluene	0.00613	J	J	0.00155	0.00619	1	03/21/2020 16:49	WG1447922
1,2,3-Trichlorobenzene	U			0.000773	0.0155	1	03/21/2020 16:49	WG1447922
1,2,4-Trichlorobenzene	U			0.00596	0.0155	1	03/21/2020 16:49	WG1447922
1,1,1-Trichloroethane	U			0.000340	0.00309	1	03/21/2020 16:49	WG1447922
1,1,2-Trichloroethane	U			0.00109	0.00309	1	03/21/2020 16:49	WG1447922
Trichloroethene	U			0.000495	0.00124	1	03/21/2020 16:49	WG1447922
Trichlorofluoromethane	U			0.000619	0.00309	1	03/21/2020 16:49	WG1447922
1,2,3-Trichloropropane	U			0.00631	0.0155	1	03/21/2020 16:49	WG1447922
1,2,4-Trimethylbenzene	U			0.00144	0.00619	1	03/21/2020 16:49	WG1447922
1,2,3-Trimethylbenzene	U			0.00142	0.00619	1	03/21/2020 16:49	WG1447922
1,3,5-Trimethylbenzene	U			0.00134	0.00619	1	03/21/2020 16:49	WG1447922
Vinyl acetate	U	UJ	J0	0.00436	0.0155	1	03/21/2020 16:49	WG1447922
Vinyl chloride	U			0.000845	0.00309	1	03/21/2020 16:49	WG1447922
Xylenes, Total	U			0.00592	0.00804	1	03/21/2020 16:49	WG1447922
(S) Toluene-d8	*115*				*75.0-131*		*03/21/2020 16:49*	WG1447922
(S) 4-Bromofluorobenzene	*92.3*				*67.0-138*		*03/21/2020 16:49*	WG1447922
(S) 1,2-Dichloroethane-d4	*89.6*				*70.0-130*		*03/21/2020 16:49*	WG1447922

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

JC 4/20/2020

B-273-1

Collected date/time: 03/17/20 11:30

SAMPLE RESULTS - 07

L1200909

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	89.1		1	03/22/2020 02:30	WG1447739

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	U		0.952	2.81	25	03/22/2020 02:16	WG1447924
(S) a,a,a-Trifluorotoluene(FID)	*96.9*			*77.0-120*		*03/22/2020 02:16*	WG1447924

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

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	U	~~J3~~	0.0154	0.0281	1	03/21/2020 17:08	WG1447922
Acrylonitrile	U		0.00213	0.0140	1	03/21/2020 17:08	WG1447922
Benzene	0.000744 J	J	0.000449	0.00112	1	03/21/2020 17:08	WG1447922
Bromobenzene	U		0.00118	0.0140	1	03/21/2020 17:08	WG1447922
Bromodichloromethane	U		0.000884	0.00281	1	03/21/2020 17:08	WG1447922
Bromochloromethane	U	~~J4~~	0.00127	0.00561	1	03/21/2020 17:08	WG1447922
Bromoform	U		0.00671	0.0281	1	03/21/2020 17:08	WG1447922
Bromomethane	U		0.00415	0.0140	1	03/21/2020 17:08	WG1447922
n-Butylbenzene	U		0.00431	0.0140	1	03/21/2020 17:08	WG1447922
sec-Butylbenzene	U		0.00284	0.0140	1	03/21/2020 17:08	WG1447922
tert-Butylbenzene	U		0.00174	0.00561	1	03/21/2020 17:08	WG1447922
Carbon disulfide	U		0.00456	0.0140	1	03/21/2020 17:08	WG1447922
Carbon tetrachloride	U		0.00121	0.00561	1	03/21/2020 17:08	WG1447922
Chlorobenzene	U		0.000643	0.00281	1	03/21/2020 17:08	WG1447922
Chlorodibromomethane	U		0.000505	0.00281	1	03/21/2020 17:08	WG1447922
Chloroethane	U		0.00121	0.00561	1	03/21/2020 17:08	WG1447922
Chloroform	U		0.000466	0.00281	1	03/21/2020 17:08	WG1447922
Chloromethane	U		0.00156	0.0140	1	03/21/2020 17:08	WG1447922
2-Chlorotoluene	U		0.00103	0.00281	1	03/21/2020 17:08	WG1447922
4-Chlorotoluene	U		0.00127	0.00561	1	03/21/2020 17:08	WG1447922
1,2-Dibromo-3-Chloropropane	U		0.00572	0.0281	1	03/21/2020 17:08	WG1447922
1,2-Dibromoethane	U		0.000589	0.00281	1	03/21/2020 17:08	WG1447922
Dibromomethane	U		0.00112	0.00561	1	03/21/2020 17:08	WG1447922
1,2-Dichlorobenzene	U		0.00163	0.00561	1	03/21/2020 17:08	WG1447922
1,3-Dichlorobenzene	U		0.00191	0.00561	1	03/21/2020 17:08	WG1447922
1,4-Dichlorobenzene	U		0.00221	0.00561	1	03/21/2020 17:08	WG1447922
Dichlorodifluoromethane	U		0.000918	0.00281	1	03/21/2020 17:08	WG1447922
1,1-Dichloroethane	U		0.000645	0.00281	1	03/21/2020 17:08	WG1447922
1,2-Dichloroethane	U		0.000533	0.00281	1	03/21/2020 17:08	WG1447922
1,1-Dichloroethene	U		0.000561	0.00281	1	03/21/2020 17:08	WG1447922
cis-1,2-Dichloroethene	U		0.000774	0.00281	1	03/21/2020 17:08	WG1447922
trans-1,2-Dichloroethene	U		0.00160	0.00561	1	03/21/2020 17:08	WG1447922
1,2-Dichloropropane	U		0.00143	0.00561	1	03/21/2020 17:08	WG1447922
1,1-Dichloropropene	U		0.000786	0.00281	1	03/21/2020 17:08	WG1447922
1,3-Dichloropropane	U		0.00196	0.00561	1	03/21/2020 17:08	WG1447922
cis-1,3-Dichloropropene	U		0.000761	0.00281	1	03/21/2020 17:08	WG1447922
trans-1,3-Dichloropropene	U		0.00172	0.00561	1	03/21/2020 17:08	WG1447922
trans-1,4-Dichloro-2-butene	U		0.00157	0.00561	1	03/21/2020 17:08	WG1447922
2,2-Dichloropropane	U		0.000890	0.00281	1	03/21/2020 17:08	WG1447922
Di-isopropyl ether	U		0.000393	0.00112	1	03/21/2020 17:08	WG1447922
Ethylbenzene	0.000897 J	J	0.000595	0.00281	1	03/21/2020 17:08	WG1447922
Hexachloro-1,3-butadiene	U		0.0143	0.0281	1	03/21/2020 17:08	WG1447922
2-Hexanone	U		0.0112	0.0281	1	03/21/2020 17:08	WG1447922
n-Hexane	U		0.00119	0.00561	1	03/21/2020 17:08	WG1447922

JC 4/20/2020

B-273-1

Collected date/time: 03/17/20 11:30

SAMPLE RESULTS - 07

L1200909

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

Analyte	Result (dry) mg/kg		Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Iodomethane	U			0.00679	0.0140	1	03/21/2020 17:08	WG1447922
Isopropylbenzene	U			0.000969	0.00281	1	03/21/2020 17:08	WG1447922
p-Isopropyltoluene	U			0.00261	0.00561	1	03/21/2020 17:08	WG1447922
2-Butanone (MEK)	U			0.0140	0.0281	1	03/21/2020 17:08	WG1447922
Methylene Chloride	U			0.00745	0.0281	1	03/21/2020 17:08	WG1447922
4-Methyl-2-pentanone (MIBK)	U			0.0112	0.0281	1	03/21/2020 17:08	WG1447922
Methyl tert-butyl ether	U			0.000331	0.00112	1	03/21/2020 17:08	WG1447922
Naphthalene	0.00646	J	J	0.00350	0.0140	1	03/21/2020 17:08	WG1447922
n-Propylbenzene	U			0.00132	0.00561	1	03/21/2020 17:08	WG1447922
Styrene	U			0.00306	0.0140	1	03/21/2020 17:08	WG1447922
1,1,1,2-Tetrachloroethane	U			0.000561	0.00281	1	03/21/2020 17:08	WG1447922
1,1,2,2-Tetrachloroethane	U			0.000438	0.00281	1	03/21/2020 17:08	WG1447922
1,1,2-Trichlorotrifluoroethane	U			0.000758	0.00281	1	03/21/2020 17:08	WG1447922
Tetrachloroethene	U			0.000786	0.00281	1	03/21/2020 17:08	WG1447922
Toluene	0.00210	J	J	0.00140	0.00561	1	03/21/2020 17:08	WG1447922
1,2,3-Trichlorobenzene	U			0.000701	0.0140	1	03/21/2020 17:08	WG1447922
1,2,4-Trichlorobenzene	U			0.00541	0.0140	1	03/21/2020 17:08	WG1447922
1,1,1-Trichloroethane	U			0.000309	0.00281	1	03/21/2020 17:08	WG1447922
1,1,2-Trichloroethane	U			0.000991	0.00281	1	03/21/2020 17:08	WG1447922
Trichloroethene	U			0.000449	0.00112	1	03/21/2020 17:08	WG1447922
Trichlorofluoromethane	U			0.000561	0.00281	1	03/21/2020 17:08	WG1447922
1,2,3-Trichloropropane	U			0.00572	0.0140	1	03/21/2020 17:08	WG1447922
1,2,4-Trimethylbenzene	0.00259	J	J	0.00130	0.00561	1	03/21/2020 17:08	WG1447922
1,2,3-Trimethylbenzene	0.00258	J	J	0.00129	0.00561	1	03/21/2020 17:08	WG1447922
1,3,5-Trimethylbenzene	0.00128	J	J	0.00121	0.00561	1	03/21/2020 17:08	WG1447922
Vinyl acetate	U	UJ	J0	0.00395	0.0140	1	03/21/2020 17:08	WG1447922
Vinyl chloride	U			0.000767	0.00281	1	03/21/2020 17:08	WG1447922
Xylenes, Total	U			0.00536	0.00729	1	03/21/2020 17:08	WG1447922
(S) Toluene-d8	*115*				*75.0-131*		*03/21/2020 17:08*	WG1447922
(S) 4-Bromofluorobenzene	*92.7*				*67.0-138*		*03/21/2020 17:08*	WG1447922
(S) 1,2-Dichloroethane-d4	*91.4*				*70.0-130*		*03/21/2020 17:08*	WG1447922

JC 4/20/2020

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	90.5		1	03/22/2020 02:30	WG1447739

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	U		0.937	2.76	25	03/22/2020 03:03	WG1447924
(S) a,a,a-Trifluorotoluene(FID)	*100*			*77.0-120*		*03/22/2020 03:03*	WG1447924

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

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	U	~~J3~~	0.0151	0.0276	1	03/21/2020 17:27	WG1447922
Acrylonitrile	U		0.00210	0.0138	1	03/21/2020 17:27	WG1447922
Benzene	0.000493 J	J	0.000442	0.00111	1	03/21/2020 17:27	WG1447922
Bromobenzene	U		0.00116	0.0138	1	03/21/2020 17:27	WG1447922
Bromodichloromethane	U		0.000871	0.00276	1	03/21/2020 17:27	WG1447922
Bromochloromethane	U	~~J4~~	0.00125	0.00553	1	03/21/2020 17:27	WG1447922
Bromoform	U		0.00661	0.0276	1	03/21/2020 17:27	WG1447922
Bromomethane	U		0.00409	0.0138	1	03/21/2020 17:27	WG1447922
n-Butylbenzene	U		0.00424	0.0138	1	03/21/2020 17:27	WG1447922
sec-Butylbenzene	U		0.00280	0.0138	1	03/21/2020 17:27	WG1447922
tert-Butylbenzene	U		0.00171	0.00553	1	03/21/2020 17:27	WG1447922
Carbon disulfide	U		0.00449	0.0138	1	03/21/2020 17:27	WG1447922
Carbon tetrachloride	U		0.00119	0.00553	1	03/21/2020 17:27	WG1447922
Chlorobenzene	U		0.000633	0.00276	1	03/21/2020 17:27	WG1447922
Chlorodibromomethane	U		0.000497	0.00276	1	03/21/2020 17:27	WG1447922
Chloroethane	U		0.00119	0.00553	1	03/21/2020 17:27	WG1447922
Chloroform	U		0.000459	0.00276	1	03/21/2020 17:27	WG1447922
Chloromethane	U		0.00154	0.0138	1	03/21/2020 17:27	WG1447922
2-Chlorotoluene	U		0.00102	0.00276	1	03/21/2020 17:27	WG1447922
4-Chlorotoluene	U		0.00125	0.00553	1	03/21/2020 17:27	WG1447922
1,2-Dibromo-3-Chloropropane	U		0.00564	0.0276	1	03/21/2020 17:27	WG1447922
1,2-Dibromoethane	U		0.000580	0.00276	1	03/21/2020 17:27	WG1447922
Dibromomethane	U		0.00111	0.00553	1	03/21/2020 17:27	WG1447922
1,2-Dichlorobenzene	U		0.00160	0.00553	1	03/21/2020 17:27	WG1447922
1,3-Dichlorobenzene	U		0.00188	0.00553	1	03/21/2020 17:27	WG1447922
1,4-Dichlorobenzene	U		0.00218	0.00553	1	03/21/2020 17:27	WG1447922
Dichlorodifluoromethane	U		0.000904	0.00276	1	03/21/2020 17:27	WG1447922
1,1-Dichloroethane	U		0.000636	0.00276	1	03/21/2020 17:27	WG1447922
1,2-Dichloroethane	U		0.000525	0.00276	1	03/21/2020 17:27	WG1447922
1,1-Dichloroethene	U		0.000553	0.00276	1	03/21/2020 17:27	WG1447922
cis-1,2-Dichloroethene	U		0.000763	0.00276	1	03/21/2020 17:27	WG1447922
trans-1,2-Dichloroethene	U		0.00158	0.00553	1	03/21/2020 17:27	WG1447922
1,2-Dichloropropane	U		0.00140	0.00553	1	03/21/2020 17:27	WG1447922
1,1-Dichloropropene	U		0.000774	0.00276	1	03/21/2020 17:27	WG1447922
1,3-Dichloropropane	U		0.00193	0.00553	1	03/21/2020 17:27	WG1447922
cis-1,3-Dichloropropene	U		0.000749	0.00276	1	03/21/2020 17:27	WG1447922
trans-1,3-Dichloropropene	U		0.00169	0.00553	1	03/21/2020 17:27	WG1447922
trans-1,4-Dichloro-2-butene	U		0.00155	0.00553	1	03/21/2020 17:27	WG1447922
2,2-Dichloropropane	U		0.000876	0.00276	1	03/21/2020 17:27	WG1447922
Di-isopropyl ether	U		0.000387	0.00111	1	03/21/2020 17:27	WG1447922
Ethylbenzene	0.000627 J	J	0.000586	0.00276	1	03/21/2020 17:27	WG1447922
Hexachloro-1,3-butadiene	U		0.0140	0.0276	1	03/21/2020 17:27	WG1447922
2-Hexanone	U		0.0111	0.0276	1	03/21/2020 17:27	WG1447922
n-Hexane	0.103		0.00117	0.00553	1	03/21/2020 17:27	WG1447922

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

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Iodomethane	U		0.00669	0.0138	1	03/21/2020 17:27	WG1447922
Isopropylbenzene	U		0.000954	0.00276	1	03/21/2020 17:27	WG1447922
p-Isopropyltoluene	0.00487	J J	0.00258	0.00553	1	03/21/2020 17:27	WG1447922
2-Butanone (MEK)	0.0166	U ~~B J~~	0.0138	0.0276	1	03/21/2020 17:27	WG1447922
Methylene Chloride	U		0.00734	0.0276	1	03/21/2020 17:27	WG1447922
4-Methyl-2-pentanone (MIBK)	U		0.0111	0.0276	1	03/21/2020 17:27	WG1447922
Methyl tert-butyl ether	U		0.000326	0.00111	1	03/21/2020 17:27	WG1447922
Naphthalene	U		0.00345	0.0138	1	03/21/2020 17:27	WG1447922
n-Propylbenzene	U		0.00130	0.00553	1	03/21/2020 17:27	WG1447922
Styrene	U		0.00302	0.0138	1	03/21/2020 17:27	WG1447922
1,1,1,2-Tetrachloroethane	U		0.000553	0.00276	1	03/21/2020 17:27	WG1447922
1,1,2,2-Tetrachloroethane	U		0.000431	0.00276	1	03/21/2020 17:27	WG1447922
1,1,2-Trichlorotrifluoroethane	U		0.000746	0.00276	1	03/21/2020 17:27	WG1447922
Tetrachloroethene	0.144		0.000774	0.00276	1	03/21/2020 17:27	WG1447922
Toluene	U		0.00138	0.00553	1	03/21/2020 17:27	WG1447922
1,2,3-Trichlorobenzene	U		0.000691	0.0138	1	03/21/2020 17:27	WG1447922
1,2,4-Trichlorobenzene	U		0.00533	0.0138	1	03/21/2020 17:27	WG1447922
1,1,1-Trichloroethane	U		0.000304	0.00276	1	03/21/2020 17:27	WG1447922
1,1,2-Trichloroethane	U		0.000976	0.00276	1	03/21/2020 17:27	WG1447922
Trichloroethene	0.00179		0.000442	0.00111	1	03/21/2020 17:27	WG1447922
Trichlorofluoromethane	U		0.000553	0.00276	1	03/21/2020 17:27	WG1447922
1,2,3-Trichloropropane	U		0.00564	0.0138	1	03/21/2020 17:27	WG1447922
1,2,4-Trimethylbenzene	0.00181	J J	0.00128	0.00553	1	03/21/2020 17:27	WG1447922
1,2,3-Trimethylbenzene	0.00197	J J	0.00127	0.00553	1	03/21/2020 17:27	WG1447922
1,3,5-Trimethylbenzene	U		0.00119	0.00553	1	03/21/2020 17:27	WG1447922
Vinyl acetate	U	UJ J0	0.00389	0.0138	1	03/21/2020 17:27	WG1447922
Vinyl chloride	U		0.000755	0.00276	1	03/21/2020 17:27	WG1447922
Xylenes, Total	U		0.00528	0.00718	1	03/21/2020 17:27	WG1447922
(S) Toluene-d8	*114*			*75.0-131*		*03/21/2020 17:27*	WG1447922
(S) 4-Bromofluorobenzene	*91.2*			*67.0-138*		*03/21/2020 17:27*	WG1447922
(S) 1,2-Dichloroethane-d4	*91.6*			*70.0-130*		*03/21/2020 17:27*	WG1447922

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Total Solids by Method 2540 G-2011

	Result	Qualifier	Dilution	Analysis	Batch
Analyte	%			date / time	
Total Solids	66.3		1	03/21/2020 18:54	WG1448016

Volatile Organic Compounds (GC) by Method NWTPHGX

	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg		date / time	
Gasoline Range Organics-NWTPH	10.7	Z, J+	2.23	6.61	43.8	03/22/2020 03:27	WG1447924
(S) a,a,a-Trifluorotoluene(FID)	*94.4*			*77.0-120*		*03/22/2020 03:27*	WG1447924

Sample Narrative:

L1200909-09 WG1447924: No discernable petroleum pattern.

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

	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg		date / time	
Acetone	U	~~J3~~	0.0303	0.0555	1.47	03/21/2020 11:28	WG1447922
Acrylonitrile	U		0.00421	0.0278	1.47	03/21/2020 11:28	WG1447922
Benzene	0.0244		0.000887	0.00222	1.47	03/21/2020 11:28	WG1447922
Bromobenzene	U		0.00232	0.0278	1.47	03/21/2020 11:28	WG1447922
Bromodichloromethane	U		0.00175	0.00555	1.47	03/21/2020 11:28	WG1447922
Bromochloromethane	U	~~J4~~	0.00250	0.0111	1.47	03/21/2020 11:28	WG1447922
Bromoform	U		0.0133	0.0555	1.47	03/21/2020 11:28	WG1447922
Bromomethane	U		0.00821	0.0278	1.47	03/21/2020 11:28	WG1447922
n-Butylbenzene	U		0.00851	0.0278	1.47	03/21/2020 11:28	WG1447922
sec-Butylbenzene	U		0.00561	0.0278	1.47	03/21/2020 11:28	WG1447922
tert-Butylbenzene	U		0.00344	0.0111	1.47	03/21/2020 11:28	WG1447922
Carbon disulfide	U		0.00900	0.0278	1.47	03/21/2020 11:28	WG1447922
Carbon tetrachloride	U		0.00240	0.0111	1.47	03/21/2020 11:28	WG1447922
Chlorobenzene	U		0.00127	0.00555	1.47	03/21/2020 11:28	WG1447922
Chlorodibromomethane	U		0.000997	0.00555	1.47	03/21/2020 11:28	WG1447922
Chloroethane	U		0.00240	0.0111	1.47	03/21/2020 11:28	WG1447922
Chloroform	U		0.000920	0.00555	1.47	03/21/2020 11:28	WG1447922
Chloromethane	U		0.00308	0.0278	1.47	03/21/2020 11:28	WG1447922
2-Chlorotoluene	U		0.00204	0.00555	1.47	03/21/2020 11:28	WG1447922
4-Chlorotoluene	U		0.00250	0.0111	1.47	03/21/2020 11:28	WG1447922
1,2-Dibromo-3-Chloropropane	U		0.0113	0.0555	1.47	03/21/2020 11:28	WG1447922
1,2-Dibromoethane	U		0.00116	0.00555	1.47	03/21/2020 11:28	WG1447922
Dibromomethane	U		0.00222	0.0111	1.47	03/21/2020 11:28	WG1447922
1,2-Dichlorobenzene	U		0.00321	0.0111	1.47	03/21/2020 11:28	WG1447922
1,3-Dichlorobenzene	U		0.00377	0.0111	1.47	03/21/2020 11:28	WG1447922
1,4-Dichlorobenzene	U		0.00437	0.0111	1.47	03/21/2020 11:28	WG1447922
Dichlorodifluoromethane	U		0.00181	0.00555	1.47	03/21/2020 11:28	WG1447922
1,1-Dichloroethane	U		0.00127	0.00555	1.47	03/21/2020 11:28	WG1447922
1,2-Dichloroethane	U		0.00105	0.00555	1.47	03/21/2020 11:28	WG1447922
1,1-Dichloroethene	U		0.00111	0.00555	1.47	03/21/2020 11:28	WG1447922
cis-1,2-Dichloroethene	0.00271	J J	0.00152	0.00555	1.47	03/21/2020 11:28	WG1447922
trans-1,2-Dichloroethene	U		0.00317	0.0111	1.47	03/21/2020 11:28	WG1447922
1,2-Dichloropropane	U		0.00282	0.0111	1.47	03/21/2020 11:28	WG1447922
1,1-Dichloropropene	U		0.00155	0.00555	1.47	03/21/2020 11:28	WG1447922
1,3-Dichloropropane	U		0.00388	0.0111	1.47	03/21/2020 11:28	WG1447922
cis-1,3-Dichloropropene	U		0.00150	0.00555	1.47	03/21/2020 11:28	WG1447922
trans-1,3-Dichloropropene	U		0.00339	0.0111	1.47	03/21/2020 11:28	WG1447922
trans-1,4-Dichloro-2-butene	U		0.00311	0.0111	1.47	03/21/2020 11:28	WG1447922
2,2-Dichloropropane	U		0.00176	0.00555	1.47	03/21/2020 11:28	WG1447922
Di-isopropyl ether	U		0.000777	0.00222	1.47	03/21/2020 11:28	WG1447922
Ethylbenzene	0.00410	J J	0.00117	0.00555	1.47	03/21/2020 11:28	WG1447922

JC 4/20/2020

B-273-6

Collected date/time: 03/17/20 11:42

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

Analyte	Result (dry) mg/kg		Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Hexachloro-1,3-butadiene	U			0.0282	0.0555	1.47	03/21/2020 11:28	WG1447922
2-Hexanone	U			0.0222	0.0555	1.47	03/21/2020 11:28	WG1447922
n-Hexane	0.635			0.00235	0.0111	1.47	03/21/2020 11:28	WG1447922
Iodomethane	U			0.0134	0.0278	1.47	03/21/2020 11:28	WG1447922
Isopropylbenzene	0.00199	J	J	0.00192	0.00555	1.47	03/21/2020 11:28	WG1447922
p-Isopropyltoluene	0.0549			0.00517	0.0111	1.47	03/21/2020 11:28	WG1447922
2-Butanone (MEK)	U			0.0278	0.0555	1.47	03/21/2020 11:28	WG1447922
Methylene Chloride	U			0.0147	0.0555	1.47	03/21/2020 11:28	WG1447922
4-Methyl-2-pentanone (MIBK)	U			0.0222	0.0555	1.47	03/21/2020 11:28	WG1447922
Methyl tert-butyl ether	U			0.000655	0.00222	1.47	03/21/2020 11:28	WG1447922
Naphthalene	U			0.00692	0.0278	1.47	03/21/2020 11:28	WG1447922
n-Propylbenzene	U			0.00261	0.0111	1.47	03/21/2020 11:28	WG1447922
Styrene	U			0.00605	0.0278	1.47	03/21/2020 11:28	WG1447922
1,1,1,2-Tetrachloroethane	U			0.00111	0.00555	1.47	03/21/2020 11:28	WG1447922
1,1,2,2-Tetrachloroethane	U			0.000864	0.00555	1.47	03/21/2020 11:28	WG1447922
1,1,2-Trichlorotrifluoroethane	U			0.00150	0.00555	1.47	03/21/2020 11:28	WG1447922
Tetrachloroethene	0.220			0.00155	0.00555	1.47	03/21/2020 11:28	WG1447922
Toluene	0.0104	J	J	0.00278	0.0111	1.47	03/21/2020 11:28	WG1447922
1,2,3-Trichlorobenzene	U			0.00139	0.0278	1.47	03/21/2020 11:28	WG1447922
1,2,4-Trichlorobenzene	U			0.0107	0.0278	1.47	03/21/2020 11:28	WG1447922
1,1,1-Trichloroethane	U			0.000609	0.00555	1.47	03/21/2020 11:28	WG1447922
1,1,2-Trichloroethane	U			0.00196	0.00555	1.47	03/21/2020 11:28	WG1447922
Trichloroethene	0.00122	J	J	0.000887	0.00222	1.47	03/21/2020 11:28	WG1447922
Trichlorofluoromethane	U			0.00111	0.00555	1.47	03/21/2020 11:28	WG1447922
1,2,3-Trichloropropane	U			0.0113	0.0278	1.47	03/21/2020 11:28	WG1447922
1,2,4-Trimethylbenzene	0.00572	J	J	0.00258	0.0111	1.47	03/21/2020 11:28	WG1447922
1,2,3-Trimethylbenzene	0.00433	J	J	0.00255	0.0111	1.47	03/21/2020 11:28	WG1447922
1,3,5-Trimethylbenzene	0.00321	J	J	0.00240	0.0111	1.47	03/21/2020 11:28	WG1447922
Vinyl acetate	U	UJ	J0	0.00780	0.0278	1.47	03/21/2020 11:28	WG1447922
Vinyl chloride	U			0.00151	0.00555	1.47	03/21/2020 11:28	WG1447922
Xylenes, Total	0.0163			0.0106	0.0144	1.47	03/21/2020 11:28	WG1447922
(S) Toluene-d8	*113*				*75.0-131*		*03/21/2020 11:28*	WG1447922
(S) 4-Bromofluorobenzene	*92.6*				*67.0-138*		*03/21/2020 11:28*	WG1447922
(S) 1,2-Dichloroethane-d4	*89.8*				*70.0-130*		*03/21/2020 11:28*	WG1447922

JC 4/20/2020

B-274-1
Collected date/time: 03/17/20 12:45

SAMPLE RESULTS - 10

L1200909

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

Total Solids by Method 2540 G-2011

	Result	Qualifier	Dilution	Analysis	Batch
Analyte	%			date / time	
Total Solids	88.9		1	03/21/2020 18:54	WG1448016

Volatile Organic Compounds (GC) by Method NWTPHGX

	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg		date / time	
Gasoline Range Organics-NWTPH	U		0.954	2.81	25	03/22/2020 03:50	WG1447924
(S) a,a,a-Trifluorotoluene(FID)	*98.3*			*77.0-120*		*03/22/2020 03:50*	WG1447924

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

	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg		date / time	
Acetone	U	~~J3~~	0.0154	0.0281	1	03/21/2020 11:47	WG1447922
Acrylonitrile	U		0.00214	0.0141	1	03/21/2020 11:47	WG1447922
Benzene	0.00540		0.000450	0.00112	1	03/21/2020 11:47	WG1447922
Bromobenzene	U		0.00118	0.0141	1	03/21/2020 11:47	WG1447922
Bromodichloromethane	U		0.000886	0.00281	1	03/21/2020 11:47	WG1447922
Bromochloromethane	U	~~J4~~	0.00127	0.00562	1	03/21/2020 11:47	WG1447922
Bromoform	U		0.00672	0.0281	1	03/21/2020 11:47	WG1447922
Bromomethane	U		0.00416	0.0141	1	03/21/2020 11:47	WG1447922
n-Butylbenzene	U		0.00432	0.0141	1	03/21/2020 11:47	WG1447922
sec-Butylbenzene	U		0.00285	0.0141	1	03/21/2020 11:47	WG1447922
tert-Butylbenzene	U		0.00174	0.00562	1	03/21/2020 11:47	WG1447922
Carbon disulfide	U		0.00457	0.0141	1	03/21/2020 11:47	WG1447922
Carbon tetrachloride	U		0.00121	0.00562	1	03/21/2020 11:47	WG1447922
Chlorobenzene	U		0.000644	0.00281	1	03/21/2020 11:47	WG1447922
Chlorodibromomethane	U		0.000506	0.00281	1	03/21/2020 11:47	WG1447922
Chloroethane	U		0.00121	0.00562	1	03/21/2020 11:47	WG1447922
Chloroform	U		0.000467	0.00281	1	03/21/2020 11:47	WG1447922
Chloromethane	U		0.00156	0.0141	1	03/21/2020 11:47	WG1447922
2-Chlorotoluene	U		0.00103	0.00281	1	03/21/2020 11:47	WG1447922
4-Chlorotoluene	U		0.00127	0.00562	1	03/21/2020 11:47	WG1447922
1,2-Dibromo-3-Chloropropane	U		0.00574	0.0281	1	03/21/2020 11:47	WG1447922
1,2-Dibromoethane	U		0.000590	0.00281	1	03/21/2020 11:47	WG1447922
Dibromomethane	U		0.00112	0.00562	1	03/21/2020 11:47	WG1447922
1,2-Dichlorobenzene	U		0.00163	0.00562	1	03/21/2020 11:47	WG1447922
1,3-Dichlorobenzene	U		0.00191	0.00562	1	03/21/2020 11:47	WG1447922
1,4-Dichlorobenzene	U		0.00222	0.00562	1	03/21/2020 11:47	WG1447922
Dichlorodifluoromethane	U		0.000920	0.00281	1	03/21/2020 11:47	WG1447922
1,1-Dichloroethane	U		0.000647	0.00281	1	03/21/2020 11:47	WG1447922
1,2-Dichloroethane	U		0.000534	0.00281	1	03/21/2020 11:47	WG1447922
1,1-Dichloroethene	U		0.000562	0.00281	1	03/21/2020 11:47	WG1447922
cis-1,2-Dichloroethene	0.00215 J	J	0.000776	0.00281	1	03/21/2020 11:47	WG1447922
trans-1,2-Dichloroethene	U		0.00161	0.00562	1	03/21/2020 11:47	WG1447922
1,2-Dichloropropane	U		0.00143	0.00562	1	03/21/2020 11:47	WG1447922
1,1-Dichloropropene	U		0.000787	0.00281	1	03/21/2020 11:47	WG1447922
1,3-Dichloropropane	U		0.00197	0.00562	1	03/21/2020 11:47	WG1447922
cis-1,3-Dichloropropene	U		0.000762	0.00281	1	03/21/2020 11:47	WG1447922
trans-1,3-Dichloropropene	U		0.00172	0.00562	1	03/21/2020 11:47	WG1447922
trans-1,4-Dichloro-2-butene	U		0.00157	0.00562	1	03/21/2020 11:47	WG1447922
2,2-Dichloropropane	U		0.000892	0.00281	1	03/21/2020 11:47	WG1447922
Di-isopropyl ether	U		0.000394	0.00112	1	03/21/2020 11:47	WG1447922
Ethylbenzene	0.00295		0.000596	0.00281	1	03/21/2020 11:47	WG1447922
Hexachloro-1,3-butadiene	U		0.0143	0.0281	1	03/21/2020 11:47	WG1447922
2-Hexanone	U		0.0112	0.0281	1	03/21/2020 11:47	WG1447922
n-Hexane	0.0904		0.00119	0.00562	1	03/21/2020 11:47	WG1447922

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

Analyte	Result (dry) mg/kg		Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Iodomethane	U			0.00680	0.0141	1	03/21/2020 11:47	WG1447922
Isopropylbenzene	U			0.000971	0.00281	1	03/21/2020 11:47	WG1447922
p-Isopropyltoluene	0.00586			0.00262	0.00562	1	03/21/2020 11:47	WG1447922
2-Butanone (MEK)	U			0.0141	0.0281	1	03/21/2020 11:47	WG1447922
Methylene Chloride	U			0.00747	0.0281	1	03/21/2020 11:47	WG1447922
4-Methyl-2-pentanone (MIBK)	U			0.0112	0.0281	1	03/21/2020 11:47	WG1447922
Methyl tert-butyl ether	U			0.000332	0.00112	1	03/21/2020 11:47	WG1447922
Naphthalene	0.0180			0.00351	0.0141	1	03/21/2020 11:47	WG1447922
n-Propylbenzene	0.00171	J	J	0.00133	0.00562	1	03/21/2020 11:47	WG1447922
Styrene	U			0.00307	0.0141	1	03/21/2020 11:47	WG1447922
1,1,1,2-Tetrachloroethane	U			0.000562	0.00281	1	03/21/2020 11:47	WG1447922
1,1,2,2-Tetrachloroethane	U			0.000439	0.00281	1	03/21/2020 11:47	WG1447922
1,1,2-Trichlorotrifluoroethane	U			0.000759	0.00281	1	03/21/2020 11:47	WG1447922
Tetrachloroethene	0.00690			0.000787	0.00281	1	03/21/2020 11:47	WG1447922
Toluene	0.00750			0.00141	0.00562	1	03/21/2020 11:47	WG1447922
1,2,3-Trichlorobenzene	U			0.000703	0.0141	1	03/21/2020 11:47	WG1447922
1,2,4-Trichlorobenzene	U			0.00542	0.0141	1	03/21/2020 11:47	WG1447922
1,1,1-Trichloroethane	U			0.000309	0.00281	1	03/21/2020 11:47	WG1447922
1,1,2-Trichloroethane	U			0.000993	0.00281	1	03/21/2020 11:47	WG1447922
Trichloroethene	U			0.000450	0.00112	1	03/21/2020 11:47	WG1447922
Trichlorofluoromethane	U			0.000562	0.00281	1	03/21/2020 11:47	WG1447922
1,2,3-Trichloropropane	U			0.00574	0.0141	1	03/21/2020 11:47	WG1447922
1,2,4-Trimethylbenzene	0.00720			0.00130	0.00562	1	03/21/2020 11:47	WG1447922
1,2,3-Trimethylbenzene	0.00623			0.00129	0.00562	1	03/21/2020 11:47	WG1447922
1,3,5-Trimethylbenzene	0.00260	J	J	0.00121	0.00562	1	03/21/2020 11:47	WG1447922
Vinyl acetate	U	UJ	J0	0.00396	0.0141	1	03/21/2020 11:47	WG1447922
Vinyl chloride	U			0.000768	0.00281	1	03/21/2020 11:47	WG1447922
Xylenes, Total	0.0144			0.00538	0.00731	1	03/21/2020 11:47	WG1447922
(S) Toluene-d8	*114*				*75.0-131*		*03/21/2020 11:47*	WG1447922
(S) 4-Bromofluorobenzene	*92.7*				*67.0-138*		*03/21/2020 11:47*	WG1447922
(S) 1,2-Dichloroethane-d4	*91.4*				*70.0-130*		*03/21/2020 11:47*	WG1447922

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B-274-3
Collected date/time: 03/17/20 12:50

SAMPLE RESULTS - 11

L1200909

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

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	92.3		1	03/21/2020 18:54	WG1448016

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	U		0.918	2.71	25	03/22/2020 04:14	WG1447924
(S) a,a,a-Trifluorotoluene(FID)	*98.6*			*77.0-120*		*03/22/2020 04:14*	WG1447924

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

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	U	~~J3~~	0.0148	0.0271	1	03/21/2020 12:06	WG1447922
Acrylonitrile	U		0.00206	0.0135	1	03/21/2020 12:06	WG1447922
Benzene	U		0.000433	0.00108	1	03/21/2020 12:06	WG1447922
Bromobenzene	U		0.00114	0.0135	1	03/21/2020 12:06	WG1447922
Bromodichloromethane	U		0.000853	0.00271	1	03/21/2020 12:06	WG1447922
Bromochloromethane	U	~~J4~~	0.00122	0.00541	1	03/21/2020 12:06	WG1447922
Bromoform	U		0.00648	0.0271	1	03/21/2020 12:06	WG1447922
Bromomethane	U		0.00401	0.0135	1	03/21/2020 12:06	WG1447922
n-Butylbenzene	U		0.00416	0.0135	1	03/21/2020 12:06	WG1447922
sec-Butylbenzene	U		0.00274	0.0135	1	03/21/2020 12:06	WG1447922
tert-Butylbenzene	U		0.00168	0.00541	1	03/21/2020 12:06	WG1447922
Carbon disulfide	U		0.00440	0.0135	1	03/21/2020 12:06	WG1447922
Carbon tetrachloride	U		0.00117	0.00541	1	03/21/2020 12:06	WG1447922
Chlorobenzene	U		0.000620	0.00271	1	03/21/2020 12:06	WG1447922
Chlorodibromomethane	U		0.000487	0.00271	1	03/21/2020 12:06	WG1447922
Chloroethane	U		0.00117	0.00541	1	03/21/2020 12:06	WG1447922
Chloroform	U		0.000449	0.00271	1	03/21/2020 12:06	WG1447922
Chloromethane	U		0.00151	0.0135	1	03/21/2020 12:06	WG1447922
2-Chlorotoluene	U		0.000996	0.00271	1	03/21/2020 12:06	WG1447922
4-Chlorotoluene	U		0.00122	0.00541	1	03/21/2020 12:06	WG1447922
1,2-Dibromo-3-Chloropropane	U		0.00552	0.0271	1	03/21/2020 12:06	WG1447922
1,2-Dibromoethane	U		0.000568	0.00271	1	03/21/2020 12:06	WG1447922
Dibromomethane	U		0.00108	0.00541	1	03/21/2020 12:06	WG1447922
1,2-Dichlorobenzene	U		0.00157	0.00541	1	03/21/2020 12:06	WG1447922
1,3-Dichlorobenzene	U		0.00184	0.00541	1	03/21/2020 12:06	WG1447922
1,4-Dichlorobenzene	U		0.00213	0.00541	1	03/21/2020 12:06	WG1447922
Dichlorodifluoromethane	U		0.000886	0.00271	1	03/21/2020 12:06	WG1447922
1,1-Dichloroethane	U		0.000623	0.00271	1	03/21/2020 12:06	WG1447922
1,2-Dichloroethane	U		0.000514	0.00271	1	03/21/2020 12:06	WG1447922
1,1-Dichloroethene	U		0.000541	0.00271	1	03/21/2020 12:06	WG1447922
cis-1,2-Dichloroethene	U		0.000747	0.00271	1	03/21/2020 12:06	WG1447922
trans-1,2-Dichloroethene	U		0.00155	0.00541	1	03/21/2020 12:06	WG1447922
1,2-Dichloropropane	U		0.00138	0.00541	1	03/21/2020 12:06	WG1447922
1,1-Dichloropropene	U		0.000758	0.00271	1	03/21/2020 12:06	WG1447922
1,3-Dichloropropane	U		0.00189	0.00541	1	03/21/2020 12:06	WG1447922
cis-1,3-Dichloropropene	U		0.000734	0.00271	1	03/21/2020 12:06	WG1447922
trans-1,3-Dichloropropene	U		0.00166	0.00541	1	03/21/2020 12:06	WG1447922
trans-1,4-Dichloro-2-butene	U		0.00152	0.00541	1	03/21/2020 12:06	WG1447922
2,2-Dichloropropane	U		0.000859	0.00271	1	03/21/2020 12:06	WG1447922
Di-isopropyl ether	U		0.000379	0.00108	1	03/21/2020 12:06	WG1447922
Ethylbenzene	U		0.000574	0.00271	1	03/21/2020 12:06	WG1447922
Hexachloro-1,3-butadiene	U		0.0138	0.0271	1	03/21/2020 12:06	WG1447922
2-Hexanone	U		0.0108	0.0271	1	03/21/2020 12:06	WG1447922
n-Hexane	0.0243		0.00115	0.00541	1	03/21/2020 12:06	WG1447922

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

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Iodomethane	U		0.00655	0.0135	1	03/21/2020 12:06	WG1447922
Isopropylbenzene	U		0.000934	0.00271	1	03/21/2020 12:06	WG1447922
p-Isopropyltoluene	U		0.00252	0.00541	1	03/21/2020 12:06	WG1447922
2-Butanone (MEK)	0.0177	U ~~B J~~	0.0135	0.0271	1	03/21/2020 12:06	WG1447922
Methylene Chloride	U		0.00719	0.0271	1	03/21/2020 12:06	WG1447922
4-Methyl-2-pentanone (MIBK)	U		0.0108	0.0271	1	03/21/2020 12:06	WG1447922
Methyl tert-butyl ether	U		0.000319	0.00108	1	03/21/2020 12:06	WG1447922
Naphthalene	U		0.00338	0.0135	1	03/21/2020 12:06	WG1447922
n-Propylbenzene	U		0.00128	0.00541	1	03/21/2020 12:06	WG1447922
Styrene	U		0.00296	0.0135	1	03/21/2020 12:06	WG1447922
1,1,1,2-Tetrachloroethane	U		0.000541	0.00271	1	03/21/2020 12:06	WG1447922
1,1,2,2-Tetrachloroethane	U		0.000422	0.00271	1	03/21/2020 12:06	WG1447922
1,1,2-Trichlorotrifluoroethane	U		0.000731	0.00271	1	03/21/2020 12:06	WG1447922
Tetrachloroethene	0.0175		0.000758	0.00271	1	03/21/2020 12:06	WG1447922
Toluene	U		0.00135	0.00541	1	03/21/2020 12:06	WG1447922
1,2,3-Trichlorobenzene	U		0.000677	0.0135	1	03/21/2020 12:06	WG1447922
1,2,4-Trichlorobenzene	U		0.00522	0.0135	1	03/21/2020 12:06	WG1447922
1,1,1-Trichloroethane	U		0.000298	0.00271	1	03/21/2020 12:06	WG1447922
1,1,2-Trichloroethane	U		0.000956	0.00271	1	03/21/2020 12:06	WG1447922
Trichloroethene	U		0.000433	0.00108	1	03/21/2020 12:06	WG1447922
Trichlorofluoromethane	U		0.000541	0.00271	1	03/21/2020 12:06	WG1447922
1,2,3-Trichloropropane	U		0.00552	0.0135	1	03/21/2020 12:06	WG1447922
1,2,4-Trimethylbenzene	0.00184	J J	0.00126	0.00541	1	03/21/2020 12:06	WG1447922
1,2,3-Trimethylbenzene	0.00206	J J	0.00125	0.00541	1	03/21/2020 12:06	WG1447922
1,3,5-Trimethylbenzene	0.00130	J J	0.00117	0.00541	1	03/21/2020 12:06	WG1447922
Vinyl acetate	U	UJ J0	0.00381	0.0135	1	03/21/2020 12:06	WG1447922
Vinyl chloride	U		0.000740	0.00271	1	03/21/2020 12:06	WG1447922
Xylenes, Total	U		0.00518	0.00704	1	03/21/2020 12:06	WG1447922
(S) Toluene-d8	*115*			*75.0-131*		*03/21/2020 12:06*	WG1447922
(S) 4-Bromofluorobenzene	*93.3*			*67.0-138*		*03/21/2020 12:06*	WG1447922
(S) 1,2-Dichloroethane-d4	*90.3*			*70.0-130*		*03/21/2020 12:06*	WG1447922

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Total Solids by Method 2540 G-2011

	Result	Qualifier	Dilution	Analysis	Batch
Analyte	%			date / time	
Total Solids	64.1		1	03/21/2020 18:54	WG1448016

Volatile Organic Compounds (GC) by Method NWTPHGX

	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg		date / time	
Gasoline Range Organics-NWTPH	10.7 Z, J+		1.75	5.15	33	03/22/2020 04:38	WG1447924
(S) a,a,a-Trifluorotoluene(FID)	*97.8*			*77.0-120*		*03/22/2020 04:38*	WG1447924

Sample Narrative:

L1200909-12 WG1447924: No discernable petroleum pattern.

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

	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg		date / time	
Acetone	U	~~J3~~	0.0243	0.0444	1.14	03/21/2020 12:25	WG1447922
Acrylonitrile	U		0.00338	0.0223	1.14	03/21/2020 12:25	WG1447922
Benzene	0.00315		0.000711	0.00178	1.14	03/21/2020 12:25	WG1447922
Bromobenzene	U		0.00187	0.0223	1.14	03/21/2020 12:25	WG1447922
Bromodichloromethane	U		0.00140	0.00444	1.14	03/21/2020 12:25	WG1447922
Bromochloromethane	U	~~J4~~	0.00201	0.00889	1.14	03/21/2020 12:25	WG1447922
Bromoform	U		0.0106	0.0444	1.14	03/21/2020 12:25	WG1447922
Bromomethane	U		0.00658	0.0223	1.14	03/21/2020 12:25	WG1447922
n-Butylbenzene	U		0.00683	0.0223	1.14	03/21/2020 12:25	WG1447922
sec-Butylbenzene	U		0.00449	0.0223	1.14	03/21/2020 12:25	WG1447922
tert-Butylbenzene	U		0.00276	0.00889	1.14	03/21/2020 12:25	WG1447922
Carbon disulfide	U		0.00722	0.0223	1.14	03/21/2020 12:25	WG1447922
Carbon tetrachloride	U		0.00192	0.00889	1.14	03/21/2020 12:25	WG1447922
Chlorobenzene	U		0.00102	0.00444	1.14	03/21/2020 12:25	WG1447922
Chlorodibromomethane	U		0.000800	0.00444	1.14	03/21/2020 12:25	WG1447922
Chloroethane	U		0.00192	0.00889	1.14	03/21/2020 12:25	WG1447922
Chloroform	U		0.000738	0.00444	1.14	03/21/2020 12:25	WG1447922
Chloromethane	U		0.00246	0.0223	1.14	03/21/2020 12:25	WG1447922
2-Chlorotoluene	U		0.00164	0.00444	1.14	03/21/2020 12:25	WG1447922
4-Chlorotoluene	U		0.00201	0.00889	1.14	03/21/2020 12:25	WG1447922
1,2-Dibromo-3-Chloropropane	U		0.00906	0.0444	1.14	03/21/2020 12:25	WG1447922
1,2-Dibromoethane	U		0.000934	0.00444	1.14	03/21/2020 12:25	WG1447922
Dibromomethane	U		0.00178	0.00889	1.14	03/21/2020 12:25	WG1447922
1,2-Dichlorobenzene	U		0.00257	0.00889	1.14	03/21/2020 12:25	WG1447922
1,3-Dichlorobenzene	U		0.00303	0.00889	1.14	03/21/2020 12:25	WG1447922
1,4-Dichlorobenzene	U		0.00351	0.00889	1.14	03/21/2020 12:25	WG1447922
Dichlorodifluoromethane	U		0.00146	0.00444	1.14	03/21/2020 12:25	WG1447922
1,1-Dichloroethane	U		0.00102	0.00444	1.14	03/21/2020 12:25	WG1447922
1,2-Dichloroethane	U		0.000845	0.00444	1.14	03/21/2020 12:25	WG1447922
1,1-Dichloroethene	U		0.000889	0.00444	1.14	03/21/2020 12:25	WG1447922
cis-1,2-Dichloroethene	0.0270		0.00123	0.00444	1.14	03/21/2020 12:25	WG1447922
trans-1,2-Dichloroethene	0.00401 J	J	0.00254	0.00889	1.14	03/21/2020 12:25	WG1447922
1,2-Dichloropropane	U		0.00226	0.00889	1.14	03/21/2020 12:25	WG1447922
1,1-Dichloropropene	U		0.00124	0.00444	1.14	03/21/2020 12:25	WG1447922
1,3-Dichloropropane	U		0.00312	0.00889	1.14	03/21/2020 12:25	WG1447922
cis-1,3-Dichloropropene	U		0.00121	0.00444	1.14	03/21/2020 12:25	WG1447922
trans-1,3-Dichloropropene	U		0.00271	0.00889	1.14	03/21/2020 12:25	WG1447922
trans-1,4-Dichloro-2-butene	U		0.00250	0.00889	1.14	03/21/2020 12:25	WG1447922
2,2-Dichloropropane	U		0.00141	0.00444	1.14	03/21/2020 12:25	WG1447922
Di-isopropyl ether	U		0.000622	0.00178	1.14	03/21/2020 12:25	WG1447922
Ethylbenzene	0.00413 J	J	0.000942	0.00444	1.14	03/21/2020 12:25	WG1447922

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B-274-6
Collected date/time: 03/17/20 12:53

SAMPLE RESULTS - 12

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

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Hexachloro-1,3-butadiene	U		0.0226	0.0444	1.14	03/21/2020 12:25	WG1447922
2-Hexanone	U		0.0178	0.0444	1.14	03/21/2020 12:25	WG1447922
n-Hexane	0.967		0.00189	0.00889	1.14	03/21/2020 12:25	WG1447922
Iodomethane	U		0.0108	0.0223	1.14	03/21/2020 12:25	WG1447922
Isopropylbenzene	U		0.00153	0.00444	1.14	03/21/2020 12:25	WG1447922
p-Isopropyltoluene	0.00608 J	J	0.00415	0.00889	1.14	03/21/2020 12:25	WG1447922
2-Butanone (MEK)	U		0.0223	0.0444	1.14	03/21/2020 12:25	WG1447922
Methylene Chloride	U		0.0118	0.0444	1.14	03/21/2020 12:25	WG1447922
4-Methyl-2-pentanone (MIBK)	U		0.0178	0.0444	1.14	03/21/2020 12:25	WG1447922
Methyl tert-butyl ether	U		0.000524	0.00178	1.14	03/21/2020 12:25	WG1447922
Naphthalene	U		0.00555	0.0223	1.14	03/21/2020 12:25	WG1447922
n-Propylbenzene	U		0.00211	0.00889	1.14	03/21/2020 12:25	WG1447922
Styrene	U		0.00485	0.0223	1.14	03/21/2020 12:25	WG1447922
1,1,1,2-Tetrachloroethane	U		0.000889	0.00444	1.14	03/21/2020 12:25	WG1447922
1,1,2,2-Tetrachloroethane	U		0.000694	0.00444	1.14	03/21/2020 12:25	WG1447922
1,1,2-Trichlorotrifluoroethane	U		0.00120	0.00444	1.14	03/21/2020 12:25	WG1447922
Tetrachloroethene	0.134		0.00124	0.00444	1.14	03/21/2020 12:25	WG1447922
Toluene	0.0123		0.00223	0.00889	1.14	03/21/2020 12:25	WG1447922
1,2,3-Trichlorobenzene	U		0.00111	0.0223	1.14	03/21/2020 12:25	WG1447922
1,2,4-Trichlorobenzene	U		0.00856	0.0223	1.14	03/21/2020 12:25	WG1447922
1,1,1-Trichloroethane	U		0.000490	0.00444	1.14	03/21/2020 12:25	WG1447922
1,1,2-Trichloroethane	U		0.00158	0.00444	1.14	03/21/2020 12:25	WG1447922
Trichloroethene	0.00613		0.000711	0.00178	1.14	03/21/2020 12:25	WG1447922
Trichlorofluoromethane	U		0.000889	0.00444	1.14	03/21/2020 12:25	WG1447922
1,2,3-Trichloropropane	U		0.00906	0.0223	1.14	03/21/2020 12:25	WG1447922
1,2,4-Trimethylbenzene	0.00667 J	J	0.00206	0.00889	1.14	03/21/2020 12:25	WG1447922
1,2,3-Trimethylbenzene	0.00608 J	J	0.00204	0.00889	1.14	03/21/2020 12:25	WG1447922
1,3,5-Trimethylbenzene	0.00298 J	J	0.00192	0.00889	1.14	03/21/2020 12:25	WG1447922
Vinyl acetate	U UJ	J0	0.00625	0.0223	1.14	03/21/2020 12:25	WG1447922
Vinyl chloride	U		0.00121	0.00444	1.14	03/21/2020 12:25	WG1447922
Xylenes, Total	0.0149		0.00850	0.0116	1.14	03/21/2020 12:25	WG1447922
(S) Toluene-d8	*114*			*75.0-131*		*03/21/2020 12:25*	WG1447922
(S) 4-Bromofluorobenzene	*94.1*			*67.0-138*		*03/21/2020 12:25*	WG1447922
(S) 1,2-Dichloroethane-d4	*93.4*			*70.0-130*		*03/21/2020 12:25*	WG1447922

JC 4/20/2020

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

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	85.2		1	03/21/2020 18:54	WG1448016

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	U		0.995	2.93	25	03/22/2020 05:02	WG1447924
(S) a,a,a-Trifluorotoluene(FID)	*99.3*			*77.0-120*		*03/22/2020 05:02*	WG1447924

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

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	U	~~J3~~	0.0161	0.0293	1	03/21/2020 12:43	WG1447922
Acrylonitrile	U		0.00223	0.0147	1	03/21/2020 12:43	WG1447922
Benzene	0.00200		0.000470	0.00117	1	03/21/2020 12:43	WG1447922
Bromobenzene	U		0.00123	0.0147	1	03/21/2020 12:43	WG1447922
Bromodichloromethane	U		0.000925	0.00293	1	03/21/2020 12:43	WG1447922
Bromochloromethane	U	~~J4~~	0.00133	0.00587	1	03/21/2020 12:43	WG1447922
Bromoform	U		0.00702	0.0293	1	03/21/2020 12:43	WG1447922
Bromomethane	U		0.00434	0.0147	1	03/21/2020 12:43	WG1447922
n-Butylbenzene	U		0.00451	0.0147	1	03/21/2020 12:43	WG1447922
sec-Butylbenzene	U		0.00297	0.0147	1	03/21/2020 12:43	WG1447922
tert-Butylbenzene	U		0.00182	0.00587	1	03/21/2020 12:43	WG1447922
Carbon disulfide	U		0.00477	0.0147	1	03/21/2020 12:43	WG1447922
Carbon tetrachloride	U		0.00127	0.00587	1	03/21/2020 12:43	WG1447922
Chlorobenzene	U		0.000673	0.00293	1	03/21/2020 12:43	WG1447922
Chlorodibromomethane	U		0.000528	0.00293	1	03/21/2020 12:43	WG1447922
Chloroethane	U		0.00127	0.00587	1	03/21/2020 12:43	WG1447922
Chloroform	U		0.000487	0.00293	1	03/21/2020 12:43	WG1447922
Chloromethane	U		0.00163	0.0147	1	03/21/2020 12:43	WG1447922
2-Chlorotoluene	U		0.00108	0.00293	1	03/21/2020 12:43	WG1447922
4-Chlorotoluene	U		0.00133	0.00587	1	03/21/2020 12:43	WG1447922
1,2-Dibromo-3-Chloropropane	U		0.00599	0.0293	1	03/21/2020 12:43	WG1447922
1,2-Dibromoethane	U		0.000616	0.00293	1	03/21/2020 12:43	WG1447922
Dibromomethane	U		0.00117	0.00587	1	03/21/2020 12:43	WG1447922
1,2-Dichlorobenzene	U		0.00170	0.00587	1	03/21/2020 12:43	WG1447922
1,3-Dichlorobenzene	U		0.00200	0.00587	1	03/21/2020 12:43	WG1447922
1,4-Dichlorobenzene	U		0.00231	0.00587	1	03/21/2020 12:43	WG1447922
Dichlorodifluoromethane	U		0.000960	0.00293	1	03/21/2020 12:43	WG1447922
1,1-Dichloroethane	U		0.000675	0.00293	1	03/21/2020 12:43	WG1447922
1,2-Dichloroethane	U		0.000558	0.00293	1	03/21/2020 12:43	WG1447922
1,1-Dichloroethene	U		0.000587	0.00293	1	03/21/2020 12:43	WG1447922
cis-1,2-Dichloroethene	U		0.000810	0.00293	1	03/21/2020 12:43	WG1447922
trans-1,2-Dichloroethene	U		0.00168	0.00587	1	03/21/2020 12:43	WG1447922
1,2-Dichloropropane	U		0.00149	0.00587	1	03/21/2020 12:43	WG1447922
1,1-Dichloropropene	U		0.000822	0.00293	1	03/21/2020 12:43	WG1447922
1,3-Dichloropropane	U		0.00205	0.00587	1	03/21/2020 12:43	WG1447922
cis-1,3-Dichloropropene	U		0.000796	0.00293	1	03/21/2020 12:43	WG1447922
trans-1,3-Dichloropropene	U		0.00180	0.00587	1	03/21/2020 12:43	WG1447922
trans-1,4-Dichloro-2-butene	U		0.00164	0.00587	1	03/21/2020 12:43	WG1447922
2,2-Dichloropropane	U		0.000931	0.00293	1	03/21/2020 12:43	WG1447922
Di-isopropyl ether	U		0.000411	0.00117	1	03/21/2020 12:43	WG1447922
Ethylbenzene	U		0.000622	0.00293	1	03/21/2020 12:43	WG1447922
Hexachloro-1,3-butadiene	U		0.0149	0.0293	1	03/21/2020 12:43	WG1447922
2-Hexanone	U		0.0117	0.0293	1	03/21/2020 12:43	WG1447922
n-Hexane	0.00923		0.00124	0.00587	1	03/21/2020 12:43	WG1447922

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

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Iodomethane	U		0.00710	0.0147	1	03/21/2020 12:43	WG1447922
Isopropylbenzene	U		0.00101	0.00293	1	03/21/2020 12:43	WG1447922
p-Isopropyltoluene	U		0.00274	0.00587	1	03/21/2020 12:43	WG1447922
2-Butanone (MEK)	U		0.0147	0.0293	1	03/21/2020 12:43	WG1447922
Methylene Chloride	U		0.00779	0.0293	1	03/21/2020 12:43	WG1447922
4-Methyl-2-pentanone (MIBK)	U		0.0117	0.0293	1	03/21/2020 12:43	WG1447922
Methyl tert-butyl ether	U		0.000346	0.00117	1	03/21/2020 12:43	WG1447922
Naphthalene	U		0.00366	0.0147	1	03/21/2020 12:43	WG1447922
n-Propylbenzene	U		0.00139	0.00587	1	03/21/2020 12:43	WG1447922
Styrene	U		0.00320	0.0147	1	03/21/2020 12:43	WG1447922
1,1,1,2-Tetrachloroethane	U		0.000587	0.00293	1	03/21/2020 12:43	WG1447922
1,1,2,2-Tetrachloroethane	U		0.000458	0.00293	1	03/21/2020 12:43	WG1447922
1,1,2-Trichlorotrifluoroethane	U		0.000792	0.00293	1	03/21/2020 12:43	WG1447922
Tetrachloroethene	0.110		0.000822	0.00293	1	03/21/2020 12:43	WG1447922
Toluene	U		0.00147	0.00587	1	03/21/2020 12:43	WG1447922
1,2,3-Trichlorobenzene	U		0.000734	0.0147	1	03/21/2020 12:43	WG1447922
1,2,4-Trichlorobenzene	U		0.00566	0.0147	1	03/21/2020 12:43	WG1447922
1,1,1-Trichloroethane	U		0.000323	0.00293	1	03/21/2020 12:43	WG1447922
1,1,2-Trichloroethane	U		0.00104	0.00293	1	03/21/2020 12:43	WG1447922
Trichloroethene	0.00466		0.000470	0.00117	1	03/21/2020 12:43	WG1447922
Trichlorofluoromethane	U		0.000587	0.00293	1	03/21/2020 12:43	WG1447922
1,2,3-Trichloropropane	U		0.00599	0.0147	1	03/21/2020 12:43	WG1447922
1,2,4-Trimethylbenzene	U		0.00136	0.00587	1	03/21/2020 12:43	WG1447922
1,2,3-Trimethylbenzene	0.00143 J	J	0.00135	0.00587	1	03/21/2020 12:43	WG1447922
1,3,5-Trimethylbenzene	U		0.00127	0.00587	1	03/21/2020 12:43	WG1447922
Vinyl acetate	U UJ	J0	0.00413	0.0147	1	03/21/2020 12:43	WG1447922
Vinyl chloride	U		0.000802	0.00293	1	03/21/2020 12:43	WG1447922
Xylenes, Total	U		0.00561	0.00763	1	03/21/2020 12:43	WG1447922
(S) Toluene-d8	*113*			*75.0-131*		*03/21/2020 12:43*	WG1447922
(S) 4-Bromofluorobenzene	*91.1*			*67.0-138*		*03/21/2020 12:43*	WG1447922
(S) 1,2-Dichloroethane-d4	*93.5*			*70.0-130*		*03/21/2020 12:43*	WG1447922

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Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	72.9		1	03/21/2020 18:54	WG1448016

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	U		1.33	3.94	28.7	03/22/2020 05:27	WG1447924
(S) a,a,a-Trifluorotoluene(FID)	*98.2*			*77.0-120*		*03/22/2020 05:27*	WG1447924

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

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	U	~~J3~~	0.0254	0.0464	1.35	03/21/2020 13:02	WG1447922
Acrylonitrile	U		0.00352	0.0232	1.35	03/21/2020 13:02	WG1447922
Benzene	0.0103		0.000741	0.00185	1.35	03/21/2020 13:02	WG1447922
Bromobenzene	U		0.00195	0.0232	1.35	03/21/2020 13:02	WG1447922
Bromodichloromethane	U		0.00145	0.00464	1.35	03/21/2020 13:02	WG1447922
Bromochloromethane	U	~~J4~~	0.00210	0.00926	1.35	03/21/2020 13:02	WG1447922
Bromoform	U		0.0111	0.0464	1.35	03/21/2020 13:02	WG1447922
Bromomethane	U		0.00686	0.0232	1.35	03/21/2020 13:02	WG1447922
n-Butylbenzene	0.00949 J	J	0.00710	0.0232	1.35	03/21/2020 13:02	WG1447922
sec-Butylbenzene	U		0.00469	0.0232	1.35	03/21/2020 13:02	WG1447922
tert-Butylbenzene	U		0.00287	0.00926	1.35	03/21/2020 13:02	WG1447922
Carbon disulfide	U		0.00751	0.0232	1.35	03/21/2020 13:02	WG1447922
Carbon tetrachloride	U		0.00200	0.00926	1.35	03/21/2020 13:02	WG1447922
Chlorobenzene	U		0.00106	0.00464	1.35	03/21/2020 13:02	WG1447922
Chlorodibromomethane	U		0.000834	0.00464	1.35	03/21/2020 13:02	WG1447922
Chloroethane	U		0.00200	0.00926	1.35	03/21/2020 13:02	WG1447922
Chloroform	U		0.000768	0.00464	1.35	03/21/2020 13:02	WG1447922
Chloromethane	U		0.00258	0.0232	1.35	03/21/2020 13:02	WG1447922
2-Chlorotoluene	U		0.00170	0.00464	1.35	03/21/2020 13:02	WG1447922
4-Chlorotoluene	U		0.00210	0.00926	1.35	03/21/2020 13:02	WG1447922
1,2-Dibromo-3-Chloropropane	U		0.00945	0.0464	1.35	03/21/2020 13:02	WG1447922
1,2-Dibromoethane	U		0.000972	0.00464	1.35	03/21/2020 13:02	WG1447922
Dibromomethane	U		0.00185	0.00926	1.35	03/21/2020 13:02	WG1447922
1,2-Dichlorobenzene	U		0.00269	0.00926	1.35	03/21/2020 13:02	WG1447922
1,3-Dichlorobenzene	U		0.00315	0.00926	1.35	03/21/2020 13:02	WG1447922
1,4-Dichlorobenzene	U		0.00365	0.00926	1.35	03/21/2020 13:02	WG1447922
Dichlorodifluoromethane	U		0.00151	0.00464	1.35	03/21/2020 13:02	WG1447922
1,1-Dichloroethane	U		0.00106	0.00464	1.35	03/21/2020 13:02	WG1447922
1,2-Dichloroethane	U		0.000879	0.00464	1.35	03/21/2020 13:02	WG1447922
1,1-Dichloroethene	U		0.000926	0.00464	1.35	03/21/2020 13:02	WG1447922
cis-1,2-Dichloroethene	0.0732		0.00128	0.00464	1.35	03/21/2020 13:02	WG1447922
trans-1,2-Dichloroethene	0.00518 J	J	0.00265	0.00926	1.35	03/21/2020 13:02	WG1447922
1,2-Dichloropropane	U		0.00234	0.00926	1.35	03/21/2020 13:02	WG1447922
1,1-Dichloropropene	U		0.00130	0.00464	1.35	03/21/2020 13:02	WG1447922
1,3-Dichloropropane	U		0.00324	0.00926	1.35	03/21/2020 13:02	WG1447922
cis-1,3-Dichloropropene	U		0.00125	0.00464	1.35	03/21/2020 13:02	WG1447922
trans-1,3-Dichloropropene	U		0.00284	0.00926	1.35	03/21/2020 13:02	WG1447922
trans-1,4-Dichloro-2-butene	U		0.00259	0.00926	1.35	03/21/2020 13:02	WG1447922
2,2-Dichloropropane	U		0.00147	0.00464	1.35	03/21/2020 13:02	WG1447922
Di-isopropyl ether	U		0.000649	0.00185	1.35	03/21/2020 13:02	WG1447922
Ethylbenzene	0.0343		0.000982	0.00464	1.35	03/21/2020 13:02	WG1447922
Hexachloro-1,3-butadiene	U		0.0234	0.0464	1.35	03/21/2020 13:02	WG1447922
2-Hexanone	U		0.0185	0.0464	1.35	03/21/2020 13:02	WG1447922
n-Hexane	0.568		0.00196	0.00926	1.35	03/21/2020 13:02	WG1447922

JC 4/20/2020

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

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Iodomethane	U		0.0112	0.0232	1.35	03/21/2020 13:02	WG1447922
Isopropylbenzene	0.00852		0.00160	0.00464	1.35	03/21/2020 13:02	WG1447922
p-Isopropyltoluene	0.0705		0.00432	0.00926	1.35	03/21/2020 13:02	WG1447922
2-Butanone (MEK)	0.0658	~~B~~	0.0232	0.0464	1.35	03/21/2020 13:02	WG1447922
Methylene Chloride	U		0.0123	0.0464	1.35	03/21/2020 13:02	WG1447922
4-Methyl-2-pentanone (MIBK)	U		0.0185	0.0464	1.35	03/21/2020 13:02	WG1447922
Methyl tert-butyl ether	U		0.000546	0.00185	1.35	03/21/2020 13:02	WG1447922
Naphthalene	0.0429		0.00577	0.0232	1.35	03/21/2020 13:02	WG1447922
n-Propylbenzene	0.0113		0.00218	0.00926	1.35	03/21/2020 13:02	WG1447922
Styrene	U		0.00506	0.0232	1.35	03/21/2020 13:02	WG1447922
1,1,1,2-Tetrachloroethane	U		0.000926	0.00464	1.35	03/21/2020 13:02	WG1447922
1,1,2,2-Tetrachloroethane	U		0.000723	0.00464	1.35	03/21/2020 13:02	WG1447922
1,1,2-Trichlorotrifluoroethane	U		0.00125	0.00464	1.35	03/21/2020 13:02	WG1447922
Tetrachloroethene	2.41		0.00130	0.00464	1.35	03/21/2020 13:02	WG1447922
Toluene	0.0938		0.00232	0.00926	1.35	03/21/2020 13:02	WG1447922
1,2,3-Trichlorobenzene	U		0.00116	0.0232	1.35	03/21/2020 13:02	WG1447922
1,2,4-Trichlorobenzene	U		0.00893	0.0232	1.35	03/21/2020 13:02	WG1447922
1,1,1-Trichloroethane	U		0.000509	0.00464	1.35	03/21/2020 13:02	WG1447922
1,1,2-Trichloroethane	U		0.00163	0.00464	1.35	03/21/2020 13:02	WG1447922
Trichloroethene	0.108		0.000741	0.00185	1.35	03/21/2020 13:02	WG1447922
Trichlorofluoromethane	U		0.000926	0.00464	1.35	03/21/2020 13:02	WG1447922
1,2,3-Trichloropropane	U		0.00945	0.0232	1.35	03/21/2020 13:02	WG1447922
1,2,4-Trimethylbenzene	0.0601		0.00215	0.00926	1.35	03/21/2020 13:02	WG1447922
1,2,3-Trimethylbenzene	0.0491		0.00213	0.00926	1.35	03/21/2020 13:02	WG1447922
1,3,5-Trimethylbenzene	0.0219		0.00200	0.00926	1.35	03/21/2020 13:02	WG1447922
Vinyl acetate	U	UJ J0	0.00651	0.0232	1.35	03/21/2020 13:02	WG1447922
Vinyl chloride	U		0.00126	0.00464	1.35	03/21/2020 13:02	WG1447922
Xylenes, Total	0.189		0.00885	0.0120	1.35	03/21/2020 13:02	WG1447922
(S) Toluene-d8	*113*			*75.0-131*		*03/21/2020 13:02*	WG1447922
(S) 4-Bromofluorobenzene	*91.0*			*67.0-138*		*03/21/2020 13:02*	WG1447922
(S) 1,2-Dichloroethane-d4	*92.9*			*70.0-130*		*03/21/2020 13:02*	WG1447922

JC 4/20/2020

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

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	65.0		1	03/21/2020 18:54	WG1448016

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	U		1.30	3.85	25	03/22/2020 05:51	WG1447924
(S) a,a,a-Trifluorotoluene(FID)	*97.9*			*77.0-120*		*03/22/2020 05:51*	WG1447924

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

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	U	~~J3~~	0.0211	0.0385	1	03/21/2020 13:21	WG1447922
Acrylonitrile	U		0.00292	0.0192	1	03/21/2020 13:21	WG1447922
Benzene	0.00112 J	J	0.000615	0.00154	1	03/21/2020 13:21	WG1447922
Bromobenzene	U		0.00162	0.0192	1	03/21/2020 13:21	WG1447922
Bromodichloromethane	U		0.00121	0.00385	1	03/21/2020 13:21	WG1447922
Bromochloromethane	U	~~J4~~	0.00174	0.00769	1	03/21/2020 13:21	WG1447922
Bromoform	U		0.00920	0.0385	1	03/21/2020 13:21	WG1447922
Bromomethane	U		0.00569	0.0192	1	03/21/2020 13:21	WG1447922
n-Butylbenzene	U		0.00591	0.0192	1	03/21/2020 13:21	WG1447922
sec-Butylbenzene	U		0.00389	0.0192	1	03/21/2020 13:21	WG1447922
tert-Butylbenzene	U		0.00238	0.00769	1	03/21/2020 13:21	WG1447922
Carbon disulfide	0.0171 J	J	0.00625	0.0192	1	03/21/2020 13:21	WG1447922
Carbon tetrachloride	U		0.00166	0.00769	1	03/21/2020 13:21	WG1447922
Chlorobenzene	U		0.000882	0.00385	1	03/21/2020 13:21	WG1447922
Chlorodibromomethane	U		0.000692	0.00385	1	03/21/2020 13:21	WG1447922
Chloroethane	U		0.00166	0.00769	1	03/21/2020 13:21	WG1447922
Chloroform	U		0.000638	0.00385	1	03/21/2020 13:21	WG1447922
Chloromethane	U		0.00214	0.0192	1	03/21/2020 13:21	WG1447922
2-Chlorotoluene	U		0.00142	0.00385	1	03/21/2020 13:21	WG1447922
4-Chlorotoluene	U		0.00174	0.00769	1	03/21/2020 13:21	WG1447922
1,2-Dibromo-3-Chloropropane	U		0.00785	0.0385	1	03/21/2020 13:21	WG1447922
1,2-Dibromoethane	U		0.000808	0.00385	1	03/21/2020 13:21	WG1447922
Dibromomethane	U		0.00154	0.00769	1	03/21/2020 13:21	WG1447922
1,2-Dichlorobenzene	U		0.00223	0.00769	1	03/21/2020 13:21	WG1447922
1,3-Dichlorobenzene	U		0.00262	0.00769	1	03/21/2020 13:21	WG1447922
1,4-Dichlorobenzene	U		0.00303	0.00769	1	03/21/2020 13:21	WG1447922
Dichlorodifluoromethane	U		0.00126	0.00385	1	03/21/2020 13:21	WG1447922
1,1-Dichloroethane	U		0.000885	0.00385	1	03/21/2020 13:21	WG1447922
1,2-Dichloroethane	U		0.000731	0.00385	1	03/21/2020 13:21	WG1447922
1,1-Dichloroethene	U		0.000769	0.00385	1	03/21/2020 13:21	WG1447922
cis-1,2-Dichloroethene	U		0.00106	0.00385	1	03/21/2020 13:21	WG1447922
trans-1,2-Dichloroethene	U		0.00220	0.00769	1	03/21/2020 13:21	WG1447922
1,2-Dichloropropane	U		0.00195	0.00769	1	03/21/2020 13:21	WG1447922
1,1-Dichloropropene	U		0.00108	0.00385	1	03/21/2020 13:21	WG1447922
1,3-Dichloropropane	U		0.00269	0.00769	1	03/21/2020 13:21	WG1447922
cis-1,3-Dichloropropene	U		0.00104	0.00385	1	03/21/2020 13:21	WG1447922
trans-1,3-Dichloropropene	U		0.00235	0.00769	1	03/21/2020 13:21	WG1447922
trans-1,4-Dichloro-2-butene	U		0.00215	0.00769	1	03/21/2020 13:21	WG1447922
2,2-Dichloropropane	U		0.00122	0.00385	1	03/21/2020 13:21	WG1447922
Di-isopropyl ether	U		0.000538	0.00154	1	03/21/2020 13:21	WG1447922
Ethylbenzene	0.00163 J	J	0.000815	0.00385	1	03/21/2020 13:21	WG1447922
Hexachloro-1,3-butadiene	U		0.0195	0.0385	1	03/21/2020 13:21	WG1447922
2-Hexanone	U		0.0154	0.0385	1	03/21/2020 13:21	WG1447922
n-Hexane	0.0189		0.00163	0.00769	1	03/21/2020 13:21	WG1447922

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

	Result (dry)		Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg			mg/kg	mg/kg		date / time	
Iodomethane	U			0.00931	0.0192	1	03/21/2020 13:21	WG1447922
Isopropylbenzene	U			0.00133	0.00385	1	03/21/2020 13:21	WG1447922
p-Isopropyltoluene	0.0126			0.00358	0.00769	1	03/21/2020 13:21	WG1447922
2-Butanone (MEK)	0.0391		~~B~~	0.0192	0.0385	1	03/21/2020 13:21	WG1447922
Methylene Chloride	U			0.0102	0.0385	1	03/21/2020 13:21	WG1447922
4-Methyl-2-pentanone (MIBK)	U			0.0154	0.0385	1	03/21/2020 13:21	WG1447922
Methyl tert-butyl ether	U			0.000454	0.00154	1	03/21/2020 13:21	WG1447922
Naphthalene	0.00814	J	J	0.00480	0.0192	1	03/21/2020 13:21	WG1447922
n-Propylbenzene	U			0.00182	0.00769	1	03/21/2020 13:21	WG1447922
Styrene	U			0.00420	0.0192	1	03/21/2020 13:21	WG1447922
1,1,1,2-Tetrachloroethane	U			0.000769	0.00385	1	03/21/2020 13:21	WG1447922
1,1,2,2-Tetrachloroethane	U			0.000600	0.00385	1	03/21/2020 13:21	WG1447922
1,1,2-Trichlorotrifluoroethane	U			0.00104	0.00385	1	03/21/2020 13:21	WG1447922
Tetrachloroethene	U			0.00108	0.00385	1	03/21/2020 13:21	WG1447922
Toluene	0.00665	J	J	0.00192	0.00769	1	03/21/2020 13:21	WG1447922
1,2,3-Trichlorobenzene	U			0.000962	0.0192	1	03/21/2020 13:21	WG1447922
1,2,4-Trichlorobenzene	U			0.00742	0.0192	1	03/21/2020 13:21	WG1447922
1,1,1-Trichloroethane	U			0.000423	0.00385	1	03/21/2020 13:21	WG1447922
1,1,2-Trichloroethane	U			0.00136	0.00385	1	03/21/2020 13:21	WG1447922
Trichloroethene	U			0.000615	0.00154	1	03/21/2020 13:21	WG1447922
Trichlorofluoromethane	U			0.000769	0.00385	1	03/21/2020 13:21	WG1447922
1,2,3-Trichloropropane	U			0.00785	0.0192	1	03/21/2020 13:21	WG1447922
1,2,4-Trimethylbenzene	0.00182	J	J	0.00178	0.00769	1	03/21/2020 13:21	WG1447922
1,2,3-Trimethylbenzene	0.00306	J	J	0.00177	0.00769	1	03/21/2020 13:21	WG1447922
1,3,5-Trimethylbenzene	U			0.00166	0.00769	1	03/21/2020 13:21	WG1447922
Vinyl acetate	U	UJ	J0	0.00542	0.0192	1	03/21/2020 13:21	WG1447922
Vinyl chloride	U			0.00105	0.00385	1	03/21/2020 13:21	WG1447922
Xylenes, Total	U			0.00735	0.0100	1	03/21/2020 13:21	WG1447922
(S) Toluene-d8	*113*				*75.0-131*		*03/21/2020 13:21*	WG1447922
(S) 4-Bromofluorobenzene	*90.8*				*67.0-138*		*03/21/2020 13:21*	WG1447922
(S) 1,2-Dichloroethane-d4	*87.0*				*70.0-130*		*03/21/2020 13:21*	WG1447922

JC 4/20/2020

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

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	90.9		1	03/22/2020 00:56	WG1448017

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	U		0.932	2.75	25	03/22/2020 06:15	WG1447924
(S) a,a,a-Trifluorotoluene(FID)	*99.6*			*77.0-120*		*03/22/2020 06:15*	WG1447924

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

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	U	~~J3~~	0.0151	0.0275	1	03/21/2020 13:40	WG1447922
Acrylonitrile	U		0.00209	0.0137	1	03/21/2020 13:40	WG1447922
Benzene	U		0.000440	0.00110	1	03/21/2020 13:40	WG1447922
Bromobenzene	U		0.00115	0.0137	1	03/21/2020 13:40	WG1447922
Bromodichloromethane	U		0.000866	0.00275	1	03/21/2020 13:40	WG1447922
Bromochloromethane	U	J4	0.00124	0.00550	1	03/21/2020 13:40	WG1447922
Bromoform	U		0.00658	0.0275	1	03/21/2020 13:40	WG1447922
Bromomethane	U		0.00407	0.0137	1	03/21/2020 13:40	WG1447922
n-Butylbenzene	U		0.00422	0.0137	1	03/21/2020 13:40	WG1447922
sec-Butylbenzene	U		0.00278	0.0137	1	03/21/2020 13:40	WG1447922
tert-Butylbenzene	U		0.00170	0.00550	1	03/21/2020 13:40	WG1447922
Carbon disulfide	U		0.00446	0.0137	1	03/21/2020 13:40	WG1447922
Carbon tetrachloride	U		0.00119	0.00550	1	03/21/2020 13:40	WG1447922
Chlorobenzene	U		0.000630	0.00275	1	03/21/2020 13:40	WG1447922
Chlorodibromomethane	U		0.000495	0.00275	1	03/21/2020 13:40	WG1447922
Chloroethane	U		0.00119	0.00550	1	03/21/2020 13:40	WG1447922
Chloroform	U		0.000456	0.00275	1	03/21/2020 13:40	WG1447922
Chloromethane	U		0.00153	0.0137	1	03/21/2020 13:40	WG1447922
2-Chlorotoluene	U		0.00101	0.00275	1	03/21/2020 13:40	WG1447922
4-Chlorotoluene	U		0.00124	0.00550	1	03/21/2020 13:40	WG1447922
1,2-Dibromo-3-Chloropropane	U		0.00561	0.0275	1	03/21/2020 13:40	WG1447922
1,2-Dibromoethane	U		0.000577	0.00275	1	03/21/2020 13:40	WG1447922
Dibromomethane	U		0.00110	0.00550	1	03/21/2020 13:40	WG1447922
1,2-Dichlorobenzene	U		0.00159	0.00550	1	03/21/2020 13:40	WG1447922
1,3-Dichlorobenzene	U		0.00187	0.00550	1	03/21/2020 13:40	WG1447922
1,4-Dichlorobenzene	U		0.00217	0.00550	1	03/21/2020 13:40	WG1447922
Dichlorodifluoromethane	U		0.000899	0.00275	1	03/21/2020 13:40	WG1447922
1,1-Dichloroethane	U		0.000632	0.00275	1	03/21/2020 13:40	WG1447922
1,2-Dichloroethane	U		0.000522	0.00275	1	03/21/2020 13:40	WG1447922
1,1-Dichloroethene	U		0.000550	0.00275	1	03/21/2020 13:40	WG1447922
cis-1,2-Dichloroethene	0.00123 J	J	0.000759	0.00275	1	03/21/2020 13:40	WG1447922
trans-1,2-Dichloroethene	U		0.00157	0.00550	1	03/21/2020 13:40	WG1447922
1,2-Dichloropropane	U		0.00140	0.00550	1	03/21/2020 13:40	WG1447922
1,1-Dichloropropene	U		0.000770	0.00275	1	03/21/2020 13:40	WG1447922
1,3-Dichloropropane	U		0.00192	0.00550	1	03/21/2020 13:40	WG1447922
cis-1,3-Dichloropropene	U		0.000745	0.00275	1	03/21/2020 13:40	WG1447922
trans-1,3-Dichloropropene	U		0.00168	0.00550	1	03/21/2020 13:40	WG1447922
trans-1,4-Dichloro-2-butene	U		0.00154	0.00550	1	03/21/2020 13:40	WG1447922
2,2-Dichloropropane	U		0.000872	0.00275	1	03/21/2020 13:40	WG1447922
Di-isopropyl ether	U		0.000385	0.00110	1	03/21/2020 13:40	WG1447922
Ethylbenzene	U		0.000583	0.00275	1	03/21/2020 13:40	WG1447922
Hexachloro-1,3-butadiene	U		0.0140	0.0275	1	03/21/2020 13:40	WG1447922
2-Hexanone	U		0.0110	0.0275	1	03/21/2020 13:40	WG1447922
n-Hexane	0.00531 J	J	0.00117	0.00550	1	03/21/2020 13:40	WG1447922

JC 4/20/2020

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

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

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Iodomethane	U		0.00665	0.0137	1	03/21/2020 13:40	WG1447922
Isopropylbenzene	U		0.000949	0.00275	1	03/21/2020 13:40	WG1447922
p-Isopropyltoluene	U		0.00256	0.00550	1	03/21/2020 13:40	WG1447922
2-Butanone (MEK)	U		0.0137	0.0275	1	03/21/2020 13:40	WG1447922
Methylene Chloride	U		0.00730	0.0275	1	03/21/2020 13:40	WG1447922
4-Methyl-2-pentanone (MIBK)	U		0.0110	0.0275	1	03/21/2020 13:40	WG1447922
Methyl tert-butyl ether	U		0.000324	0.00110	1	03/21/2020 13:40	WG1447922
Naphthalene	U		0.00343	0.0137	1	03/21/2020 13:40	WG1447922
n-Propylbenzene	U		0.00130	0.00550	1	03/21/2020 13:40	WG1447922
Styrene	U		0.00300	0.0137	1	03/21/2020 13:40	WG1447922
1,1,1,2-Tetrachloroethane	U		0.000550	0.00275	1	03/21/2020 13:40	WG1447922
1,1,2,2-Tetrachloroethane	U		0.000429	0.00275	1	03/21/2020 13:40	WG1447922
1,1,2-Trichlorotrifluoroethane	U		0.000742	0.00275	1	03/21/2020 13:40	WG1447922
Tetrachloroethene	0.0164		0.000770	0.00275	1	03/21/2020 13:40	WG1447922
Toluene	0.00142	J J	0.00137	0.00550	1	03/21/2020 13:40	WG1447922
1,2,3-Trichlorobenzene	U		0.000687	0.0137	1	03/21/2020 13:40	WG1447922
1,2,4-Trichlorobenzene	U		0.00530	0.0137	1	03/21/2020 13:40	WG1447922
1,1,1-Trichloroethane	U		0.000302	0.00275	1	03/21/2020 13:40	WG1447922
1,1,2-Trichloroethane	U		0.000971	0.00275	1	03/21/2020 13:40	WG1447922
Trichloroethene	U		0.000440	0.00110	1	03/21/2020 13:40	WG1447922
Trichlorofluoromethane	U		0.000550	0.00275	1	03/21/2020 13:40	WG1447922
1,2,3-Trichloropropane	U		0.00561	0.0137	1	03/21/2020 13:40	WG1447922
1,2,4-Trimethylbenzene	U		0.00128	0.00550	1	03/21/2020 13:40	WG1447922
1,2,3-Trimethylbenzene	U		0.00126	0.00550	1	03/21/2020 13:40	WG1447922
1,3,5-Trimethylbenzene	U		0.00119	0.00550	1	03/21/2020 13:40	WG1447922
Vinyl acetate	U	UJ J0	0.00387	0.0137	1	03/21/2020 13:40	WG1447922
Vinyl chloride	U		0.000751	0.00275	1	03/21/2020 13:40	WG1447922
Xylenes, Total	U		0.00526	0.00715	1	03/21/2020 13:40	WG1447922
(S) Toluene-d8	*112*			*75.0-131*		*03/21/2020 13:40*	WG1447922
(S) 4-Bromofluorobenzene	*88.9*			*67.0-138*		*03/21/2020 13:40*	WG1447922
(S) 1,2-Dichloroethane-d4	*89.0*			*70.0-130*		*03/21/2020 13:40*	WG1447922

JC 4/20/2020

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

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	82.4		1	03/22/2020 00:56	WG1448017

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	U		1.03	3.03	25	03/22/2020 06:39	WG1447924
(S) a,a,a-Trifluorotoluene(FID)	*100*			*77.0-120*		*03/22/2020 06:39*	WG1447924

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

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	U	~~J3~~	0.0252	0.0461	1.52	03/21/2020 13:59	WG1447922
Acrylonitrile	U		0.00351	0.0231	1.52	03/21/2020 13:59	WG1447922
Benzene	U		0.000738	0.00184	1.52	03/21/2020 13:59	WG1447922
Bromobenzene	U		0.00194	0.0231	1.52	03/21/2020 13:59	WG1447922
Bromodichloromethane	U		0.00146	0.00461	1.52	03/21/2020 13:59	WG1447922
Bromochloromethane	U	~~J4~~	0.00209	0.00922	1.52	03/21/2020 13:59	WG1447922
Bromoform	U		0.0110	0.0461	1.52	03/21/2020 13:59	WG1447922
Bromomethane	U		0.00682	0.0231	1.52	03/21/2020 13:59	WG1447922
n-Butylbenzene	U		0.00709	0.0231	1.52	03/21/2020 13:59	WG1447922
sec-Butylbenzene	U		0.00467	0.0231	1.52	03/21/2020 13:59	WG1447922
tert-Butylbenzene	U		0.00286	0.00922	1.52	03/21/2020 13:59	WG1447922
Carbon disulfide	U		0.00749	0.0231	1.52	03/21/2020 13:59	WG1447922
Carbon tetrachloride	U		0.00199	0.00922	1.52	03/21/2020 13:59	WG1447922
Chlorobenzene	U		0.00106	0.00461	1.52	03/21/2020 13:59	WG1447922
Chlorodibromomethane	U		0.000830	0.00461	1.52	03/21/2020 13:59	WG1447922
Chloroethane	U		0.00199	0.00922	1.52	03/21/2020 13:59	WG1447922
Chloroform	U		0.000766	0.00461	1.52	03/21/2020 13:59	WG1447922
Chloromethane	U		0.00256	0.0231	1.52	03/21/2020 13:59	WG1447922
2-Chlorotoluene	U		0.00170	0.00461	1.52	03/21/2020 13:59	WG1447922
4-Chlorotoluene	U		0.00209	0.00922	1.52	03/21/2020 13:59	WG1447922
1,2-Dibromo-3-Chloropropane	U		0.00941	0.0461	1.52	03/21/2020 13:59	WG1447922
1,2-Dibromoethane	U		0.000969	0.00461	1.52	03/21/2020 13:59	WG1447922
Dibromomethane	U		0.00184	0.00922	1.52	03/21/2020 13:59	WG1447922
1,2-Dichlorobenzene	U		0.00267	0.00922	1.52	03/21/2020 13:59	WG1447922
1,3-Dichlorobenzene	U		0.00313	0.00922	1.52	03/21/2020 13:59	WG1447922
1,4-Dichlorobenzene	U		0.00363	0.00922	1.52	03/21/2020 13:59	WG1447922
Dichlorodifluoromethane	U		0.00150	0.00461	1.52	03/21/2020 13:59	WG1447922
1,1-Dichloroethane	U		0.00106	0.00461	1.52	03/21/2020 13:59	WG1447922
1,2-Dichloroethane	U		0.000876	0.00461	1.52	03/21/2020 13:59	WG1447922
1,1-Dichloroethene	U		0.000922	0.00461	1.52	03/21/2020 13:59	WG1447922
cis-1,2-Dichloroethene	U		0.00127	0.00461	1.52	03/21/2020 13:59	WG1447922
trans-1,2-Dichloroethene	U		0.00263	0.00922	1.52	03/21/2020 13:59	WG1447922
1,2-Dichloropropane	U		0.00234	0.00922	1.52	03/21/2020 13:59	WG1447922
1,1-Dichloropropene	U		0.00129	0.00461	1.52	03/21/2020 13:59	WG1447922
1,3-Dichloropropane	U		0.00323	0.00922	1.52	03/21/2020 13:59	WG1447922
cis-1,3-Dichloropropene	U		0.00125	0.00461	1.52	03/21/2020 13:59	WG1447922
trans-1,3-Dichloropropene	U		0.00283	0.00922	1.52	03/21/2020 13:59	WG1447922
trans-1,4-Dichloro-2-butene	U		0.00259	0.00922	1.52	03/21/2020 13:59	WG1447922
2,2-Dichloropropane	U		0.00147	0.00461	1.52	03/21/2020 13:59	WG1447922
Di-isopropyl ether	U		0.000646	0.00184	1.52	03/21/2020 13:59	WG1447922
Ethylbenzene	U		0.000978	0.00461	1.52	03/21/2020 13:59	WG1447922
Hexachloro-1,3-butadiene	U		0.0234	0.0461	1.52	03/21/2020 13:59	WG1447922
2-Hexanone	U		0.0184	0.0461	1.52	03/21/2020 13:59	WG1447922
n-Hexane	0.00336 J	J	0.00195	0.00922	1.52	03/21/2020 13:59	WG1447922

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

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Iodomethane	U		0.0112	0.0231	1.52	03/21/2020 13:59	WG1447922
Isopropylbenzene	U		0.00159	0.00461	1.52	03/21/2020 13:59	WG1447922
p-Isopropyltoluene	U		0.00430	0.00922	1.52	03/21/2020 13:59	WG1447922
2-Butanone (MEK)	U		0.0231	0.0461	1.52	03/21/2020 13:59	WG1447922
Methylene Chloride	U		0.0123	0.0461	1.52	03/21/2020 13:59	WG1447922
4-Methyl-2-pentanone (MIBK)	U		0.0184	0.0461	1.52	03/21/2020 13:59	WG1447922
Methyl tert-butyl ether	U		0.000544	0.00184	1.52	03/21/2020 13:59	WG1447922
Naphthalene	U		0.00575	0.0231	1.52	03/21/2020 13:59	WG1447922
n-Propylbenzene	U		0.00217	0.00922	1.52	03/21/2020 13:59	WG1447922
Styrene	U		0.00504	0.0231	1.52	03/21/2020 13:59	WG1447922
1,1,1,2-Tetrachloroethane	U		0.000922	0.00461	1.52	03/21/2020 13:59	WG1447922
1,1,2,2-Tetrachloroethane	U		0.000720	0.00461	1.52	03/21/2020 13:59	WG1447922
1,1,2-Trichlorotrifluoroethane	U		0.00125	0.00461	1.52	03/21/2020 13:59	WG1447922
Tetrachloroethene	0.00336 J	J	0.00129	0.00461	1.52	03/21/2020 13:59	WG1447922
Toluene	U		0.00231	0.00922	1.52	03/21/2020 13:59	WG1447922
1,2,3-Trichlorobenzene	U		0.00115	0.0231	1.52	03/21/2020 13:59	WG1447922
1,2,4-Trichlorobenzene	U		0.00890	0.0231	1.52	03/21/2020 13:59	WG1447922
1,1,1-Trichloroethane	U		0.000507	0.00461	1.52	03/21/2020 13:59	WG1447922
1,1,2-Trichloroethane	U		0.00163	0.00461	1.52	03/21/2020 13:59	WG1447922
Trichloroethene	U		0.000738	0.00184	1.52	03/21/2020 13:59	WG1447922
Trichlorofluoromethane	U		0.000922	0.00461	1.52	03/21/2020 13:59	WG1447922
1,2,3-Trichloropropane	U		0.00941	0.0231	1.52	03/21/2020 13:59	WG1447922
1,2,4-Trimethylbenzene	U		0.00214	0.00922	1.52	03/21/2020 13:59	WG1447922
1,2,3-Trimethylbenzene	U		0.00212	0.00922	1.52	03/21/2020 13:59	WG1447922
1,3,5-Trimethylbenzene	U		0.00199	0.00922	1.52	03/21/2020 13:59	WG1447922
Vinyl acetate	U UJ	J0	0.00649	0.0231	1.52	03/21/2020 13:59	WG1447922
Vinyl chloride	U		0.00126	0.00461	1.52	03/21/2020 13:59	WG1447922
Xylenes, Total	U		0.00882	0.0120	1.52	03/21/2020 13:59	WG1447922
(S) Toluene-d8	*113*			*75.0-131*		*03/21/2020 13:59*	WG1447922
(S) 4-Bromofluorobenzene	*89.0*			*67.0-138*		*03/21/2020 13:59*	WG1447922
(S) 1,2-Dichloroethane-d4	*89.1*			*70.0-130*		*03/21/2020 13:59*	WG1447922

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

Total Solids by Method 2540 G-2011

	Result	Qualifier	Dilution	Analysis	Batch
Analyte	%			date / time	
Total Solids	90.4		1	03/22/2020 00:56	WG1448017

Volatile Organic Compounds (GC) by Method NWTPHGX

	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg		date / time	
Gasoline Range Organics-NWTPH	U		0.938	2.76	25	03/22/2020 07:03	WG1447924
(S) a,a,a-Trifluorotoluene(FID)	*99.8*			*77.0-120*		*03/22/2020 07:03*	WG1447924

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

	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg		date / time	
Acetone	U	~~J3~~	0.0152	0.0276	1	03/21/2020 14:18	WG1447922
Acrylonitrile	U		0.00210	0.0138	1	03/21/2020 14:18	WG1447922
Benzene	U		0.000442	0.00111	1	03/21/2020 14:18	WG1447922
Bromobenzene	U		0.00116	0.0138	1	03/21/2020 14:18	WG1447922
Bromodichloromethane	U		0.000871	0.00276	1	03/21/2020 14:18	WG1447922
Bromochloromethane	U	~~J4~~	0.00125	0.00553	1	03/21/2020 14:18	WG1447922
Bromoform	U		0.00661	0.0276	1	03/21/2020 14:18	WG1447922
Bromomethane	U		0.00409	0.0138	1	03/21/2020 14:18	WG1447922
n-Butylbenzene	U		0.00425	0.0138	1	03/21/2020 14:18	WG1447922
sec-Butylbenzene	U		0.00280	0.0138	1	03/21/2020 14:18	WG1447922
tert-Butylbenzene	U		0.00171	0.00553	1	03/21/2020 14:18	WG1447922
Carbon disulfide	U		0.00449	0.0138	1	03/21/2020 14:18	WG1447922
Carbon tetrachloride	U		0.00119	0.00553	1	03/21/2020 14:18	WG1447922
Chlorobenzene	U		0.000634	0.00276	1	03/21/2020 14:18	WG1447922
Chlorodibromomethane	U		0.000498	0.00276	1	03/21/2020 14:18	WG1447922
Chloroethane	U		0.00119	0.00553	1	03/21/2020 14:18	WG1447922
Chloroform	U		0.000459	0.00276	1	03/21/2020 14:18	WG1447922
Chloromethane	U		0.00154	0.0138	1	03/21/2020 14:18	WG1447922
2-Chlorotoluene	U		0.00102	0.00276	1	03/21/2020 14:18	WG1447922
4-Chlorotoluene	U		0.00125	0.00553	1	03/21/2020 14:18	WG1447922
1,2-Dibromo-3-Chloropropane	U		0.00564	0.0276	1	03/21/2020 14:18	WG1447922
1,2-Dibromoethane	U		0.000581	0.00276	1	03/21/2020 14:18	WG1447922
Dibromomethane	U		0.00111	0.00553	1	03/21/2020 14:18	WG1447922
1,2-Dichlorobenzene	U		0.00160	0.00553	1	03/21/2020 14:18	WG1447922
1,3-Dichlorobenzene	U		0.00188	0.00553	1	03/21/2020 14:18	WG1447922
1,4-Dichlorobenzene	U		0.00218	0.00553	1	03/21/2020 14:18	WG1447922
Dichlorodifluoromethane	U		0.000905	0.00276	1	03/21/2020 14:18	WG1447922
1,1-Dichloroethane	U		0.000636	0.00276	1	03/21/2020 14:18	WG1447922
1,2-Dichloroethane	U		0.000525	0.00276	1	03/21/2020 14:18	WG1447922
1,1-Dichloroethene	U		0.000553	0.00276	1	03/21/2020 14:18	WG1447922
cis-1,2-Dichloroethene	0.00751		0.000763	0.00276	1	03/21/2020 14:18	WG1447922
trans-1,2-Dichloroethene	U		0.00158	0.00553	1	03/21/2020 14:18	WG1447922
1,2-Dichloropropane	U		0.00140	0.00553	1	03/21/2020 14:18	WG1447922
1,1-Dichloropropene	U		0.000774	0.00276	1	03/21/2020 14:18	WG1447922
1,3-Dichloropropane	U		0.00194	0.00553	1	03/21/2020 14:18	WG1447922
cis-1,3-Dichloropropene	U		0.000750	0.00276	1	03/21/2020 14:18	WG1447922
trans-1,3-Dichloropropene	U		0.00169	0.00553	1	03/21/2020 14:18	WG1447922
trans-1,4-Dichloro-2-butene	U		0.00155	0.00553	1	03/21/2020 14:18	WG1447922
2,2-Dichloropropane	U		0.000877	0.00276	1	03/21/2020 14:18	WG1447922
Di-isopropyl ether	U		0.000387	0.00111	1	03/21/2020 14:18	WG1447922
Ethylbenzene	U		0.000586	0.00276	1	03/21/2020 14:18	WG1447922
Hexachloro-1,3-butadiene	U		0.0140	0.0276	1	03/21/2020 14:18	WG1447922
2-Hexanone	U		0.0111	0.0276	1	03/21/2020 14:18	WG1447922
n-Hexane	U		0.00117	0.00553	1	03/21/2020 14:18	WG1447922

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

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Iodomethane	U		0.00669	0.0138	1	03/21/2020 14:18	WG1447922
Isopropylbenzene	U		0.000954	0.00276	1	03/21/2020 14:18	WG1447922
p-Isopropyltoluene	U		0.00258	0.00553	1	03/21/2020 14:18	WG1447922
2-Butanone (MEK)	U		0.0138	0.0276	1	03/21/2020 14:18	WG1447922
Methylene Chloride	U		0.00734	0.0276	1	03/21/2020 14:18	WG1447922
4-Methyl-2-pentanone (MIBK)	U		0.0111	0.0276	1	03/21/2020 14:18	WG1447922
Methyl tert-butyl ether	U		0.000326	0.00111	1	03/21/2020 14:18	WG1447922
Naphthalene	U		0.00345	0.0138	1	03/21/2020 14:18	WG1447922
n-Propylbenzene	U		0.00131	0.00553	1	03/21/2020 14:18	WG1447922
Styrene	U		0.00302	0.0138	1	03/21/2020 14:18	WG1447922
1,1,1,2-Tetrachloroethane	U		0.000553	0.00276	1	03/21/2020 14:18	WG1447922
1,1,2,2-Tetrachloroethane	U		0.000431	0.00276	1	03/21/2020 14:18	WG1447922
1,1,2-Trichlorotrifluoroethane	U		0.000747	0.00276	1	03/21/2020 14:18	WG1447922
Tetrachloroethene	0.00811		0.000774	0.00276	1	03/21/2020 14:18	WG1447922
Toluene	U		0.00138	0.00553	1	03/21/2020 14:18	WG1447922
1,2,3-Trichlorobenzene	U		0.000691	0.0138	1	03/21/2020 14:18	WG1447922
1,2,4-Trichlorobenzene	U		0.00533	0.0138	1	03/21/2020 14:18	WG1447922
1,1,1-Trichloroethane	U		0.000304	0.00276	1	03/21/2020 14:18	WG1447922
1,1,2-Trichloroethane	U		0.000977	0.00276	1	03/21/2020 14:18	WG1447922
Trichloroethene	0.00341		0.000442	0.00111	1	03/21/2020 14:18	WG1447922
Trichlorofluoromethane	U		0.000553	0.00276	1	03/21/2020 14:18	WG1447922
1,2,3-Trichloropropane	U		0.00564	0.0138	1	03/21/2020 14:18	WG1447922
1,2,4-Trimethylbenzene	U		0.00128	0.00553	1	03/21/2020 14:18	WG1447922
1,2,3-Trimethylbenzene	U		0.00127	0.00553	1	03/21/2020 14:18	WG1447922
1,3,5-Trimethylbenzene	U		0.00119	0.00553	1	03/21/2020 14:18	WG1447922
Vinyl acetate	U UJ	J0	0.00389	0.0138	1	03/21/2020 14:18	WG1447922
Vinyl chloride	U		0.000755	0.00276	1	03/21/2020 14:18	WG1447922
Xylenes, Total	U		0.00529	0.00719	1	03/21/2020 14:18	WG1447922
(S) Toluene-d8	*112*			*75.0-131*		*03/21/2020 14:18*	WG1447922
(S) 4-Bromofluorobenzene	*88.8*			*67.0-138*		*03/21/2020 14:18*	WG1447922
(S) 1,2-Dichloroethane-d4	*89.8*			*70.0-130*		*03/21/2020 14:18*	WG1447922

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

JC 4/20/2020

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

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	85.6		1	03/22/2020 00:56	WG1448017

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	U		0.991	2.92	25	03/22/2020 15:32	WG1448464
(S) a,a,a-Trifluorotoluene(FID)	*98.9*			*77.0-120*		*03/22/2020 15:32*	WG1448464

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

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	U		0.0160	0.0292	1	03/21/2020 22:30	WG1448125
Acrylonitrile	U		0.00222	0.0146	1	03/21/2020 22:30	WG1448125
Benzene	0.000491 J	J	0.000467	0.00117	1	03/21/2020 22:30	WG1448125
Bromobenzene	U		0.00123	0.0146	1	03/21/2020 22:30	WG1448125
Bromodichloromethane	U		0.000920	0.00292	1	03/21/2020 22:30	WG1448125
Bromochloromethane	U		0.00132	0.00584	1	03/21/2020 22:30	WG1448125
Bromoform	U		0.00699	0.0292	1	03/21/2020 22:30	WG1448125
Bromomethane	U		0.00432	0.0146	1	03/21/2020 22:30	WG1448125
n-Butylbenzene	U		0.00449	0.0146	1	03/21/2020 22:30	WG1448125
sec-Butylbenzene	U		0.00296	0.0146	1	03/21/2020 22:30	WG1448125
tert-Butylbenzene	U		0.00181	0.00584	1	03/21/2020 22:30	WG1448125
Carbon disulfide	0.0125 J	J	0.00474	0.0146	1	03/21/2020 22:30	WG1448125
Carbon tetrachloride	U		0.00126	0.00584	1	03/21/2020 22:30	WG1448125
Chlorobenzene	U		0.000669	0.00292	1	03/21/2020 22:30	WG1448125
Chlorodibromomethane	U		0.000526	0.00292	1	03/21/2020 22:30	WG1448125
Chloroethane	U		0.00126	0.00584	1	03/21/2020 22:30	WG1448125
Chloroform	U		0.000485	0.00292	1	03/21/2020 22:30	WG1448125
Chloromethane	U		0.00162	0.0146	1	03/21/2020 22:30	WG1448125
2-Chlorotoluene	U		0.00107	0.00292	1	03/21/2020 22:30	WG1448125
4-Chlorotoluene	U		0.00132	0.00584	1	03/21/2020 22:30	WG1448125
1,2-Dibromo-3-Chloropropane	U		0.00596	0.0292	1	03/21/2020 22:30	WG1448125
1,2-Dibromoethane	U		0.000613	0.00292	1	03/21/2020 22:30	WG1448125
Dibromomethane	U		0.00117	0.00584	1	03/21/2020 22:30	WG1448125
1,2-Dichlorobenzene	U		0.00169	0.00584	1	03/21/2020 22:30	WG1448125
1,3-Dichlorobenzene	U		0.00199	0.00584	1	03/21/2020 22:30	WG1448125
1,4-Dichlorobenzene	U		0.00230	0.00584	1	03/21/2020 22:30	WG1448125
Dichlorodifluoromethane	U		0.000955	0.00292	1	03/21/2020 22:30	WG1448125
1,1-Dichloroethane	U		0.000672	0.00292	1	03/21/2020 22:30	WG1448125
1,2-Dichloroethane	U		0.000555	0.00292	1	03/21/2020 22:30	WG1448125
1,1-Dichloroethene	U		0.000584	0.00292	1	03/21/2020 22:30	WG1448125
cis-1,2-Dichloroethene	0.00834		0.000806	0.00292	1	03/21/2020 22:30	WG1448125
trans-1,2-Dichloroethene	U		0.00167	0.00584	1	03/21/2020 22:30	WG1448125
1,2-Dichloropropane	U		0.00148	0.00584	1	03/21/2020 22:30	WG1448125
1,1-Dichloropropene	U		0.000818	0.00292	1	03/21/2020 22:30	WG1448125
1,3-Dichloropropane	U		0.00204	0.00584	1	03/21/2020 22:30	WG1448125
cis-1,3-Dichloropropene	U		0.000792	0.00292	1	03/21/2020 22:30	WG1448125
trans-1,3-Dichloropropene	U		0.00179	0.00584	1	03/21/2020 22:30	WG1448125
trans-1,4-Dichloro-2-butene	U		0.00164	0.00584	1	03/21/2020 22:30	WG1448125
2,2-Dichloropropane	U		0.000926	0.00292	1	03/21/2020 22:30	WG1448125
Di-isopropyl ether	U		0.000409	0.00117	1	03/21/2020 22:30	WG1448125
Ethylbenzene	U		0.000619	0.00292	1	03/21/2020 22:30	WG1448125
Hexachloro-1,3-butadiene	U		0.0148	0.0292	1	03/21/2020 22:30	WG1448125
2-Hexanone	U		0.0117	0.0292	1	03/21/2020 22:30	WG1448125
n-Hexane	0.00869		0.00124	0.00584	1	03/21/2020 22:30	WG1448125

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

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Iodomethane	U		0.00707	0.0146	1	03/21/2020 22:30	WG1448125
Isopropylbenzene	U		0.00101	0.00292	1	03/21/2020 22:30	WG1448125
p-Isopropyltoluene	U		0.00272	0.00584	1	03/21/2020 22:30	WG1448125
2-Butanone (MEK)	0.0296	~~B~~	0.0146	0.0292	1	03/21/2020 22:30	WG1448125
Methylene Chloride	U		0.00776	0.0292	1	03/21/2020 22:30	WG1448125
4-Methyl-2-pentanone (MIBK)	U		0.0117	0.0292	1	03/21/2020 22:30	WG1448125
Methyl tert-butyl ether	U		0.000345	0.00117	1	03/21/2020 22:30	WG1448125
Naphthalene	0.0395 J	J0 ~~J3~~	0.00364	0.0146	1	03/21/2020 22:30	WG1448125
n-Propylbenzene	U		0.00138	0.00584	1	03/21/2020 22:30	WG1448125
Styrene	U		0.00319	0.0146	1	03/21/2020 22:30	WG1448125
1,1,1,2-Tetrachloroethane	U		0.000584	0.00292	1	03/21/2020 22:30	WG1448125
1,1,2,2-Tetrachloroethane	U		0.000456	0.00292	1	03/21/2020 22:30	WG1448125
1,1,2-Trichlorotrifluoroethane	U		0.000788	0.00292	1	03/21/2020 22:30	WG1448125
Tetrachloroethene	U		0.000818	0.00292	1	03/21/2020 22:30	WG1448125
Toluene	0.00217 J	J	0.00146	0.00584	1	03/21/2020 22:30	WG1448125
1,2,3-Trichlorobenzene	U	~~J3~~	0.000730	0.0146	1	03/21/2020 22:30	WG1448125
1,2,4-Trichlorobenzene	U	~~J3~~	0.00563	0.0146	1	03/21/2020 22:30	WG1448125
1,1,1-Trichloroethane	U		0.000321	0.00292	1	03/21/2020 22:30	WG1448125
1,1,2-Trichloroethane	U		0.00103	0.00292	1	03/21/2020 22:30	WG1448125
Trichloroethene	U		0.000467	0.00117	1	03/21/2020 22:30	WG1448125
Trichlorofluoromethane	U		0.000584	0.00292	1	03/21/2020 22:30	WG1448125
1,2,3-Trichloropropane	U		0.00596	0.0146	1	03/21/2020 22:30	WG1448125
1,2,4-Trimethylbenzene	U		0.00135	0.00584	1	03/21/2020 22:30	WG1448125
1,2,3-Trimethylbenzene	U		0.00134	0.00584	1	03/21/2020 22:30	WG1448125
1,3,5-Trimethylbenzene	U		0.00126	0.00584	1	03/21/2020 22:30	WG1448125
Vinyl acetate	U		0.00411	0.0146	1	03/21/2020 22:30	WG1448125
Vinyl chloride	0.00682		0.000798	0.00292	1	03/21/2020 22:30	WG1448125
Xylenes, Total	U		0.00558	0.00759	1	03/21/2020 22:30	WG1448125
(S) Toluene-d8	*113*			*75.0-131*		*03/21/2020 22:30*	WG1448125
(S) 4-Bromofluorobenzene	*92.7*			*67.0-138*		*03/21/2020 22:30*	WG1448125
(S) 1,2-Dichloroethane-d4	*93.9*			*70.0-130*		*03/21/2020 22:30*	WG1448125

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

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	90.4		1	03/22/2020 00:56	WG1448017

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	U		0.938	2.77	25	03/22/2020 15:56	WG1448464
(S) a,a,a-Trifluorotoluene(FID)	*101*			*77.0-120*		*03/22/2020 15:56*	WG1448464

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

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	U		0.0152	0.0277	1	03/21/2020 22:49	WG1448125
Acrylonitrile	U		0.00210	0.0138	1	03/21/2020 22:49	WG1448125
Benzene	U		0.000443	0.00111	1	03/21/2020 22:49	WG1448125
Bromobenzene	U		0.00116	0.0138	1	03/21/2020 22:49	WG1448125
Bromodichloromethane	U		0.000872	0.00277	1	03/21/2020 22:49	WG1448125
Bromochloromethane	U		0.00125	0.00553	1	03/21/2020 22:49	WG1448125
Bromoform	U		0.00662	0.0277	1	03/21/2020 22:49	WG1448125
Bromomethane	U		0.00409	0.0138	1	03/21/2020 22:49	WG1448125
n-Butylbenzene	U		0.00425	0.0138	1	03/21/2020 22:49	WG1448125
sec-Butylbenzene	U		0.00280	0.0138	1	03/21/2020 22:49	WG1448125
tert-Butylbenzene	U		0.00172	0.00553	1	03/21/2020 22:49	WG1448125
Carbon disulfide	U		0.00449	0.0138	1	03/21/2020 22:49	WG1448125
Carbon tetrachloride	U		0.00120	0.00553	1	03/21/2020 22:49	WG1448125
Chlorobenzene	U		0.000634	0.00277	1	03/21/2020 22:49	WG1448125
Chlorodibromomethane	U		0.000498	0.00277	1	03/21/2020 22:49	WG1448125
Chloroethane	U		0.00120	0.00553	1	03/21/2020 22:49	WG1448125
Chloroform	U		0.000459	0.00277	1	03/21/2020 22:49	WG1448125
Chloromethane	U		0.00154	0.0138	1	03/21/2020 22:49	WG1448125
2-Chlorotoluene	U		0.00102	0.00277	1	03/21/2020 22:49	WG1448125
4-Chlorotoluene	U		0.00125	0.00553	1	03/21/2020 22:49	WG1448125
1,2-Dibromo-3-Chloropropane	U		0.00564	0.0277	1	03/21/2020 22:49	WG1448125
1,2-Dibromoethane	U		0.000581	0.00277	1	03/21/2020 22:49	WG1448125
Dibromomethane	U		0.00111	0.00553	1	03/21/2020 22:49	WG1448125
1,2-Dichlorobenzene	U		0.00160	0.00553	1	03/21/2020 22:49	WG1448125
1,3-Dichlorobenzene	U		0.00188	0.00553	1	03/21/2020 22:49	WG1448125
1,4-Dichlorobenzene	U		0.00218	0.00553	1	03/21/2020 22:49	WG1448125
Dichlorodifluoromethane	U		0.000905	0.00277	1	03/21/2020 22:49	WG1448125
1,1-Dichloroethane	U		0.000636	0.00277	1	03/21/2020 22:49	WG1448125
1,2-Dichloroethane	U		0.000526	0.00277	1	03/21/2020 22:49	WG1448125
1,1-Dichloroethene	U		0.000553	0.00277	1	03/21/2020 22:49	WG1448125
cis-1,2-Dichloroethene	0.00838		0.000764	0.00277	1	03/21/2020 22:49	WG1448125
trans-1,2-Dichloroethene	U		0.00158	0.00553	1	03/21/2020 22:49	WG1448125
1,2-Dichloropropane	U		0.00141	0.00553	1	03/21/2020 22:49	WG1448125
1,1-Dichloropropene	U		0.000775	0.00277	1	03/21/2020 22:49	WG1448125
1,3-Dichloropropane	U		0.00194	0.00553	1	03/21/2020 22:49	WG1448125
cis-1,3-Dichloropropene	U		0.000750	0.00277	1	03/21/2020 22:49	WG1448125
trans-1,3-Dichloropropene	U		0.00169	0.00553	1	03/21/2020 22:49	WG1448125
trans-1,4-Dichloro-2-butene	U		0.00155	0.00553	1	03/21/2020 22:49	WG1448125
2,2-Dichloropropane	U		0.000878	0.00277	1	03/21/2020 22:49	WG1448125
Di-isopropyl ether	U		0.000387	0.00111	1	03/21/2020 22:49	WG1448125
Ethylbenzene	U		0.000587	0.00277	1	03/21/2020 22:49	WG1448125
Hexachloro-1,3-butadiene	U		0.0141	0.0277	1	03/21/2020 22:49	WG1448125
2-Hexanone	U		0.0111	0.0277	1	03/21/2020 22:49	WG1448125
n-Hexane	U		0.00117	0.00553	1	03/21/2020 22:49	WG1448125

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

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Iodomethane	U		0.00669	0.0138	1	03/21/2020 22:49	WG1448125
Isopropylbenzene	U		0.000955	0.00277	1	03/21/2020 22:49	WG1448125
p-Isopropyltoluene	U		0.00258	0.00553	1	03/21/2020 22:49	WG1448125
2-Butanone (MEK)	U		0.0138	0.0277	1	03/21/2020 22:49	WG1448125
Methylene Chloride	U		0.00735	0.0277	1	03/21/2020 22:49	WG1448125
4-Methyl-2-pentanone (MIBK)	U		0.0111	0.0277	1	03/21/2020 22:49	WG1448125
Methyl tert-butyl ether	U		0.000326	0.00111	1	03/21/2020 22:49	WG1448125
Naphthalene	U UJ	J0 ~~J3~~	0.00345	0.0138	1	03/21/2020 22:49	WG1448125
n-Propylbenzene	U		0.00131	0.00553	1	03/21/2020 22:49	WG1448125
Styrene	U		0.00302	0.0138	1	03/21/2020 22:49	WG1448125
1,1,1,2-Tetrachloroethane	U		0.000553	0.00277	1	03/21/2020 22:49	WG1448125
1,1,2,2-Tetrachloroethane	U		0.000432	0.00277	1	03/21/2020 22:49	WG1448125
1,1,2-Trichlorotrifluoroethane	U		0.000747	0.00277	1	03/21/2020 22:49	WG1448125
Tetrachloroethene	0.00976		0.000775	0.00277	1	03/21/2020 22:49	WG1448125
Toluene	U		0.00138	0.00553	1	03/21/2020 22:49	WG1448125
1,2,3-Trichlorobenzene	U	~~J3~~	0.000692	0.0138	1	03/21/2020 22:49	WG1448125
1,2,4-Trichlorobenzene	U	~~J3~~	0.00533	0.0138	1	03/21/2020 22:49	WG1448125
1,1,1-Trichloroethane	U		0.000304	0.00277	1	03/21/2020 22:49	WG1448125
1,1,2-Trichloroethane	U		0.000977	0.00277	1	03/21/2020 22:49	WG1448125
Trichloroethene	0.00361		0.000443	0.00111	1	03/21/2020 22:49	WG1448125
Trichlorofluoromethane	U		0.000553	0.00277	1	03/21/2020 22:49	WG1448125
1,2,3-Trichloropropane	U		0.00564	0.0138	1	03/21/2020 22:49	WG1448125
1,2,4-Trimethylbenzene	U		0.00128	0.00553	1	03/21/2020 22:49	WG1448125
1,2,3-Trimethylbenzene	U		0.00127	0.00553	1	03/21/2020 22:49	WG1448125
1,3,5-Trimethylbenzene	U		0.00120	0.00553	1	03/21/2020 22:49	WG1448125
Vinyl acetate	U		0.00390	0.0138	1	03/21/2020 22:49	WG1448125
Vinyl chloride	U		0.000756	0.00277	1	03/21/2020 22:49	WG1448125
Xylenes, Total	U		0.00529	0.00719	1	03/21/2020 22:49	WG1448125
(S) Toluene-d8	*114*			*75.0-131*		*03/21/2020 22:49*	WG1448125
(S) 4-Bromofluorobenzene	*91.3*			*67.0-138*		*03/21/2020 22:49*	WG1448125
(S) 1,2-Dichloroethane-d4	*92.1*			*70.0-130*		*03/21/2020 22:49*	WG1448125

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MEMORANDUM

TO: Project File **DATE:** April 21, 2020

FROM: Jessie Compeau

SUBJECT: Laboratory Data Validation Review

PROJECT: American Linen Data Validation

PROJECT #: 1413.001.02.501F

TASK: EIM Data Validation Level EPA2A for April 2020 – Soil Vapor Samples

LAB: Pace Sample Delivery Groups (SDG): L1205183

Two (2) soil vapor samples (including one field duplicate) were collected as part of the ongoing sampling monitoring event at the Former American Linen Supply Site, in Seattle, Washington on April 01, 2020. The samples were shipped and delivered to Pace Lab Sciences (Pace) of Mount Juliet, TN for laboratory analysis. Samples were analyzed for the following:

- Volatile organic compounds (VOCs) by United States Environmental Protection Agency (USEPA) Method TO-15

The quality assurance review of the sample data associated with SDG L1205183 is summarized below.

DATA QUALIFICATIONS

Guidelines established by USEPA for a limited data validation review of analytical data along with PACE control limit criteria were used to validate the data. The comments presented in this memorandum refer to the laboratory's performance in meeting the quality control criteria outlined in the USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (USEPA, 2017). Following Guidelines, non-project-specific laboratory duplicates and matrix spike results were not evaluated as part of this data validation.

DATA VALIDATION

Completeness

All samples were collected and analyzed as requested.

Sample Collection and Preservation

The laboratory supplied a Summa Canister ^{TM} canister (1Liter) for the air sample. The samples were shipped, delivered by FedEx, and received in good condition by the laboratory. The sample was collected, handled, and delivered in an appropriate manner. No data qualifications were warranted based upon sampling techniques.

Holding Times

The analyses for VOCs by Method TO-15 were performed within the 30-day recommended holding time limit for the air samples collected in Summa canisters. All holding time criteria are met.

Initial and Continuing Calibration

Initial and continuing calibration data for this project are retained by the laboratory and available for review if necessary. Case narrative and laboratory notes do not indicate that there are any issues with calibration.

Method Blank Results

A laboratory method blank is included with the analytical batch per method requirement. The target analytes were not detected in the method blank at or above the RDLs with one exception:

- Low levels of acetone, benzyl chloride, 1,3-dichlorobenzene, 1,4-dichlorobenzene, and propene were detected in the method blank. No action is necessary is these were either not detected or detected well above the RDLs in the associated samples.

Trip Blank Results

A trip blank was not required for the VOCs by TO-15 analyses. No action is taken other than to note this.

Field Duplicate Analyses

Field duplicate sample pair is as follows:

- Samples SV01-040120 and SV01-040120-D

Target analyte results are comparable and within a relative percent difference (RPD) of 30% for the field duplicate pair with the following exceptions:

- Samples SV01-040120 and SV01-040120-D – VOC results are not comparable with an RPD greater than 30% (or for results < 5X RDL the absolute difference < 1X RDL). **Field duplicate results for acetone are estimated and qualified (J).**

Laboratory Duplicate/Replicate Analyses

A laboratory replicate was not performed. Refer to the Laboratory Control Sample section for additional information.

Surrogate Recoveries

The surrogate percent recovery (% R) results for the VOCs by TO-15 air samples, method blank, and laboratory control samples are within the laboratory surrogate control limits of 60 -140% R. No data qualifications were warranted.

Laboratory Control Samples

A laboratory control sample/laboratory control sample duplicate (LCS/LCSD) were analyzed for the VOCs by TO-15 along with each analytical batch. The LCS/LCSD recovery and relative percent differences (RPDs) for all control compounds met laboratory control limit criteria with the following discussion:

- LCS recoveries for 2-propanol and methyl butyl ketone are slightly below laboratory acceptance criteria and laboratory qualified (J4). No action is taken since LCSD recoveries as well as associated RPD criteria are met.

Matrix Spike/Matrix Spike Duplicates

A matrix spike/matrix spike duplicate (MS/MSD) is not required for the VOCs by TO-15 method.

Other Quality Control Issues

No laboratory quality control issues were identified in the laboratory report with the following discussion:

- Electronic data deliverables (EDDs) for these SDGs were provided by the laboratory and data validator qualifiers were entered. In some cases, different chemical synonyms are used between the EDD and the hardcopy however associated Chemical Abstracts Service (CAS) numbers are provided in the EDD to confirm chemical identifications.

Quantitation Limits

Results of the VOCs by TO-15 analysis are reported based on laboratory MRLs (assuming standard temperature and pressure is equal to 24.45) and reported in units of ppbv and $\mu g/m^3$.

The RDLs indicate the minimum quantity of a target analyte that can be confidently determined by the reference method. The RDLs were acceptable for the project; therefore, no data qualifications were warranted.

Data Assessment

The laboratory data reported for this project were reviewed based on the criteria outlined in:

- USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (USEPA, 2017).

No data qualifiers are assigned and laboratory report pages with qualifiers are attached. All data, including qualified data, are judged to be acceptable for their intended use.

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
Acetone	67-64-1	58.10	1.25	2.97	5.04	12.0	J	1	WG1455032
Allyl chloride	107-05-1	76.53	0.200	0.626	ND	ND		1	WG1455032
Benzene	71-43-2	78.10	0.200	0.639	ND	ND		1	WG1455032
Benzyl Chloride	100-44-7	127	0.200	1.04	ND	ND		1	WG1455032
Bromodichloromethane	75-27-4	164	0.200	1.34	ND	ND		1	WG1455032
Bromoform	75-25-2	253	0.600	6.21	ND	ND		1	WG1455032
Bromomethane	74-83-9	94.90	0.200	0.776	ND	ND		1	WG1455032
1,3-Butadiene	106-99-0	54.10	2.00	4.43	ND	ND		1	WG1455032
Carbon disulfide	75-15-0	76.10	0.200	0.622	ND	ND		1	WG1455032
Carbon tetrachloride	56-23-5	154	0.200	1.26	ND	ND		1	WG1455032
Chlorobenzene	108-90-7	113	0.200	0.924	ND	ND		1	WG1455032
Chloroethane	75-00-3	64.50	0.200	0.528	ND	ND		1	WG1455032
Chloroform	67-66-3	119	0.200	0.973	ND	ND		1	WG1455032
Chloromethane	74-87-3	50.50	0.200	0.413	0.280	0.578		1	WG1455032
2-Chlorotoluene	95-49-8	126	0.200	1.03	ND	ND		1	WG1455032
Cyclohexane	110-82-7	84.20	0.200	0.689	ND	ND		1	WG1455032
Dibromochloromethane	124-48-1	208	0.200	1.70	ND	ND		1	WG1455032
1,2-Dibromoethane	106-93-4	188	0.200	1.54	ND	ND		1	WG1455032
1,2-Dichlorobenzene	95-50-1	147	0.200	1.20	ND	ND		1	WG1455032
1,3-Dichlorobenzene	541-73-1	147	0.200	1.20	ND	ND		1	WG1455032
1,4-Dichlorobenzene	106-46-7	147	0.200	1.20	ND	ND		1	WG1455032
1,2-Dichloroethane	107-06-2	99	0.200	0.810	ND	ND		1	WG1455032
1,1-Dichloroethane	75-34-3	98	0.200	0.802	0.351	1.41		1	WG1455032
1,1-Dichloroethene	75-35-4	96.90	0.200	0.793	ND	ND		1	WG1455032
cis-1,2-Dichloroethene	156-59-2	96.90	0.200	0.793	ND	ND		1	WG1455032
trans-1,2-Dichloroethene	156-60-5	96.90	0.200	0.793	ND	ND		1	WG1455032
1,2-Dichloropropane	78-87-5	113	0.200	0.924	ND	ND		1	WG1455032
cis-1,3-Dichloropropene	10061-01-5	111	0.200	0.908	ND	ND		1	WG1455032
trans-1,3-Dichloropropene	10061-02-6	111	0.200	0.908	ND	ND		1	WG1455032
1,4-Dioxane	123-91-1	88.10	0.200	0.721	ND	ND		1	WG1455032
Ethanol	64-17-5	46.10	0.630	1.19	7.23	13.6		1	WG1455032
Ethylbenzene	100-41-4	106	0.200	0.867	ND	ND		1	WG1455032
4-Ethyltoluene	622-96-8	120	0.200	0.982	ND	ND		1	WG1455032
Trichlorofluoromethane	75-69-4	137.40	0.200	1.12	ND	ND		1	WG1455032
Dichlorodifluoromethane	75-71-8	120.92	0.200	0.989	0.331	1.64		1	WG1455032
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	0.200	1.53	ND	ND		1	WG1455032
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.200	1.40	ND	ND		1	WG1455032
Heptane	142-82-5	100	0.200	0.818	ND	ND		1	WG1455032
Hexachloro-1,3-butadiene	87-68-3	261	0.630	6.73	ND	ND		1	WG1455032
n-Hexane	110-54-3	86.20	0.200	0.705	ND	ND		1	WG1455032
Isopropylbenzene	98-82-8	120.20	0.200	0.983	ND	ND		1	WG1455032
Methylene Chloride	75-09-2	84.90	0.200	0.694	ND	ND		1	WG1455032
Methyl Butyl Ketone	591-78-6	100	1.25	5.11	ND	ND	~~J4~~	1	WG1455032
2-Butanone (MEK)	78-93-3	72.10	1.25	3.69	1.25	3.69		1	WG1455032
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	1.25	5.12	ND	ND		1	WG1455032
Methyl methacrylate	80-62-6	100.12	0.200	0.819	ND	ND		1	WG1455032
MTBE	1634-04-4	88.10	0.200	0.721	ND	ND		1	WG1455032
Naphthalene	91-20-3	128	0.630	3.30	ND	ND		1	WG1455032
2-Propanol	67-63-0	60.10	1.25	3.07	1.33	3.27	~~J4~~	1	WG1455032
Propene	115-07-1	42.10	0.400	0.689	0.504	0.868	~~B~~	1	WG1455032
Styrene	100-42-5	104	0.200	0.851	ND	ND		1	WG1455032
1,1,2,2-Tetrachloroethane	79-34-5	168	0.200	1.37	ND	ND		1	WG1455032
Tetrachloroethylene	127-18-4	166	0.200	1.36	0.245	1.66		1	WG1455032
Tetrahydrofuran	109-99-9	72.10	0.200	0.590	ND	ND		1	WG1455032
Toluene	108-88-3	92.10	0.200	0.753	ND	ND		1	WG1455032
1,2,4-Trichlorobenzene	120-82-1	181	0.630	4.66	ND	ND		1	WG1455032

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Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
1,1,1-Trichloroethane	71-55-6	133	0.200	1.09	5.22	28.4		1	WG1455032
1,1,2-Trichloroethane	79-00-5	133	0.200	1.09	ND	ND		1	WG1455032
Trichloroethylene	79-01-6	131	0.200	1.07	ND	ND		1	WG1455032
1,2,4-Trimethylbenzene	95-63-6	120	0.200	0.982	ND	ND		1	WG1455032
1,3,5-Trimethylbenzene	108-67-8	120	0.200	0.982	ND	ND		1	WG1455032
2,2,4-Trimethylpentane	540-84-1	114.22	0.200	0.934	ND	ND		1	WG1455032
Vinyl chloride	75-01-4	62.50	0.200	0.511	ND	ND		1	WG1455032
Vinyl Bromide	593-60-2	106.95	0.200	0.875	ND	ND		1	WG1455032
Vinyl acetate	108-05-4	86.10	0.200	0.704	ND	ND		1	WG1455032
m&p-Xylene	1330-20-7	106	0.400	1.73	ND	ND		1	WG1455032
o-Xylene	95-47-6	106	0.200	0.867	ND	ND		1	WG1455032
(S) 1,4-Bromofluorobenzene	*460-00-4*	*175*	*60.0-140*		*93.7*				WG1455032

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Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
Acetone	67-64-1	58.10	1.25	2.97	1.97	4.68	J	1	WG1455032
Allyl chloride	107-05-1	76.53	0.200	0.626	ND	ND		1	WG1455032
Benzene	71-43-2	78.10	0.200	0.639	ND	ND		1	WG1455032
Benzyl Chloride	100-44-7	127	0.200	1.04	ND	ND		1	WG1455032
Bromodichloromethane	75-27-4	164	0.200	1.34	ND	ND		1	WG1455032
Bromoform	75-25-2	253	0.600	6.21	ND	ND		1	WG1455032
Bromomethane	74-83-9	94.90	0.200	0.776	ND	ND		1	WG1455032
1,3-Butadiene	106-99-0	54.10	2.00	4.43	ND	ND		1	WG1455032
Carbon disulfide	75-15-0	76.10	0.200	0.622	ND	ND		1	WG1455032
Carbon tetrachloride	56-23-5	154	0.200	1.26	ND	ND		1	WG1455032
Chlorobenzene	108-90-7	113	0.200	0.924	ND	ND		1	WG1455032
Chloroethane	75-00-3	64.50	0.200	0.528	ND	ND		1	WG1455032
Chloroform	67-66-3	119	0.200	0.973	ND	ND		1	WG1455032
Chloromethane	74-87-3	50.50	0.200	0.413	ND	ND		1	WG1455032
2-Chlorotoluene	95-49-8	126	0.200	1.03	ND	ND		1	WG1455032
Cyclohexane	110-82-7	84.20	0.200	0.689	ND	ND		1	WG1455032
Dibromochloromethane	124-48-1	208	0.200	1.70	ND	ND		1	WG1455032
1,2-Dibromoethane	106-93-4	188	0.200	1.54	ND	ND		1	WG1455032
1,2-Dichlorobenzene	95-50-1	147	0.200	1.20	ND	ND		1	WG1455032
1,3-Dichlorobenzene	541-73-1	147	0.200	1.20	ND	ND		1	WG1455032
1,4-Dichlorobenzene	106-46-7	147	0.200	1.20	ND	ND		1	WG1455032
1,2-Dichloroethane	107-06-2	99	0.200	0.810	ND	ND		1	WG1455032
1,1-Dichloroethane	75-34-3	98	0.200	0.802	0.369	1.48		1	WG1455032
1,1-Dichloroethene	75-35-4	96.90	0.200	0.793	ND	ND		1	WG1455032
cis-1,2-Dichloroethene	156-59-2	96.90	0.200	0.793	ND	ND		1	WG1455032
trans-1,2-Dichloroethene	156-60-5	96.90	0.200	0.793	ND	ND		1	WG1455032
1,2-Dichloropropane	78-87-5	113	0.200	0.924	ND	ND		1	WG1455032
cis-1,3-Dichloropropene	10061-01-5	111	0.200	0.908	ND	ND		1	WG1455032
trans-1,3-Dichloropropene	10061-02-6	111	0.200	0.908	ND	ND		1	WG1455032
1,4-Dioxane	123-91-1	88.10	0.200	0.721	ND	ND		1	WG1455032
Ethanol	64-17-5	46.10	0.630	1.19	6.96	13.1		1	WG1455032
Ethylbenzene	100-41-4	106	0.200	0.867	ND	ND		1	WG1455032
4-Ethyltoluene	622-96-8	120	0.200	0.982	ND	ND		1	WG1455032
Trichlorofluoromethane	75-69-4	137.40	0.200	1.12	ND	ND		1	WG1455032
Dichlorodifluoromethane	75-71-8	120.92	0.200	0.989	0.364	1.80		1	WG1455032
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	0.200	1.53	ND	ND		1	WG1455032
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.200	1.40	ND	ND		1	WG1455032
Heptane	142-82-5	100	0.200	0.818	ND	ND		1	WG1455032
Hexachloro-1,3-butadiene	87-68-3	261	0.630	6.73	ND	ND		1	WG1455032
n-Hexane	110-54-3	86.20	0.200	0.705	ND	ND		1	WG1455032
Isopropylbenzene	98-82-8	120.20	0.200	0.983	ND	ND		1	WG1455032
Methylene Chloride	75-09-2	84.90	0.200	0.694	ND	ND		1	WG1455032
Methyl Butyl Ketone	591-78-6	100	1.25	5.11	ND	ND	~~J4~~	1	WG1455032
2-Butanone (MEK)	78-93-3	72.10	1.25	3.69	ND	ND		1	WG1455032
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	1.25	5.12	ND	ND		1	WG1455032
Methyl methacrylate	80-62-6	100.12	0.200	0.819	ND	ND		1	WG1455032
MTBE	1634-04-4	88.10	0.200	0.721	ND	ND		1	WG1455032
Naphthalene	91-20-3	128	0.630	3.30	ND	ND		1	WG1455032
2-Propanol	67-63-0	60.10	1.25	3.07	ND	ND	~~J4~~	1	WG1455032
Propene	115-07-1	42.10	0.400	0.689	0.524	0.902	~~B~~	1	WG1455032
Styrene	100-42-5	104	0.200	0.851	ND	ND		1	WG1455032
1,1,2,2-Tetrachloroethane	79-34-5	168	0.200	1.37	ND	ND		1	WG1455032
Tetrachloroethylene	127-18-4	166	0.200	1.36	ND	ND		1	WG1455032
Tetrahydrofuran	109-99-9	72.10	0.200	0.590	0.394	1.16		1	WG1455032
Toluene	108-88-3	92.10	0.200	0.753	ND	ND		1	WG1455032
1,2,4-Trichlorobenzene	120-82-1	181	0.630	4.66	ND	ND		1	WG1455032

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Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
1,1,1-Trichloroethane	71-55-6	133	0.200	1.09	5.34	29.0		1	WG1455032
1,1,2-Trichloroethane	79-00-5	133	0.200	1.09	ND	ND		1	WG1455032
Trichloroethylene	79-01-6	131	0.200	1.07	ND	ND		1	WG1455032
1,2,4-Trimethylbenzene	95-63-6	120	0.200	0.982	ND	ND		1	WG1455032
1,3,5-Trimethylbenzene	108-67-8	120	0.200	0.982	ND	ND		1	WG1455032
2,2,4-Trimethylpentane	540-84-1	114.22	0.200	0.934	ND	ND		1	WG1455032
Vinyl chloride	75-01-4	62.50	0.200	0.511	ND	ND		1	WG1455032
Vinyl Bromide	593-60-2	106.95	0.200	0.875	ND	ND		1	WG1455032
Vinyl acetate	108-05-4	86.10	0.200	0.704	ND	ND		1	WG1455032
m&p-Xylene	1330-20-7	106	0.400	1.73	ND	ND		1	WG1455032
o-Xylene	95-47-6	106	0.200	0.867	ND	ND		1	WG1455032
(S) 1,4-Bromofluorobenzene	*460-00-4*	*175*	*60.0-140*		*92.7*				WG1455032

JC 4/21/2020

MEMORANDUM

TO: Project File **DATE:** April 27, 2020

FROM: Jessie Compeau

SUBJECT: Laboratory Data Validation Review

PROJECT: American Linen Data Validation

PROJECT #: 1413.001.02.501E

TASK: EIM Data Validation Level EPA2A for 2nd Quarter Monitoring – Groundwater Samples

LAB: Pace Sample Delivery Groups (SDGs): L1204945, L1205427, L1205430, L1205456, L1205789, L1206575, L1207108, and L1205708

Thirty-nine (39) groundwater samples (including one field duplicate), one equipment blank, and two trip blanks were collected as part of the 2nd Quarterly Monitoring Round for 2020 for the ongoing Remedial Investigation (RI) sampling at the Former American Linen Supply Site, in Seattle, Washington in April of 2020. The samples were shipped and delivered to Pace Lab Sciences (Pace) of Mount Juliet, TN for laboratory analysis. Selected samples were analyzed for the following:

- Volatile organic compounds (VOCs) by United States Environmental Protection Agency (USEPA) Method 8260D;
- Total petroleum hydrocarbons as gasoline (TPH-Gx) by NWTPH-Gx per analytical method stipulated by Washington State Department of Ecology;
- VOCs (dissolved gases – methane, ethane, and ethene) by EPA SOP RSK 175;
- Alkalinity by Method 2320 B-2011;
- Anions (chloride, nitrate, and sulfate) by USEPA Method 9056A;
- Total Organic Carbon (TOC) by USEPA Method 9060A; and
- Metals (iron and manganese) by USEPA Method 6020B.

The RI sampling was conducted mostly during the month of April with a few samples collected 2020. Results are reported in multiple SDGs from Pace. Pace SDGs are reviewed in groups (approximately 10 SDGs) for each data validation report. Group 1 analytical results are reported in SDGs L1204945, L1205427, L1205430, L1205456, L1205789, L1206575, L1207108, and L1205708. The quality assurance review of the laboratory data associated with Group 1 is summarized below.

DATA QUALIFICATIONS

Guidelines established by USEPA for a limited data validation review of analytical data along with Pace control limit criteria were used to validate the data. The comments presented in this memorandum refer to the laboratory's performance in meeting the quality control criteria

outlined in the USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (USEPA, 2017) and USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Superfund Methods Data Review (USEPA, 2017). Following Guidelines, non-project-specific laboratory duplicates and matrix spike results were not evaluated as part of this data validation.

DATA VALIDATION

Completeness

All samples were collected and analyzed as requested with the following exceptions:

- SDG L1205427: Date of sample receipt at the laboratory is not included on the associated chain of custody. No action is taken other than to not that the courier FedEx bill of lading (#167627498142) shows that the cooler was received on 4/3/2020 at 8:07 am and signed for by Pace (C. Green).

Sample Collection and Preservation

Samples were collected in laboratory-supplied sample containers preserved as appropriate for the individual analyses conducted. The samples were packed on ice in coolers and delivered by courier to the analytical laboratory. The laboratory reported that the coolers were received at a cooler temperature less than the recommended temperature preservation of 6°C. Samples were received in good condition except for issues mentioned in the Completeness section. No data were qualified based upon the sample collection and preservation information.

Holding Times

USEPA Method 8260D:
All samples were analyzed for VOCs within the EPA recommended holding time of fourteen days for preserved waters from the date of collection. All holding time criteria are met.

NWTPH-Gx Method:
All samples were analyzed within the WA State recommended holding time of fourteen days for preserved waters from the date of sample collection. All holding time criteria are met.

Dissolved Gases (Methane, Ethane, and Ethene) by RSK 175:
All samples were analyzed within the WA State recommended holding time of fourteen days for preserved waters from the date of sample collection. All holding time criteria are met.

USEPA Method 6020B:
All samples were analyzed within the USEPA recommended holding time for iron and manganese of 180 days for preserved waters from the date of sample collection. All holding time criteria are met.

General Chemistry (Alkalinity, Chloride, Sulfate, Nitrate, and TOC):

All samples were analyzed within the USEPA recommended holding time for alkalinity (14 days), chloride (28 days), sulfate (28 days), and nitrate (48 hours), and TOC (28 days) for preserved waters from the date of sample collection. All holding time criteria are met.

Initial and Continuing Calibration

Calibration data for this project are not required for this deliverable however Pace's notes indicate the following:

- Multiple SDGs - *USEPA Method 8260D:* Continuing calibration verification (CCV) issues were noted by Pace for multiple compounds associated with analytical batches in each SDG. These compounds are qualified by the laboratory "J0" to indicate that percent difference CCV is outside of laboratory acceptance criteria. **Associated sample results with laboratory qualified (J0) results are estimated and qualified (J/UJ).**

Method Blank Results

USEPA Method 8260D:
Laboratory method blanks were included with the analytical batches per method requirement. The target analytes were not detected in the method blanks at or above the reporting detection limits (RDLs) with the following exceptions:

- SDG L1204945 - Analytical batch WG1455710: Low levels of naphthalene, 1,2,3-trichlorobenzene, and 1,2,4-trimethylbenzene are detected in the method blank. **Associated 1,2,4-trimethylbenzene detection in sample SCL-MW105-040120 is below the RDL and qualified as not detected (U).**   No action is taken for naphthalene and 1,2,3-trichlorobenzene as these are either not detected or are detected above the RDL.

- SDG L1205427 - Analytical batch WG1455710: Low levels of naphthalene, 1,2,3-trichlorobenzene, and 1,2,4-trimethylbenzene is detected in the method blank. **Associated naphthalene detection in sample MW-178-040220 is below the RDL and qualified as not detected (U).**

- SDG L1205456 – Analytical batch WG1456345: A low level of acetone is detected in the method blank. **Associated acetone detection in sample MW-144R-040220 is below the RDL and qualified as not detected (U).**

NWTPH-Gx Method:
Laboratory method blanks were included with the analytical batches per method requirement. The target analyte (gasoline) was not detected in the method blanks at or above the RDLs with one exception:

- SDG L1204945 – Analytical batch WG1454847: A low level gasoline concentration is detected in the method blank. **Associated gasoline detections in samples MW-180-040120 and MW104-040120 are below the RDL and qualified as not detected (U).**

- SDG L1205789 – Analytical batch WG1456436: A low level gasoline concentration is detected in the method blank. **Associated gasoline detections in samples MW124-040320 and MW-161-040320 are below the RDL and qualified as not detected (U).**

- SDG L1205427 – Analytical batch WG1455833: A low level gasoline concentration is detected in the method blank. **Associated gasoline detections in samples MW-178-040220 and MW-171-040220 are below the RDL and qualified as not detected (U).**

Dissolved Gases (Methane, Ethane, and Ethene) by RSK 175:
Laboratory method blanks were included with the analytical batches per method requirement. The target analytes (dissolved gases) are not detected in the method blanks at or above the RDLs.

USEPA Method 6020B and General Chemistry (Alkalinity, Chloride, Sulfate, Nitrate, and TOC):
Laboratory method blanks were included with the analytical batches per method requirement. The target analytes were detected in the method blanks below the RDLs. Per Guidance, no action is taken for blank detections less than the RDL when associated sample detections are greater than the RDL. General chemistry and metal blank detections are shown below:

SDG	Batch	Method	Analyte	Method Blank Result	Qualifier	RDL	Units	Associated Result(s) Qualified
L1204945	WG1455529	SM2320B	Alkalinity as CaCO3, Total	3420	J	20000	µg/L	NO
L1204945	WG1455985	SM2320B	Alkalinity as CaCO3, Total	4060	J	20000	µg/L	NO
L1204945	WG1454414	9056A	Chloride	176	J	1000	µg/L	NO
L1204945	WG1454414	9056A	Sulfate	290	J	1000	µg/L	**YES**
L1204945	WG1455135	9060A	TOC	288	J	5.00	µg/L	NO
L1204945	WG1454310	6020B	Manganese	0.329	J	5.00	µg/L	NO
L1204945	WG1454310	6020B	Iron	29.0	J	100	µg/L	NO
L1204945	WG1454310	6020B	Manganese	0.813	J	5.00	µg/L	NO
L1205427	WG1455323	SM2320B	Alkalinity as CaCO3, Total	4070	J	20000	µg/L	NO
L1205427	WG1455323	SM2320B	Alkalinity as CaCO3, Total	5660	J	20000	µg/L	NO
L1205427	WG1455131	9056A	Chloride	175	J	1000	µg/L	NO
L1205427	WG1455131	9056A	Sulfate	273	J	5000	µg/L	NO
L1205427	WG1456781	9060A	TOC	517	J	1000	µg/L	NO
L1205427	WG1456783	9060A	TOC	308	J	1000	µg/L	NO
L1205427	WG1455253	6020B	Manganese	0.300	J	5.00	µg/L	NO
L1205430	WG1455324	SM2320B	Alkalinity as CaCO3, Total	5660	J	20000	µg/L	NO
L1205430	WG1455131	9056A	Chloride	175	J	1000	µg/L	NO
L1205430	WG1455131	9056A	Sulfate	273	J	5000	µg/L	**YES**
L1205430	WG1456783	9060A	TOC	308	J	1000	µg/L	NO
L1205430	WG1455253	6020B	Manganese	0.300	J	5.00	µg/L	NO
L1205456	WG1455324	SM2320B	Alkalinity as CaCO3, Total	5660	J	20000	µg/L	NO
L1205456	WG1455131	9056A	Chloride	175	J	1000	µg/L	NO
L1205456	WG1455131	9056A	Sulfate	273	J	5000	µg/L	**YES**
L1205456	WG1456783	9060A	TOC	308	J	1000	µg/L	NO
L1205456	WG1455253	6020B	Manganese	0.300	J	5.00	µg/L	NO
L1205789	WG1455548	9056A	Chloride	174	J	1000	µg/L	NO
L1205789	WG1457464	9060A	TOC	212	J	1000	µg/L	NO
L1205789	WG1455814	6020B	Iron	16.5	J	100	µg/L	NO
L1206575	WG1458143	9060A	TOC	449	J	1000	µg/L	NO

SDG	Batch	Method	Analyte	Method Blank Result	Qualifier	RDL	Units	Associated Result(s) Qualified
L1207108	WG1458780	9060A	TOC	250	J	1000	µg/L	NO
L1205708	WG1458781	9060A	TOC	542	J	1000	µg/L	NO

Target analytes were detected in method blanks at low levels with no impact to the associated samples with the following exception:

- SDG L1204945 – Analytical batch WG1454414: A low level of sulfate is detected in the method blank. **Samples MW-181-040120 and W-MW-02-040120 sulfate detections are below the RDL and qualified as not detected (U).**

- SDG L1204945 – Analytical batch WG1454414: A low level of sulfate (290 µg/L) is detected in the method blank. Sample MW-160-040120 sulfate detection is 3,290 µg/L and is also below the RDL (5,000 µg/L). *In this case, using professional judgement, no action is taken other than to note this.*

- SDG L1205430 – Analytical batch WG1455131: A low level of sulfate is detected in the method blank. **Samples MW-183-040220 and MW-185-040220 sulfate detections are below the RDL and qualified as not detected (U).**

- SDG L1205456 – Analytical batch WG1455131: A low level of sulfate (273 µg/L) is detected in the method blank. Sample MW-145R-040220 sulfate detection is 1,070 µg/L and is also below the RDL (5,000 µg/L). *In this case, using professional judgement, no action is taken other than to note this.*

- SDG L1205456 – Analytical batch WG1455131: A low level of sulfate is detected in the method blank. **Samples MW-144R-040220 sulfate detections are below the RDL and qualified as not detected (U).**

Trip Blank Results

USEPA Method 8260D and NWTPH-Gx:
Two trip blanks were collected. Low levels of gasoline and acetone were detected in the trip blank (TB-040120). A low level of gasoline is also detected in the associated method blank. Actions are as follows:

- **SDG L1204945: Low levels of gasoline were detected in associated samples MW-180-040120 and MW104-040120 and detections are qualified as not detected (U).**

- **SDG L1204945: Low levels of acetone were detected in associated samples MW-160-040120 and MW-180-040120 and detections are qualified as not detected (U).**

Field, Rinsate, or Equipment Blank Results

All Analytical Methods:

One equipment blank (EQ-040320 with SDG L1205789) is associated with samples collected April 3, 2020. Low levels of acetone and cis-1,2-dichloroethene were detected in the equipment blank as well as low levels of TOC, manganese, and chloride. No action is taken for low levels of TOC, manganese, and chloride detections since amounts in the associated samples are far greater than the detections in the equipment blank. **Low levels of cis-1,2-dichloroethene were detected in associated samples MW-189-040320 and MW-927-040320. These detections are qualified as not detected (U) due to equipment blank contamination.** No action was taken for acetone since it was not detected in the associated samples.

Field Duplicate Analyses

Field duplicate pairs were submitted and analyzed. Field duplicate sample pair is as follows:

- SDG L1205789: MW-189-040320 and MW-927-040320

Target analyte results are comparable and within a relative percent difference (RPD) of 30% (± 1x RDL for groundwater results <5X the RDL) for the field duplicate pair.

Laboratory Duplicate Analyses

USEPA Method 8260D:
Laboratory duplicate samples were not analyzed. Refer to laboratory control sample/sample duplicate (LCS/LCSD) or matrix spike/matrix spike duplicate (MS/MSD) results for precision data.

NWTPH-Gx Method:
Laboratory duplicate samples were not analyzed. Refer to field duplicate, LCS, or MS results for additional information.

Dissolved Gases (Methane, Ethane, and Ethene) by RSK 175:
Laboratory duplicate sample analyses were performed on client and non-client samples within the analytical batches. The primary/duplicate RPDs for dissolved gas analyses are within the laboratory control limit of 20%.

USEPA Method 6020B:
Laboratory duplicate samples were not analyzed. Refer to LCS/LCSD or MS/MSD results for precision data.

General Chemistry (Alkalinity, Chloride, Sulfate, Nitrate, and TOC):
Laboratory duplicate sample analyses were performed on client samples and/or on non-client samples. The primary/duplicate RPDs for general chemistry parameters are within the laboratory control RPD limits or ± 1x RDL for groundwater results <5X the RDL.

Surrogate Recoveries

USEPA Method 8260D:

The surrogate recovery results for the samples, laboratory control samples, matrix spike samples, and the method blanks are within the laboratory surrogate control limits for all the analyses with the following exception:

- SDG L1205456: Sample MW-144R-040220 surrogate recovery (4-Bromofluorobenzene) associated with analytical batch WG1456345 (April 6, 2020) is recovered below QC criteria and laboratory qualified (J2). **Associated sample MW-144R-040220 vinyl chloride result is above the RDL and is estimated (J-) due to low surrogate recovery except for acetone which is qualified non-detect (U) due to blank contamination. Associated sample MW-144R-040220 results below the RDL are not assigned negative bias though these detections are still considered estimated values (J). Remaining non-detected results associated with analytical batch WG1456345 (April 6, 2020) are qualified as (UJ).**

NWTPH-Gx Method:
The surrogate recovery results for the samples, laboratory control samples, matrix spike samples, and the method blanks are within the laboratory surrogate control limits for all analyses.

Laboratory Control Samples

USEPA Method 8260D:
Laboratory control sample/laboratory control sample duplicate (LCS/LCSD) or laboratory control sample (LCS) were analyzed by USEPA Method 8260D method. The LCS % Rs or LCS/LCSD % Rs and RPDs for the all target compounds are within the laboratory control criteria for waters with the following discussion:

- SDG L1204945 - Analytical batch WG1456142: LCS/LCSD % recoveries for acetone, acrylonitrile, and n-hexane recovery are above laboratory acceptance criteria and laboratory qualified (J4). No action is needed for these compound as they are not detected in the associated samples.

- SDG L1205427 - Analytical batch WG1455831: LCS % recoveries for carbon tetrachloride and trichloroethene and are above laboratory acceptance criteria and laboratory qualified (J4). No action is needed for carbon tetrachloride as it was not detected in the associated sample. **Trichloroethene was detected in sample MW-171-040220 below the RDL and the result is estimated (J).**

- SDG L1205430 - Analytical batch WG1455831: LCS % recoveries for carbon tetrachloride and trichloroethene and are above laboratory acceptance criteria and laboratory qualified (J4). No action is needed for carbon tetrachloride as it was not detected in the associated sample. **Trichloroethene was detected in sample MW-186-040220 below the RDL and the result is estimated (J).**

- SDG L1205789 - Analytical batch WG1456237: LCS/LCSD % recoveries for 1,4-dichlorobenzene and is below laboratory acceptance criteria and laboratory qualified (J4). **1,4-Dichlorobenzene associated results below the RDL, and the results are estimated (UJ).**

NWTPH-Gx Method:
The LCS % Rs for the target compound (gasoline) are within the laboratory control criteria for waters. In many cases, no measure of precision is provided with the analytical batch. No action is taken other than to note this.

Dissolved Gases (Methane, Ethane, and Ethene) by RSK 175:
The LCS/LCSD % Rs and RPDs for the target compound (dissolved gases) are within the laboratory control criteria for waters.

USEPA Method 6020B:
The LCS/LCSD % Rs and RPDs for the target compound (iron and manganese) are within the laboratory control criteria for waters with the following exceptions:

- SDG L1205789: MS/MSD was performed on sample MW124-040320 with recoveries outside of criteria for iron and manganese. No action is taken for manganese since the sample amount is greater than four times the spike amount. Matrix spike recovery for iron is above QC criteria. Sample MW124-040320 iron result is qualified (J) due to elevated spike recovery.

General Chemistry (Alkalinity, Chloride, Sulfate, Nitrate, and TOC):
The LCS % Rs for general chemistry parameters are within the laboratory control criteria for waters.

Matrix Spike/Matrix Spike Duplicates

USEPA Method 8260D:
Matrix spike/matrix spike duplicate (MS/MSD) analyses were performed on client and on non-client samples within select analytical batches. The MS/MSD % Rs and RPD were acceptable and within laboratory control limit criteria for water samples with the following discussion:

- SDGs L1205427, L1205430, and L1205456: MS/MSD was performed on a non-client sample with multiple spike recovery and RPD exceedances. No action was taken since the spike was performed on a non-client sample.

- SDG L1205789: MS/MSD was performed on sample W-MW-01-040320 with six MSD recoveries above criteria. No action was taken since none of the spiked compounds are not detected in the associated sample.

NWTPH-Gx Method:
MS/MSD analyses were not performed. Refer to LCS results. No measure of precision was provided. No action was taken other than to note this.

Dissolved Gases (Methane, Ethane, and Ethene) by RSK 175:
MS/MSD analyses were not performed. Refer to LCS results and field duplicate sample for accuracy and precision data.

USEPA Method 6020B:
MS/MSD analyses were performed on client and on non-client samples within the analytical batches. The MS/MSD % Rs and RPD were acceptable and within laboratory control limit criteria for water samples with the following discussion:

- SDG L1156109: Matrix spike analysis was performed on a non-client sample and spike results are laboratory qualified (V) to indicate that the sample concentration is greater than 4X the spike amount. No action is taken in this case since the spike was performed on a non-client sample. Refer to LCS/LCSD results for accuracy and precision data.

General Chemistry (Alkalinity, Chloride, Sulfate, Nitrate, and TOC):
MS or MS/MSD analyses were performed on client and/or non-client samples within the analytical batches. In cases where MS/MSD spike analyses are not performed refer to LCS/LCSD or laboratory duplicate data for accuracy and precision data. The MS/MSD % Rs and RPDs are acceptable and within laboratory control limit criteria for water samples.

Other Quality Control Issues

No laboratory quality control issues were identified in the laboratory report with the following discussions:

- Multiple SDGs: Selected sample narratives for alkalinity results indicate that several sample containers had some headspace and exposure to air may have impacted the reported results. No action was taken other than to note this.

- Electronic data deliverables (EDDs) for these SDGs were provided by the laboratory and data validator qualifiers were entered. In some cases, different chemical synonyms are used between the EDD and the hardcopy however associated Chemical Abstracts Service (CAS) numbers are provided in the EDD to confirm chemical identifications.

Compound Identification and Quantitation Limits

Results of the analyses were reported based on laboratory RDLs for all compounds. RDLs for selected compounds are elevated due to method-required dilutions. No action is taken other than to note this.

Gasoline and gasoline range organics are analyzed for via Volatile Organic Compounds (GC) by Washington State Method NWTPHGx (using a gas chromatograph/flame ionization detector (GC/FID)) and Pace reported gasoline range organic-NWTPH results. Several chlorinated VOC compounds (including cis-1,2-dichloroethene, trans-1,2-dichloroethene, trichloroethene, and tetrachloroethene) elute within the gasoline range organics (GRO) retention time range as specified by Washington State (detections falling between the toluene and dodecane range).

Non-petroleum organics (e.g. chlorinated VOC compounds) eluting within the gasoline range contribute to the GRO result and GRO results are likely biased high (J+). PES requested that Pace evaluate chromatograms associated with positive sample detections to confirm the potential presence of gasoline. Per PES's request Pace reviewed selected sample chromatograms against the gasoline standard chromatograms and assigned "no discernible petroleum pattern" to GRO results associated with this Task. PES assigned an additional project level qualifier (Z) to GRO results when the chromatogram for the sample does not match a discernible gasoline standard pattern. In two cases (SDG L1204945) Pace included the statement for non-detected gasoline range organics. No action is taken in these cases other than to note that this is likely due to report formatting error. Associated chromatograms and qualified samples for this Task are as follows:

Sample ID	Laboratory Identification	Gasoline Range Organic Result (µg/L)	DV Qualifier	Data Validation Comments	Pace Chromatogram Review Notes
MW-181-040120	L1204945-02	12,200	Z, J+	Elevated chlorinated VOCs detected within the GRO elution range	No discernible petroleum pattern present.
MW-177-040120	L1204945-03	77,100	Z, J+	Elevated chlorinated VOCs detected within the GRO elution range	No discernible petroleum pattern present.
MW-184-040120	L1204945-04	212	Z, J+	Elevated chlorinated VOCs detected within the GRO elution range	No discernible petroleum pattern present.
MW-182-040120	L1204945-07	1,760	Z, J+	Elevated chlorinated VOCs detected within the GRO elution range	No discernible petroleum pattern present.
MW-179-040220	L1205427-01	424	Z, J+	Elevated chlorinated VOCs detected within the GRO elution range	No discernible petroleum pattern present.
MW-172-040220	L1205427-03	5,310	Z, J+	Elevated chlorinated VOCs detected within the GRO elution range	No discernible petroleum pattern present.
MW-170-040220	L1205427-04	17,000	Z, J+	Elevated chlorinated VOCs detected within the GRO elution range	No discernible petroleum pattern present.
MW107-040320	L1205789-05	1,420	Z, J+	Elevated chlorinated VOCs detected within the GRO elution range	No discernible petroleum pattern present.

Project level qualifiers have been included to the PES's project database (Epiphany) as (ZJ+). Washington State EIM valid values were reviewed. In this case no Washington State EIM valid value descriptor is ideal and the default estimated value (J) has been selected as the best match to qualify GRO (Z,J+) data.

Data Assessment

The laboratory data reported for this project were reviewed based on the criteria outlined in:

- USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (USEPA, 2017); and
- USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Superfund Methods Data Review (USEPA, 2017).

Data qualifiers are assigned and laboratory report pages with qualifiers are attached. All data, including qualified data, are judged to be acceptable for their intended use.

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

Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Alkalinity	182000		2710	20000	1	04/06/2020 02:39	WG1455529

Sample Narrative:

L1204945-01 WG1455529: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chloride	7590		51.9	1000	1	04/02/2020 14:48	WG1454414
Nitrate	24.9	J	22.7	100	1	04/02/2020 14:48	WG1454414
Sulfate	3290	J	77.4	5000	1	04/02/2020 14:48	WG1454414

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
TOC (Total Organic Carbon)	3410		102	1000	1	04/03/2020 17:07	WG1455135

Metals (ICPMS) by Method 6020B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Iron	20700		15.0	100	1	04/02/2020 22:14	WG1454310
Manganese	569		0.250	5.00	1	04/02/2020 22:14	WG1454310

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Gasoline Range Organics-NWTPH	U		31.6	100	1	04/03/2020 17:00	WG1454847
(S) a,a,a-Trifluorotoluene(FID)	*97.5*			*78.0-120*		*04/03/2020 17:00*	WG1454847

Sample Narrative:

L1204945-01 WG1454847: No discernable petroleum pattern present.

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Methane	621		0.287	0.678	1	04/03/2020 10:27	WG1454571
Ethane	2.24		0.296	1.29	1	04/03/2020 10:27	WG1454571
Ethene	U		0.422	1.27	1	04/03/2020 10:27	WG1454571

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	5.85	J	1.05	25.0	1	04/05/2020 21:13	WG1455710
Acrylonitrile	U		0.873	5.00	1	04/05/2020 21:13	WG1455710
Benzene	U		0.0896	0.500	1	04/05/2020 21:13	WG1455710
Bromobenzene	U		0.133	0.500	1	04/05/2020 21:13	WG1455710
Bromodichloromethane	U		0.0800	0.500	1	04/05/2020 21:13	WG1455710
Bromochloromethane	U		0.145	0.500	1	04/05/2020 21:13	WG1455710
Bromoform	U	UJ J0	0.186	0.500	1	04/05/2020 21:13	WG1455710
Bromomethane	U	UJ J0	0.157	2.50	1	04/05/2020 21:13	WG1455710
n-Butylbenzene	U		0.143	0.500	1	04/05/2020 21:13	WG1455710
sec-Butylbenzene	U		0.134	0.500	1	04/05/2020 21:13	WG1455710

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

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
tert-Butylbenzene	U		0.183	0.500	1	04/05/2020 21:13	WG1455710
Carbon disulfide	U		0.101	0.500	1	04/05/2020 21:13	WG1455710
Carbon tetrachloride	U		0.159	0.500	1	04/05/2020 21:13	WG1455710
Chlorobenzene	U		0.140	0.500	1	04/05/2020 21:13	WG1455710
Chlorodibromomethane	U		0.128	0.500	1	04/05/2020 21:13	WG1455710
Chloroethane	U		0.141	2.50	1	04/05/2020 21:13	WG1455710
Chloroform	U		0.0860	0.500	1	04/05/2020 21:13	WG1455710
Chloromethane	U	UJ J0	0.153	1.25	1	04/05/2020 21:13	WG1455710
2-Chlorotoluene	U		0.111	0.500	1	04/05/2020 21:13	WG1455710
4-Chlorotoluene	U		0.0972	0.500	1	04/05/2020 21:13	WG1455710
1,2-Dibromo-3-Chloropropane	U	UJ J0	0.325	2.50	1	04/05/2020 21:13	WG1455710
1,2-Dibromoethane	U		0.193	0.500	1	04/05/2020 21:13	WG1455710
Dibromomethane	U		0.117	0.500	1	04/05/2020 21:13	WG1455710
1,2-Dichlorobenzene	U		0.101	0.500	1	04/05/2020 21:13	WG1455710
1,3-Dichlorobenzene	U		0.130	0.500	1	04/05/2020 21:13	WG1455710
1,4-Dichlorobenzene	U		0.121	0.500	1	04/05/2020 21:13	WG1455710
Dichlorodifluoromethane	U		0.127	2.50	1	04/05/2020 21:13	WG1455710
1,1-Dichloroethane	U		0.114	0.500	1	04/05/2020 21:13	WG1455710
1,2-Dichloroethane	U		0.108	0.500	1	04/05/2020 21:13	WG1455710
1,1-Dichloroethene	U		0.188	0.500	1	04/05/2020 21:13	WG1455710
cis-1,2-Dichloroethene	2.09		0.0933	0.500	1	04/05/2020 21:13	WG1455710
trans-1,2-Dichloroethene	U		0.152	0.500	1	04/05/2020 21:13	WG1455710
1,2-Dichloropropane	U		0.190	0.500	1	04/05/2020 21:13	WG1455710
1,1-Dichloropropene	U		0.128	0.500	1	04/05/2020 21:13	WG1455710
1,3-Dichloropropane	U		0.147	1.00	1	04/05/2020 21:13	WG1455710
cis-1,3-Dichloropropene	U		0.0976	0.500	1	04/05/2020 21:13	WG1455710
trans-1,3-Dichloropropene	U		0.222	0.500	1	04/05/2020 21:13	WG1455710
trans-1,4-Dichloro-2-butene	U	UJ J0	0.257	5.00	1	04/05/2020 21:13	WG1455710
2,2-Dichloropropane	U		0.0929	0.500	1	04/05/2020 21:13	WG1455710
Di-isopropyl ether	U		0.0924	0.500	1	04/05/2020 21:13	WG1455710
Ethylbenzene	U		0.158	0.500	1	04/05/2020 21:13	WG1455710
Hexachloro-1,3-butadiene	U		0.157	1.00	1	04/05/2020 21:13	WG1455710
2-Hexanone	U		0.757	5.00	1	04/05/2020 21:13	WG1455710
n-Hexane	U		0.305	5.00	1	04/05/2020 21:13	WG1455710
Iodomethane	U	UJ J0	0.377	10.0	1	04/05/2020 21:13	WG1455710
Isopropylbenzene	U		0.126	0.500	1	04/05/2020 21:13	WG1455710
p-Isopropyltoluene	U		0.138	0.500	1	04/05/2020 21:13	WG1455710
2-Butanone (MEK)	U		1.28	5.00	1	04/05/2020 21:13	WG1455710
Methylene Chloride	U		1.07	2.50	1	04/05/2020 21:13	WG1455710
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	04/05/2020 21:13	WG1455710
Methyl tert-butyl ether	U		0.102	0.500	1	04/05/2020 21:13	WG1455710
Naphthalene	U	UJ J0	0.174	2.50	1	04/05/2020 21:13	WG1455710
n-Propylbenzene	U		0.162	0.500	1	04/05/2020 21:13	WG1455710
Styrene	U		0.117	0.500	1	04/05/2020 21:13	WG1455710
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	04/05/2020 21:13	WG1455710
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	04/05/2020 21:13	WG1455710
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	04/05/2020 21:13	WG1455710
Tetrachloroethene	U		0.199	0.500	1	04/05/2020 21:13	WG1455710
Toluene	U		0.412	0.500	1	04/05/2020 21:13	WG1455710
1,2,3-Trichlorobenzene	U	UJ J0	0.164	0.500	1	04/05/2020 21:13	WG1455710
1,2,4-Trichlorobenzene	U	UJ J0	0.355	0.500	1	04/05/2020 21:13	WG1455710
1,1,1-Trichloroethane	U		0.0940	0.500	1	04/05/2020 21:13	WG1455710
1,1,2-Trichloroethane	U		0.186	0.500	1	04/05/2020 21:13	WG1455710
Trichloroethene	3.18		0.153	0.500	1	04/05/2020 21:13	WG1455710
Trichlorofluoromethane	U		0.130	2.50	1	04/05/2020 21:13	WG1455710
1,2,3-Trichloropropane	U		0.247	2.50	1	04/05/2020 21:13	WG1455710

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,2,4-Trimethylbenzene	U		0.123	0.500	1	04/05/2020 21:13	WG1455710
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	04/05/2020 21:13	WG1455710
1,3,5-Trimethylbenzene	U		0.124	0.500	1	04/05/2020 21:13	WG1455710
Vinyl acetate	U	UJ J0	0.645	5.00	1	04/05/2020 21:13	WG1455710
Vinyl chloride	U		0.118	0.500	1	04/05/2020 21:13	WG1455710
Xylenes, Total	U		0.316	1.50	1	04/05/2020 21:13	WG1455710
(S) Toluene-d8	*97.3*			*80.0-120*		*04/05/2020 21:13*	WG1455710
(S) 4-Bromofluorobenzene	*102*			*77.0-126*		*04/05/2020 21:13*	WG1455710
(S) 1,2-Dichloroethane-d4	*109*			*70.0-130*		*04/05/2020 21:13*	WG1455710

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Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	553000		2710	20000	1	04/06/2020 02:47	WG1455529

Sample Narrative:

L1204945-02 WG1455529: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	185000		260	5000	5	04/02/2020 15:41	WG1454414
Nitrate	27.4	J	22.7	100	1	04/02/2020 20:32	WG1454414
Sulfate	337	~~B J~~ U	77.4	5000	1	04/02/2020 20:32	WG1454414

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	22400		102	1000	1	04/03/2020 18:20	WG1455135

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	9120		15.0	100	1	04/02/2020 22:18	WG1454310
Manganese	1450		0.250	5.00	1	04/02/2020 22:18	WG1454310

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	12200	Z, J+	790	2500	25	04/03/2020 20:56	WG1454847
(S) a,a,a-Trifluorotoluene(FID)	*97.6*			*78.0-120*		*04/03/2020 20:56*	WG1454847

Sample Narrative:

L1204945-02 WG1454847: No discernable petroleum pattern present.

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	17700		2.87	6.78	10	04/03/2020 12:23	WG1454997
Ethane	24.3		0.296	1.29	1	04/03/2020 10:30	WG1454571
Ethene	2620		0.422	1.27	1	04/03/2020 10:30	WG1454571

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	647	J	525	12500	500	04/05/2020 23:12	WG1455710
Acrylonitrile	U		437	2500	500	04/05/2020 23:12	WG1455710
Benzene	U		44.8	250	500	04/05/2020 23:12	WG1455710
Bromobenzene	U		66.5	250	500	04/05/2020 23:12	WG1455710
Bromodichloromethane	U		40.0	250	500	04/05/2020 23:12	WG1455710
Bromochloromethane	U		72.5	250	500	04/05/2020 23:12	WG1455710
Bromoform	U	UJ J0	93.0	250	500	04/05/2020 23:12	WG1455710
Bromomethane	U	UJ J0	78.5	1250	500	04/05/2020 23:12	WG1455710
n-Butylbenzene	U		71.5	250	500	04/05/2020 23:12	WG1455710
sec-Butylbenzene	U		67.0	250	500	04/05/2020 23:12	WG1455710

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
tert-Butylbenzene	U		91.5	250	500	04/05/2020 23:12	WG1455710
Carbon disulfide	U		50.5	250	500	04/05/2020 23:12	WG1455710
Carbon tetrachloride	U		79.5	250	500	04/05/2020 23:12	WG1455710
Chlorobenzene	U		70.0	250	500	04/05/2020 23:12	WG1455710
Chlorodibromomethane	U		64.0	250	500	04/05/2020 23:12	WG1455710
Chloroethane	U		70.5	1250	500	04/05/2020 23:12	WG1455710
Chloroform	U		43.0	250	500	04/05/2020 23:12	WG1455710
Chloromethane	U	UJ J0	76.5	625	500	04/05/2020 23:12	WG1455710
2-Chlorotoluene	U		55.5	250	500	04/05/2020 23:12	WG1455710
4-Chlorotoluene	U		48.6	250	500	04/05/2020 23:12	WG1455710
1,2-Dibromo-3-Chloropropane	U	UJ J0	163	1250	500	04/05/2020 23:12	WG1455710
1,2-Dibromoethane	U		96.5	250	500	04/05/2020 23:12	WG1455710
Dibromomethane	U		58.5	250	500	04/05/2020 23:12	WG1455710
1,2-Dichlorobenzene	U		50.5	250	500	04/05/2020 23:12	WG1455710
1,3-Dichlorobenzene	U		65.0	250	500	04/05/2020 23:12	WG1455710
1,4-Dichlorobenzene	U		60.5	250	500	04/05/2020 23:12	WG1455710
Dichlorodifluoromethane	U		63.5	1250	500	04/05/2020 23:12	WG1455710
1,1-Dichloroethane	U		57.0	250	500	04/05/2020 23:12	WG1455710
1,2-Dichloroethane	U		54.0	250	500	04/05/2020 23:12	WG1455710
1,1-Dichloroethene	U		94.0	250	500	04/05/2020 23:12	WG1455710
cis-1,2-Dichloroethene	24300		46.7	250	500	04/05/2020 23:12	WG1455710
trans-1,2-Dichloroethene	120	J	76.0	250	500	04/05/2020 23:12	WG1455710
1,2-Dichloropropane	U		95.0	250	500	04/05/2020 23:12	WG1455710
1,1-Dichloropropene	U		64.0	250	500	04/05/2020 23:12	WG1455710
1,3-Dichloropropane	U		73.5	500	500	04/05/2020 23:12	WG1455710
cis-1,3-Dichloropropene	U		48.8	250	500	04/05/2020 23:12	WG1455710
trans-1,3-Dichloropropene	U		111	250	500	04/05/2020 23:12	WG1455710
trans-1,4-Dichloro-2-butene	U	UJ J0	129	2500	500	04/05/2020 23:12	WG1455710
2,2-Dichloropropane	U		46.5	250	500	04/05/2020 23:12	WG1455710
Di-isopropyl ether	U		46.2	250	500	04/05/2020 23:12	WG1455710
Ethylbenzene	U		79.0	250	500	04/05/2020 23:12	WG1455710
Hexachloro-1,3-butadiene	U		78.5	500	500	04/05/2020 23:12	WG1455710
2-Hexanone	U		379	2500	500	04/05/2020 23:12	WG1455710
n-Hexane	U		153	2500	500	04/05/2020 23:12	WG1455710
Iodomethane	U	UJ J0	189	5000	500	04/05/2020 23:12	WG1455710
Isopropylbenzene	U		63.0	250	500	04/05/2020 23:12	WG1455710
p-Isopropyltoluene	U		69.0	250	500	04/05/2020 23:12	WG1455710
2-Butanone (MEK)	U		640	2500	500	04/05/2020 23:12	WG1455710
Methylene Chloride	U		535	1250	500	04/05/2020 23:12	WG1455710
4-Methyl-2-pentanone (MIBK)	U		412	2500	500	04/05/2020 23:12	WG1455710
Methyl tert-butyl ether	U		51.0	250	500	04/05/2020 23:12	WG1455710
Naphthalene	U	UJ J0	87.0	1250	500	04/05/2020 23:12	WG1455710
n-Propylbenzene	U		81.0	250	500	04/05/2020 23:12	WG1455710
Styrene	U		58.5	250	500	04/05/2020 23:12	WG1455710
1,1,1,2-Tetrachloroethane	U		60.0	250	500	04/05/2020 23:12	WG1455710
1,1,2,2-Tetrachloroethane	U		65.0	250	500	04/05/2020 23:12	WG1455710
1,1,2-Trichlorotrifluoroethane	U		82.0	250	500	04/05/2020 23:12	WG1455710
Tetrachloroethene	U		99.5	250	500	04/05/2020 23:12	WG1455710
Toluene	U		206	250	500	04/05/2020 23:12	WG1455710
1,2,3-Trichlorobenzene	U	UJ J0	82.0	250	500	04/05/2020 23:12	WG1455710
1,2,4-Trichlorobenzene	U	UJ J0	178	250	500	04/05/2020 23:12	WG1455710
1,1,1-Trichloroethane	U		47.0	250	500	04/05/2020 23:12	WG1455710
1,1,2-Trichloroethane	U		93.0	250	500	04/05/2020 23:12	WG1455710
Trichloroethene	U		76.5	250	500	04/05/2020 23:12	WG1455710
Trichlorofluoromethane	U		65.0	1250	500	04/05/2020 23:12	WG1455710
1,2,3-Trichloropropane	U		123	1250	500	04/05/2020 23:12	WG1455710

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,2,4-Trimethylbenzene	U		61.5	250	500	04/05/2020 23:12	WG1455710
1,2,3-Trimethylbenzene	U		36.9	250	500	04/05/2020 23:12	WG1455710
1,3,5-Trimethylbenzene	U		62.0	250	500	04/05/2020 23:12	WG1455710
Vinyl acetate	U	UJ J0	322	2500	500	04/05/2020 23:12	WG1455710
Vinyl chloride	10000		59.0	250	500	04/05/2020 23:12	WG1455710
Xylenes, Total	U		158	750	500	04/05/2020 23:12	WG1455710
(S) Toluene-d8	*99.7*			*80.0-120*		*04/05/2020 23:12*	WG1455710
(S) 4-Bromofluorobenzene	*99.5*			*77.0-126*		*04/05/2020 23:12*	WG1455710
(S) 1,2-Dichloroethane-d4	*105*			*70.0-130*		*04/05/2020 23:12*	WG1455710

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

JC 5/6/202

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

Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	588000		2710	20000	1	04/06/2020 02:54	WG1455529

Sample Narrative:

L1204945-03 WG1455529: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	282000		260	5000	5	04/02/2020 15:54	WG1454414
Nitrate	U		22.7	100	1	04/02/2020 20:45	WG1454414
Sulfate	60700		77.4	5000	1	04/02/2020 20:45	WG1454414

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	26700		102	1000	1	04/03/2020 18:35	WG1455135

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	19800		15.0	100	1	04/02/2020 22:21	WG1454310
Manganese	3210		0.250	5.00	1	04/02/2020 22:21	WG1454310

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	77100	Z, J+	1580	5000	50	04/03/2020 21:18	WG1454847
(S) a,a,a-Trifluorotoluene(FID)	*97.8*			*78.0-120*		*04/03/2020 21:18*	WG1454847

Sample Narrative:

L1204945-03 WG1454847: No discernable petroleum pattern present.

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	21300		2.87	6.78	10	04/03/2020 12:26	WG1454997
Ethane	122		0.296	1.29	1	04/03/2020 10:37	WG1454571
Ethene	2410		0.422	1.27	1	04/03/2020 10:37	WG1454571

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	5380	J	5250	125000	5000	04/05/2020 23:32	WG1455710
Acrylonitrile	U		4370	25000	5000	04/05/2020 23:32	WG1455710
Benzene	U		448	2500	5000	04/05/2020 23:32	WG1455710
Bromobenzene	U		665	2500	5000	04/05/2020 23:32	WG1455710
Bromodichloromethane	U		400	2500	5000	04/05/2020 23:32	WG1455710
Bromochloromethane	U		725	2500	5000	04/05/2020 23:32	WG1455710
Bromoform	U	UJ J0	930	2500	5000	04/05/2020 23:32	WG1455710
Bromomethane	U	UJ J0	785	12500	5000	04/05/2020 23:32	WG1455710
n-Butylbenzene	U		715	2500	5000	04/05/2020 23:32	WG1455710
sec-Butylbenzene	U		670	2500	5000	04/05/2020 23:32	WG1455710

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
tert-Butylbenzene	U		915	2500	5000	04/05/2020 23:32	WG1455710
Carbon disulfide	U		505	2500	5000	04/05/2020 23:32	WG1455710
Carbon tetrachloride	U		795	2500	5000	04/05/2020 23:32	WG1455710
Chlorobenzene	U		700	2500	5000	04/05/2020 23:32	WG1455710
Chlorodibromomethane	U		640	2500	5000	04/05/2020 23:32	WG1455710
Chloroethane	U		705	12500	5000	04/05/2020 23:32	WG1455710
Chloroform	U		430	2500	5000	04/05/2020 23:32	WG1455710
Chloromethane	U	UJ J0	765	6250	5000	04/05/2020 23:32	WG1455710
2-Chlorotoluene	U		555	2500	5000	04/05/2020 23:32	WG1455710
4-Chlorotoluene	U		486	2500	5000	04/05/2020 23:32	WG1455710
1,2-Dibromo-3-Chloropropane	U	UJ J0	1630	12500	5000	04/05/2020 23:32	WG1455710
1,2-Dibromoethane	U		965	2500	5000	04/05/2020 23:32	WG1455710
Dibromomethane	U		585	2500	5000	04/05/2020 23:32	WG1455710
1,2-Dichlorobenzene	U		505	2500	5000	04/05/2020 23:32	WG1455710
1,3-Dichlorobenzene	U		650	2500	5000	04/05/2020 23:32	WG1455710
1,4-Dichlorobenzene	U		605	2500	5000	04/05/2020 23:32	WG1455710
Dichlorodifluoromethane	U		635	12500	5000	04/05/2020 23:32	WG1455710
1,1-Dichloroethane	U		570	2500	5000	04/05/2020 23:32	WG1455710
1,2-Dichloroethane	U		540	2500	5000	04/05/2020 23:32	WG1455710
1,1-Dichloroethene	U		940	2500	5000	04/05/2020 23:32	WG1455710
cis-1,2-Dichloroethene	123000		467	2500	5000	04/05/2020 23:32	WG1455710
trans-1,2-Dichloroethene	U		760	2500	5000	04/05/2020 23:32	WG1455710
1,2-Dichloropropane	U		950	2500	5000	04/05/2020 23:32	WG1455710
1,1-Dichloropropene	U		640	2500	5000	04/05/2020 23:32	WG1455710
1,3-Dichloropropane	U		735	5000	5000	04/05/2020 23:32	WG1455710
cis-1,3-Dichloropropene	U		488	2500	5000	04/05/2020 23:32	WG1455710
trans-1,3-Dichloropropene	U		1110	2500	5000	04/05/2020 23:32	WG1455710
trans-1,4-Dichloro-2-butene	U	UJ J0	1290	25000	5000	04/05/2020 23:32	WG1455710
2,2-Dichloropropane	U		465	2500	5000	04/05/2020 23:32	WG1455710
Di-isopropyl ether	U		462	2500	5000	04/05/2020 23:32	WG1455710
Ethylbenzene	U		790	2500	5000	04/05/2020 23:32	WG1455710
Hexachloro-1,3-butadiene	U		785	5000	5000	04/05/2020 23:32	WG1455710
2-Hexanone	U		3780	25000	5000	04/05/2020 23:32	WG1455710
n-Hexane	U		1530	25000	5000	04/05/2020 23:32	WG1455710
Iodomethane	U	UJ J0	1890	50000	5000	04/05/2020 23:32	WG1455710
Isopropylbenzene	U		630	2500	5000	04/05/2020 23:32	WG1455710
p-Isopropyltoluene	U		690	2500	5000	04/05/2020 23:32	WG1455710
2-Butanone (MEK)	U		6400	25000	5000	04/05/2020 23:32	WG1455710
Methylene Chloride	U		5350	12500	5000	04/05/2020 23:32	WG1455710
4-Methyl-2-pentanone (MIBK)	U		4110	25000	5000	04/05/2020 23:32	WG1455710
Methyl tert-butyl ether	U		510	2500	5000	04/05/2020 23:32	WG1455710
Naphthalene	U	UJ J0	870	12500	5000	04/05/2020 23:32	WG1455710
n-Propylbenzene	U		810	2500	5000	04/05/2020 23:32	WG1455710
Styrene	U		585	2500	5000	04/05/2020 23:32	WG1455710
1,1,1,2-Tetrachloroethane	U		600	2500	5000	04/05/2020 23:32	WG1455710
1,1,2,2-Tetrachloroethane	U		650	2500	5000	04/05/2020 23:32	WG1455710
1,1,2-Trichlorotrifluoroethane	U		820	2500	5000	04/05/2020 23:32	WG1455710
Tetrachloroethene	27900		995	2500	5000	04/05/2020 23:32	WG1455710
Toluene	U		2060	2500	5000	04/05/2020 23:32	WG1455710
1,2,3-Trichlorobenzene	U	UJ J0	820	2500	5000	04/05/2020 23:32	WG1455710
1,2,4-Trichlorobenzene	U	UJ J0	1780	2500	5000	04/05/2020 23:32	WG1455710
1,1,1-Trichloroethane	U		470	2500	5000	04/05/2020 23:32	WG1455710
1,1,2-Trichloroethane	U		930	2500	5000	04/05/2020 23:32	WG1455710
Trichloroethene	6980		765	2500	5000	04/05/2020 23:32	WG1455710
Trichlorofluoromethane	U		650	12500	5000	04/05/2020 23:32	WG1455710
1,2,3-Trichloropropane	U		1230	12500	5000	04/05/2020 23:32	WG1455710

JC 5/6/202

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

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,2,4-Trimethylbenzene	U		615	2500	5000	04/05/2020 23:32	WG1455710
1,2,3-Trimethylbenzene	U		370	2500	5000	04/05/2020 23:32	WG1455710
1,3,5-Trimethylbenzene	U		620	2500	5000	04/05/2020 23:32	WG1455710
Vinyl acetate	U	UJ J0	3220	25000	5000	04/05/2020 23:32	WG1455710
Vinyl chloride	9860		590	2500	5000	04/05/2020 23:32	WG1455710
Xylenes, Total	U		1580	7500	5000	04/05/2020 23:32	WG1455710
(S) Toluene-d8	*100*			*80.0-120*		*04/05/2020 23:32*	WG1455710
(S) 4-Bromofluorobenzene	*103*			*77.0-126*		*04/05/2020 23:32*	WG1455710
(S) 1,2-Dichloroethane-d4	*114*			*70.0-130*		*04/05/2020 23:32*	WG1455710

JC 5/6/202

MW-184-040120
Collected date/time: 04/01/20 11:45

SAMPLE RESULTS - 04

L1204945

Wet Chemistry by Method 2320 B-2011

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Alkalinity	152000		2710	20000	1	04/06/2020 03:01	WG1455529

Sample Narrative:

L1204945-04 WG1455529: Endpoint pH 4.5

Wet Chemistry by Method 9056A

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Chloride	8680		51.9	1000	1	04/02/2020 16:07	WG1454414
Nitrate	27.7	J	22.7	100	1	04/02/2020 16:07	WG1454414
Sulfate	6060		77.4	5000	1	04/02/2020 16:07	WG1454414

Wet Chemistry by Method 9060A

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
TOC (Total Organic Carbon)	1520	~~B~~	102	1000	1	04/03/2020 18:47	WG1455135

Metals (ICPMS) by Method 6020B

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Iron	4900		15.0	100	1	04/02/2020 22:25	WG1454310
Manganese	364		0.250	5.00	1	04/02/2020 22:25	WG1454310

Volatile Organic Compounds (GC) by Method NWTPHGX

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Gasoline Range Organics-NWTPH	212	Z, J+ ~~B~~	31.6	100	1	04/03/2020 17:21	WG1454847
(S) a,a,a-Trifluorotoluene(FID)	*97.5*			*78.0-120*		*04/03/2020 17:21*	WG1454847

Sample Narrative:

L1204945-04 WG1454847: No discernable petroleum pattern present.

Volatile Organic Compounds (GC) by Method RSK175

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Methane	9.82		0.287	0.678	1	04/03/2020 10:44	WG1454571
Ethane	U		0.296	1.29	1	04/03/2020 10:44	WG1454571
Ethene	5.11		0.422	1.27	1	04/03/2020 10:44	WG1454571

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

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Acetone	U	J4	10.5	250	10	04/06/2020 13:45	WG1456142
Acrylonitrile	U	J4	8.73	50.0	10	04/06/2020 13:45	WG1456142
Benzene	U		0.896	5.00	10	04/06/2020 13:45	WG1456142
Bromobenzene	U		1.33	5.00	10	04/06/2020 13:45	WG1456142
Bromodichloromethane	U		0.800	5.00	10	04/06/2020 13:45	WG1456142
Bromochloromethane	U		1.45	5.00	10	04/06/2020 13:45	WG1456142
Bromoform	U		1.86	5.00	10	04/06/2020 13:45	WG1456142
Bromomethane	U		1.57	25.0	10	04/06/2020 13:45	WG1456142
n-Butylbenzene	U		1.43	5.00	10	04/06/2020 13:45	WG1456142
sec-Butylbenzene	U		1.34	5.00	10	04/06/2020 13:45	WG1456142

JC 5/6/202

MW-184-040120
Collected date/time: 04/01/20 11:45

SAMPLE RESULTS - 04

L1204945

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
tert-Butylbenzene	U		1.83	5.00	10	04/06/2020 13:45	WG1456142
Carbon disulfide	U		1.01	5.00	10	04/06/2020 13:45	WG1456142
Carbon tetrachloride	U		1.59	5.00	10	04/06/2020 13:45	WG1456142
Chlorobenzene	U		1.40	5.00	10	04/06/2020 13:45	WG1456142
Chlorodibromomethane	U		1.28	5.00	10	04/06/2020 13:45	WG1456142
Chloroethane	U		1.41	25.0	10	04/06/2020 13:45	WG1456142
Chloroform	U		0.860	5.00	10	04/06/2020 13:45	WG1456142
Chloromethane	U		1.53	12.5	10	04/06/2020 13:45	WG1456142
2-Chlorotoluene	U		1.11	5.00	10	04/06/2020 13:45	WG1456142
4-Chlorotoluene	U		0.972	5.00	10	04/06/2020 13:45	WG1456142
1,2-Dibromo-3-Chloropropane	U		3.25	25.0	10	04/06/2020 13:45	WG1456142
1,2-Dibromoethane	U		1.93	5.00	10	04/06/2020 13:45	WG1456142
Dibromomethane	U		1.17	5.00	10	04/06/2020 13:45	WG1456142
1,2-Dichlorobenzene	U		1.01	5.00	10	04/06/2020 13:45	WG1456142
1,3-Dichlorobenzene	U		1.30	5.00	10	04/06/2020 13:45	WG1456142
1,4-Dichlorobenzene	U		1.21	5.00	10	04/06/2020 13:45	WG1456142
Dichlorodifluoromethane	U		1.27	25.0	10	04/06/2020 13:45	WG1456142
1,1-Dichloroethane	U		1.14	5.00	10	04/06/2020 13:45	WG1456142
1,2-Dichloroethane	U		1.08	5.00	10	04/06/2020 13:45	WG1456142
1,1-Dichloroethene	U		1.88	5.00	10	04/06/2020 13:45	WG1456142
cis-1,2-Dichloroethene	370		0.933	5.00	10	04/06/2020 13:45	WG1456142
trans-1,2-Dichloroethene	U		1.52	5.00	10	04/06/2020 13:45	WG1456142
1,2-Dichloropropane	U		1.90	5.00	10	04/06/2020 13:45	WG1456142
1,1-Dichloropropene	U		1.28	5.00	10	04/06/2020 13:45	WG1456142
1,3-Dichloropropane	U		1.47	10.0	10	04/06/2020 13:45	WG1456142
cis-1,3-Dichloropropene	U		0.976	5.00	10	04/06/2020 13:45	WG1456142
trans-1,3-Dichloropropene	U		2.22	5.00	10	04/06/2020 13:45	WG1456142
trans-1,4-Dichloro-2-butene	U		2.57	50.0	10	04/06/2020 13:45	WG1456142
2,2-Dichloropropane	U		0.929	5.00	10	04/06/2020 13:45	WG1456142
Di-isopropyl ether	U		0.924	5.00	10	04/06/2020 13:45	WG1456142
Ethylbenzene	U		1.58	5.00	10	04/06/2020 13:45	WG1456142
Hexachloro-1,3-butadiene	U		1.57	10.0	10	04/06/2020 13:45	WG1456142
2-Hexanone	U		7.57	50.0	10	04/06/2020 13:45	WG1456142
n-Hexane	U	J4	3.05	50.0	10	04/06/2020 13:45	WG1456142
Iodomethane	U		3.77	100	10	04/06/2020 13:45	WG1456142
Isopropylbenzene	U		1.26	5.00	10	04/06/2020 13:45	WG1456142
p-Isopropyltoluene	U		1.38	5.00	10	04/06/2020 13:45	WG1456142
2-Butanone (MEK)	U		12.8	50.0	10	04/06/2020 13:45	WG1456142
Methylene Chloride	U		10.7	25.0	10	04/06/2020 13:45	WG1456142
4-Methyl-2-pentanone (MIBK)	U		8.23	50.0	10	04/06/2020 13:45	WG1456142
Methyl tert-butyl ether	U		1.02	5.00	10	04/06/2020 13:45	WG1456142
Naphthalene	U		1.74	25.0	10	04/06/2020 13:45	WG1456142
n-Propylbenzene	U		1.62	5.00	10	04/06/2020 13:45	WG1456142
Styrene	U		1.17	5.00	10	04/06/2020 13:45	WG1456142
1,1,1,2-Tetrachloroethane	U		1.20	5.00	10	04/06/2020 13:45	WG1456142
1,1,2,2-Tetrachloroethane	U		1.30	5.00	10	04/06/2020 13:45	WG1456142
1,1,2-Trichlorotrifluoroethane	U		1.64	5.00	10	04/06/2020 13:45	WG1456142
Tetrachloroethene	U		1.99	5.00	10	04/06/2020 13:45	WG1456142
Toluene	U		4.12	5.00	10	04/06/2020 13:45	WG1456142
1,2,3-Trichlorobenzene	U		1.64	5.00	10	04/06/2020 13:45	WG1456142
1,2,4-Trichlorobenzene	U		3.55	5.00	10	04/06/2020 13:45	WG1456142
1,1,1-Trichloroethane	U		0.940	5.00	10	04/06/2020 13:45	WG1456142
1,1,2-Trichloroethane	U		1.86	5.00	10	04/06/2020 13:45	WG1456142
Trichloroethene	U		1.53	5.00	10	04/06/2020 13:45	WG1456142
Trichlorofluoromethane	U		1.30	25.0	10	04/06/2020 13:45	WG1456142
1,2,3-Trichloropropane	U		2.47	25.0	10	04/06/2020 13:45	WG1456142

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,2,4-Trimethylbenzene	U		1.23	5.00	10	04/06/2020 13:45	WG1456142
1,2,3-Trimethylbenzene	U		0.739	5.00	10	04/06/2020 13:45	WG1456142
1,3,5-Trimethylbenzene	U		1.24	5.00	10	04/06/2020 13:45	WG1456142
Vinyl acetate	U		6.45	50.0	10	04/06/2020 13:45	WG1456142
Vinyl chloride	U		1.18	5.00	10	04/06/2020 13:45	WG1456142
Xylenes, Total	U		3.16	15.0	10	04/06/2020 13:45	WG1456142
(S) Toluene-d8	*110*			*80.0-120*		*04/06/2020 13:45*	WG1456142
(S) 4-Bromofluorobenzene	*93.6*			*77.0-126*		*04/06/2020 13:45*	WG1456142
(S) 1,2-Dichloroethane-d4	*102*			*70.0-130*		*04/06/2020 13:45*	WG1456142

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Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	1140000		2710	20000	1	04/06/2020 22:51	WG1455985

Sample Narrative:

L1204945-05 WG1455985: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	82400		51.9	1000	1	04/02/2020 16:20	WG1454414
Nitrate	26.3	J	22.7	100	1	04/02/2020 16:20	WG1454414
Sulfate	280	U ~~B J~~	77.4	5000	1	04/02/2020 16:20	WG1454414

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	33700		204	2000	2	04/03/2020 19:01	WG1455135

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	16000		15.0	100	1	04/03/2020 11:42	WG1454757
Manganese	3300		0.250	5.00	1	04/03/2020 11:42	WG1454757

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	U		31.6	100	1	04/03/2020 17:43	WG1454847
(S) a,a,a-Trifluorotoluene(FID)	*97.5*			*78.0-120*		*04/03/2020 17:43*	WG1454847

Sample Narrative:

L1204945-05 WG1454847: No discernable petroleum pattern present.

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	22800		2.87	6.78	10	04/03/2020 12:28	WG1454997
Ethane	79.6		0.296	1.29	1	04/03/2020 10:47	WG1454571
Ethene	U		0.422	1.27	1	04/03/2020 10:47	WG1454571

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U		1.05	25.0	1	04/05/2020 21:33	WG1455710
Acrylonitrile	U		0.873	5.00	1	04/05/2020 21:33	WG1455710
Benzene	U		0.0896	0.500	1	04/05/2020 21:33	WG1455710
Bromobenzene	U		0.133	0.500	1	04/05/2020 21:33	WG1455710
Bromodichloromethane	U		0.0800	0.500	1	04/05/2020 21:33	WG1455710
Bromochloromethane	U		0.145	0.500	1	04/05/2020 21:33	WG1455710
Bromoform	U	UJ J0	0.186	0.500	1	04/05/2020 21:33	WG1455710
Bromomethane	U	UJ J0	0.157	2.50	1	04/05/2020 21:33	WG1455710
n-Butylbenzene	U		0.143	0.500	1	04/05/2020 21:33	WG1455710
sec-Butylbenzene	U		0.134	0.500	1	04/05/2020 21:33	WG1455710

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

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
tert-Butylbenzene	U		0.183	0.500	1	04/05/2020 21:33	WG1455710
Carbon disulfide	U		0.101	0.500	1	04/05/2020 21:33	WG1455710
Carbon tetrachloride	U		0.159	0.500	1	04/05/2020 21:33	WG1455710
Chlorobenzene	U		0.140	0.500	1	04/05/2020 21:33	WG1455710
Chlorodibromomethane	U		0.128	0.500	1	04/05/2020 21:33	WG1455710
Chloroethane	U		0.141	2.50	1	04/05/2020 21:33	WG1455710
Chloroform	U		0.0860	0.500	1	04/05/2020 21:33	WG1455710
Chloromethane	U	UJ J0	0.153	1.25	1	04/05/2020 21:33	WG1455710
2-Chlorotoluene	U		0.111	0.500	1	04/05/2020 21:33	WG1455710
4-Chlorotoluene	U		0.0972	0.500	1	04/05/2020 21:33	WG1455710
1,2-Dibromo-3-Chloropropane	U	UJ J0	0.325	2.50	1	04/05/2020 21:33	WG1455710
1,2-Dibromoethane	U		0.193	0.500	1	04/05/2020 21:33	WG1455710
Dibromomethane	U		0.117	0.500	1	04/05/2020 21:33	WG1455710
1,2-Dichlorobenzene	U		0.101	0.500	1	04/05/2020 21:33	WG1455710
1,3-Dichlorobenzene	U		0.130	0.500	1	04/05/2020 21:33	WG1455710
1,4-Dichlorobenzene	U		0.121	0.500	1	04/05/2020 21:33	WG1455710
Dichlorodifluoromethane	U		0.127	2.50	1	04/05/2020 21:33	WG1455710
1,1-Dichloroethane	U		0.114	0.500	1	04/05/2020 21:33	WG1455710
1,2-Dichloroethane	U		0.108	0.500	1	04/05/2020 21:33	WG1455710
1,1-Dichloroethene	U		0.188	0.500	1	04/05/2020 21:33	WG1455710
cis-1,2-Dichloroethene	1.44		0.0933	0.500	1	04/05/2020 21:33	WG1455710
trans-1,2-Dichloroethene	0.166	J	0.152	0.500	1	04/05/2020 21:33	WG1455710
1,2-Dichloropropane	U		0.190	0.500	1	04/05/2020 21:33	WG1455710
1,1-Dichloropropene	U		0.128	0.500	1	04/05/2020 21:33	WG1455710
1,3-Dichloropropane	U		0.147	1.00	1	04/05/2020 21:33	WG1455710
cis-1,3-Dichloropropene	U		0.0976	0.500	1	04/05/2020 21:33	WG1455710
trans-1,3-Dichloropropene	U		0.222	0.500	1	04/05/2020 21:33	WG1455710
trans-1,4-Dichloro-2-butene	U	UJ J0	0.257	5.00	1	04/05/2020 21:33	WG1455710
2,2-Dichloropropane	U		0.0929	0.500	1	04/05/2020 21:33	WG1455710
Di-isopropyl ether	U		0.0924	0.500	1	04/05/2020 21:33	WG1455710
Ethylbenzene	U		0.158	0.500	1	04/05/2020 21:33	WG1455710
Hexachloro-1,3-butadiene	U		0.157	1.00	1	04/05/2020 21:33	WG1455710
2-Hexanone	U		0.757	5.00	1	04/05/2020 21:33	WG1455710
n-Hexane	U		0.305	5.00	1	04/05/2020 21:33	WG1455710
Iodomethane	U	UJ J0	0.377	10.0	1	04/05/2020 21:33	WG1455710
Isopropylbenzene	U		0.126	0.500	1	04/05/2020 21:33	WG1455710
p-Isopropyltoluene	U		0.138	0.500	1	04/05/2020 21:33	WG1455710
2-Butanone (MEK)	U		1.28	5.00	1	04/05/2020 21:33	WG1455710
Methylene Chloride	U		1.07	2.50	1	04/05/2020 21:33	WG1455710
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	04/05/2020 21:33	WG1455710
Methyl tert-butyl ether	U		0.102	0.500	1	04/05/2020 21:33	WG1455710
Naphthalene	U	UJ J0	0.174	2.50	1	04/05/2020 21:33	WG1455710
n-Propylbenzene	U		0.162	0.500	1	04/05/2020 21:33	WG1455710
Styrene	U		0.117	0.500	1	04/05/2020 21:33	WG1455710
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	04/05/2020 21:33	WG1455710
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	04/05/2020 21:33	WG1455710
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	04/05/2020 21:33	WG1455710
Tetrachloroethene	U		0.199	0.500	1	04/05/2020 21:33	WG1455710
Toluene	2.51		0.412	0.500	1	04/05/2020 21:33	WG1455710
1,2,3-Trichlorobenzene	U	UJ J0	0.164	0.500	1	04/05/2020 21:33	WG1455710
1,2,4-Trichlorobenzene	U	UJ J0	0.355	0.500	1	04/05/2020 21:33	WG1455710
1,1,1-Trichloroethane	U		0.0940	0.500	1	04/05/2020 21:33	WG1455710
1,1,2-Trichloroethane	U		0.186	0.500	1	04/05/2020 21:33	WG1455710
Trichloroethene	U		0.153	0.500	1	04/05/2020 21:33	WG1455710
Trichlorofluoromethane	U		0.130	2.50	1	04/05/2020 21:33	WG1455710
1,2,3-Trichloropropane	U		0.247	2.50	1	04/05/2020 21:33	WG1455710

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

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
1,2,4-Trimethylbenzene	U		0.123	0.500	1	04/05/2020 21:33	WG1455710
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	04/05/2020 21:33	WG1455710
1,3,5-Trimethylbenzene	U		0.124	0.500	1	04/05/2020 21:33	WG1455710
Vinyl acetate	U	UJ J0	0.645	5.00	1	04/05/2020 21:33	WG1455710
Vinyl chloride	1.42		0.118	0.500	1	04/05/2020 21:33	WG1455710
Xylenes, Total	U		0.316	1.50	1	04/05/2020 21:33	WG1455710
(S) Toluene-d8	*99.1*			*80.0-120*		*04/05/2020 21:33*	WG1455710
(S) 4-Bromofluorobenzene	*101*			*77.0-126*		*04/05/2020 21:33*	WG1455710
(S) 1,2-Dichloroethane-d4	*109*			*70.0-130*		*04/05/2020 21:33*	WG1455710

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

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Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	489000		2710	20000	1	04/06/2020 03:24	WG1455529

Sample Narrative:

L1204945-06 WG1455529: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	34600		51.9	1000	1	04/02/2020 16:33	WG1454414
Nitrate	28.7	J	22.7	100	1	04/02/2020 16:33	WG1454414
Sulfate	68300		77.4	5000	1	04/02/2020 16:33	WG1454414

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	40900		102	1000	1	04/03/2020 19:29	WG1455135

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	19600		15.0	100	1	04/03/2020 11:46	WG1454757
Manganese	5000		0.250	5.00	1	04/03/2020 11:46	WG1454757

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	69.1 U	B J	31.6	100	1	04/03/2020 18:04	WG1454847
(S) a,a,a-Trifluorotoluene(FID)	*97.4*			*78.0-120*		*04/03/2020 18:04*	WG1454847

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	12700		2.87	6.78	10	04/03/2020 12:31	WG1454997
Ethane	2.65		0.296	1.29	1	04/03/2020 10:59	WG1454571
Ethene	U		0.422	1.27	1	04/03/2020 10:59	WG1454571

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	9.35	J	5.25	125	5	04/06/2020 00:12	WG1455710
Acrylonitrile	U		4.37	25.0	5	04/06/2020 00:12	WG1455710
Benzene	U		0.448	2.50	5	04/06/2020 00:12	WG1455710
Bromobenzene	U		0.665	2.50	5	04/06/2020 00:12	WG1455710
Bromodichloromethane	U		0.400	2.50	5	04/06/2020 00:12	WG1455710
Bromochloromethane	U		0.725	2.50	5	04/06/2020 00:12	WG1455710
Bromoform	U UJ	J0	0.930	2.50	5	04/06/2020 00:12	WG1455710
Bromomethane	U UJ	J0	0.785	12.5	5	04/06/2020 00:12	WG1455710
n-Butylbenzene	U		0.715	2.50	5	04/06/2020 00:12	WG1455710
sec-Butylbenzene	U		0.670	2.50	5	04/06/2020 00:12	WG1455710
tert-Butylbenzene	U		0.915	2.50	5	04/06/2020 00:12	WG1455710
Carbon disulfide	U		0.505	2.50	5	04/06/2020 00:12	WG1455710
Carbon tetrachloride	U		0.795	2.50	5	04/06/2020 00:12	WG1455710

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chlorobenzene	U		0.700	2.50	5	04/06/2020 00:12	WG1455710
Chlorodibromomethane	U		0.640	2.50	5	04/06/2020 00:12	WG1455710
Chloroethane	U		0.705	12.5	5	04/06/2020 00:12	WG1455710
Chloroform	U		0.430	2.50	5	04/06/2020 00:12	WG1455710
Chloromethane	U	UJ J0	0.765	6.25	5	04/06/2020 00:12	WG1455710
2-Chlorotoluene	U		0.555	2.50	5	04/06/2020 00:12	WG1455710
4-Chlorotoluene	U		0.486	2.50	5	04/06/2020 00:12	WG1455710
1,2-Dibromo-3-Chloropropane	U	UJ J0	1.63	12.5	5	04/06/2020 00:12	WG1455710
1,2-Dibromoethane	U		0.965	2.50	5	04/06/2020 00:12	WG1455710
Dibromomethane	U		0.585	2.50	5	04/06/2020 00:12	WG1455710
1,2-Dichlorobenzene	U		0.505	2.50	5	04/06/2020 00:12	WG1455710
1,3-Dichlorobenzene	U		0.650	2.50	5	04/06/2020 00:12	WG1455710
1,4-Dichlorobenzene	U		0.605	2.50	5	04/06/2020 00:12	WG1455710
Dichlorodifluoromethane	U		0.635	12.5	5	04/06/2020 00:12	WG1455710
1,1-Dichloroethane	U		0.570	2.50	5	04/06/2020 00:12	WG1455710
1,2-Dichloroethane	U		0.540	2.50	5	04/06/2020 00:12	WG1455710
1,1-Dichloroethene	U		0.940	2.50	5	04/06/2020 00:12	WG1455710
cis-1,2-Dichloroethene	89.9		0.467	2.50	5	04/06/2020 00:12	WG1455710
trans-1,2-Dichloroethene	U		0.760	2.50	5	04/06/2020 00:12	WG1455710
1,2-Dichloropropane	U		0.950	2.50	5	04/06/2020 00:12	WG1455710
1,1-Dichloropropene	U		0.640	2.50	5	04/06/2020 00:12	WG1455710
1,3-Dichloropropane	U		0.735	5.00	5	04/06/2020 00:12	WG1455710
cis-1,3-Dichloropropene	U		0.488	2.50	5	04/06/2020 00:12	WG1455710
trans-1,3-Dichloropropene	U		1.11	2.50	5	04/06/2020 00:12	WG1455710
trans-1,4-Dichloro-2-butene	U	UJ J0	1.29	25.0	5	04/06/2020 00:12	WG1455710
2,2-Dichloropropane	U		0.465	2.50	5	04/06/2020 00:12	WG1455710
Di-isopropyl ether	U		0.462	2.50	5	04/06/2020 00:12	WG1455710
Ethylbenzene	U		0.790	2.50	5	04/06/2020 00:12	WG1455710
Hexachloro-1,3-butadiene	U		0.785	5.00	5	04/06/2020 00:12	WG1455710
2-Hexanone	U		3.78	25.0	5	04/06/2020 00:12	WG1455710
n-Hexane	U		1.53	25.0	5	04/06/2020 00:12	WG1455710
Iodomethane	U	UJ J0	1.89	50.0	5	04/06/2020 00:12	WG1455710
Isopropylbenzene	U		0.630	2.50	5	04/06/2020 00:12	WG1455710
p-Isopropyltoluene	U		0.690	2.50	5	04/06/2020 00:12	WG1455710
2-Butanone (MEK)	24.0	J	6.40	25.0	5	04/06/2020 00:12	WG1455710
Methylene Chloride	U		5.35	12.5	5	04/06/2020 00:12	WG1455710
4-Methyl-2-pentanone (MIBK)	U		4.12	25.0	5	04/06/2020 00:12	WG1455710
Methyl tert-butyl ether	U		0.510	2.50	5	04/06/2020 00:12	WG1455710
Naphthalene	U	UJ J0	0.870	12.5	5	04/06/2020 00:12	WG1455710
n-Propylbenzene	U		0.810	2.50	5	04/06/2020 00:12	WG1455710
Styrene	U		0.585	2.50	5	04/06/2020 00:12	WG1455710
1,1,1,2-Tetrachloroethane	U		0.600	2.50	5	04/06/2020 00:12	WG1455710
1,1,2,2-Tetrachloroethane	U		0.650	2.50	5	04/06/2020 00:12	WG1455710
1,1,2-Trichlorotrifluoroethane	U		0.820	2.50	5	04/06/2020 00:12	WG1455710
Tetrachloroethene	U		0.995	2.50	5	04/06/2020 00:12	WG1455710
Toluene	U		2.06	2.50	5	04/06/2020 00:12	WG1455710
1,2,3-Trichlorobenzene	U	UJ J0	0.820	2.50	5	04/06/2020 00:12	WG1455710
1,2,4-Trichlorobenzene	U	UJ J0	1.78	2.50	5	04/06/2020 00:12	WG1455710
1,1,1-Trichloroethane	U		0.470	2.50	5	04/06/2020 00:12	WG1455710
1,1,2-Trichloroethane	U		0.930	2.50	5	04/06/2020 00:12	WG1455710
Trichloroethene	U		0.765	2.50	5	04/06/2020 00:12	WG1455710
Trichlorofluoromethane	U		0.650	12.5	5	04/06/2020 00:12	WG1455710
1,2,3-Trichloropropane	U		1.23	12.5	5	04/06/2020 00:12	WG1455710
1,2,4-Trimethylbenzene	U		0.615	2.50	5	04/06/2020 00:12	WG1455710
1,2,3-Trimethylbenzene	U		0.369	2.50	5	04/06/2020 00:12	WG1455710
1,3,5-Trimethylbenzene	U		0.620	2.50	5	04/06/2020 00:12	WG1455710

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MW-180-040120

Collected date/time: 04/01/20 12:55

SAMPLE RESULTS - 06

L1204945

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Vinyl acetate	U UJ	J0	3.22	25.0	5	04/06/2020 00:12	WG1455710
Vinyl chloride	22.9		0.590	2.50	5	04/06/2020 00:12	WG1455710
Xylenes, Total	U		1.58	7.50	5	04/06/2020 00:12	WG1455710
(S) Toluene-d8	*98.4*			*80.0-120*		*04/06/2020 00:12*	WG1455710
(S) 4-Bromofluorobenzene	*99.2*			*77.0-126*		*04/06/2020 00:12*	WG1455710
(S) 1,2-Dichloroethane-d4	*111*			*70.0-130*		*04/06/2020 00:12*	WG1455710

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

JC 5/6/202

Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	1290000		2710	20000	1	04/06/2020 23:00	WG1455985

Sample Narrative:

L1204945-07 WG1455985: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	137000		519	10000	10	04/02/2020 21:11	WG1454414
Nitrate	U		22.7	100	1	04/02/2020 20:58	WG1454414
Sulfate	22300		77.4	5000	1	04/02/2020 20:58	WG1454414

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	75700		102	1000	1	04/03/2020 19:45	WG1455135

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	61400		15.0	100	1	04/03/2020 11:49	WG1454757
Manganese	6800		0.250	5.00	1	04/03/2020 11:49	WG1454757

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	1760	Z, J+	31.6	100	1	04/03/2020 18:26	WG1454847
(S) a,a,a-Trifluorotoluene(FID)	*97.8*			*78.0-120*		*04/03/2020 18:26*	WG1454847

Sample Narrative:

L1204945-07 WG1454847: No discernable petroleum pattern present.

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	16800		2.87	6.78	10	04/03/2020 12:35	WG1454997
Ethane	337		0.296	1.29	1	04/03/2020 11:03	WG1454571
Ethene	2400		0.422	1.27	1	04/03/2020 11:03	WG1454571

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U	~~J4~~	52.5	1250	50	04/06/2020 14:04	WG1456142
Acrylonitrile	U	~~J4~~	43.7	250	50	04/06/2020 14:04	WG1456142
Benzene	U		4.48	25.0	50	04/06/2020 14:04	WG1456142
Bromobenzene	U		6.65	25.0	50	04/06/2020 14:04	WG1456142
Bromodichloromethane	U		4.00	25.0	50	04/06/2020 14:04	WG1456142
Bromochloromethane	U		7.25	25.0	50	04/06/2020 14:04	WG1456142
Bromoform	U		9.30	25.0	50	04/06/2020 14:04	WG1456142
Bromomethane	U		7.85	125	50	04/06/2020 14:04	WG1456142
n-Butylbenzene	U		7.15	25.0	50	04/06/2020 14:04	WG1456142
sec-Butylbenzene	U		6.70	25.0	50	04/06/2020 14:04	WG1456142

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
tert-Butylbenzene	U		9.15	25.0	50	04/06/2020 14:04	WG1456142
Carbon disulfide	U		5.05	25.0	50	04/06/2020 14:04	WG1456142
Carbon tetrachloride	U		7.95	25.0	50	04/06/2020 14:04	WG1456142
Chlorobenzene	U		7.00	25.0	50	04/06/2020 14:04	WG1456142
Chlorodibromomethane	U		6.40	25.0	50	04/06/2020 14:04	WG1456142
Chloroethane	U		7.05	125	50	04/06/2020 14:04	WG1456142
Chloroform	U		4.30	25.0	50	04/06/2020 14:04	WG1456142
Chloromethane	U		7.65	62.5	50	04/06/2020 14:04	WG1456142
2-Chlorotoluene	U		5.55	25.0	50	04/06/2020 14:04	WG1456142
4-Chlorotoluene	U		4.86	25.0	50	04/06/2020 14:04	WG1456142
1,2-Dibromo-3-Chloropropane	U		16.3	125	50	04/06/2020 14:04	WG1456142
1,2-Dibromoethane	U		9.65	25.0	50	04/06/2020 14:04	WG1456142
Dibromomethane	U		5.85	25.0	50	04/06/2020 14:04	WG1456142
1,2-Dichlorobenzene	U		5.05	25.0	50	04/06/2020 14:04	WG1456142
1,3-Dichlorobenzene	U		6.50	25.0	50	04/06/2020 14:04	WG1456142
1,4-Dichlorobenzene	U		6.05	25.0	50	04/06/2020 14:04	WG1456142
Dichlorodifluoromethane	U		6.35	125	50	04/06/2020 14:04	WG1456142
1,1-Dichloroethane	U		5.70	25.0	50	04/06/2020 14:04	WG1456142
1,2-Dichloroethane	U		5.40	25.0	50	04/06/2020 14:04	WG1456142
1,1-Dichloroethene	U		9.40	25.0	50	04/06/2020 14:04	WG1456142
cis-1,2-Dichloroethene	2600		4.67	25.0	50	04/06/2020 14:04	WG1456142
trans-1,2-Dichloroethene	25.0	J	7.60	25.0	50	04/06/2020 14:04	WG1456142
1,2-Dichloropropane	U		9.50	25.0	50	04/06/2020 14:04	WG1456142
1,1-Dichloropropene	U		6.40	25.0	50	04/06/2020 14:04	WG1456142
1,3-Dichloropropane	U		7.35	50.0	50	04/06/2020 14:04	WG1456142
cis-1,3-Dichloropropene	U		4.88	25.0	50	04/06/2020 14:04	WG1456142
trans-1,3-Dichloropropene	U		11.1	25.0	50	04/06/2020 14:04	WG1456142
trans-1,4-Dichloro-2-butene	U		12.9	250	50	04/06/2020 14:04	WG1456142
2,2-Dichloropropane	U		4.65	25.0	50	04/06/2020 14:04	WG1456142
Di-isopropyl ether	U		4.62	25.0	50	04/06/2020 14:04	WG1456142
Ethylbenzene	U		7.90	25.0	50	04/06/2020 14:04	WG1456142
Hexachloro-1,3-butadiene	U		7.85	50.0	50	04/06/2020 14:04	WG1456142
2-Hexanone	U		37.9	250	50	04/06/2020 14:04	WG1456142
n-Hexane	U	J4	15.3	250	50	04/06/2020 14:04	WG1456142
Iodomethane	U		18.9	500	50	04/06/2020 14:04	WG1456142
Isopropylbenzene	U		6.30	25.0	50	04/06/2020 14:04	WG1456142
p-Isopropyltoluene	U		6.90	25.0	50	04/06/2020 14:04	WG1456142
2-Butanone (MEK)	U		64.0	250	50	04/06/2020 14:04	WG1456142
Methylene Chloride	U		53.5	125	50	04/06/2020 14:04	WG1456142
4-Methyl-2-pentanone (MIBK)	U		41.2	250	50	04/06/2020 14:04	WG1456142
Methyl tert-butyl ether	U		5.10	25.0	50	04/06/2020 14:04	WG1456142
Naphthalene	U		8.70	125	50	04/06/2020 14:04	WG1456142
n-Propylbenzene	U		8.10	25.0	50	04/06/2020 14:04	WG1456142
Styrene	U		5.85	25.0	50	04/06/2020 14:04	WG1456142
1,1,1,2-Tetrachloroethane	U		6.00	25.0	50	04/06/2020 14:04	WG1456142
1,1,2,2-Tetrachloroethane	U		6.50	25.0	50	04/06/2020 14:04	WG1456142
1,1,2-Trichlorotrifluoroethane	U		8.20	25.0	50	04/06/2020 14:04	WG1456142
Tetrachloroethene	1480		9.95	25.0	50	04/06/2020 14:04	WG1456142
Toluene	U		20.6	25.0	50	04/06/2020 14:04	WG1456142
1,2,3-Trichlorobenzene	U		8.20	25.0	50	04/06/2020 14:04	WG1456142
1,2,4-Trichlorobenzene	U		17.8	25.0	50	04/06/2020 14:04	WG1456142
1,1,1-Trichloroethane	U		4.70	25.0	50	04/06/2020 14:04	WG1456142
1,1,2-Trichloroethane	U		9.30	25.0	50	04/06/2020 14:04	WG1456142
Trichloroethene	169		7.65	25.0	50	04/06/2020 14:04	WG1456142
Trichlorofluoromethane	U		6.50	125	50	04/06/2020 14:04	WG1456142
1,2,3-Trichloropropane	U		12.3	125	50	04/06/2020 14:04	WG1456142

JC 5/6/202

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,2,4-Trimethylbenzene	U		6.15	25.0	50	04/06/2020 14:04	WG1456142
1,2,3-Trimethylbenzene	U		3.69	25.0	50	04/06/2020 14:04	WG1456142
1,3,5-Trimethylbenzene	U		6.20	25.0	50	04/06/2020 14:04	WG1456142
Vinyl acetate	U		32.3	250	50	04/06/2020 14:04	WG1456142
Vinyl chloride	2040		5.90	25.0	50	04/06/2020 14:04	WG1456142
Xylenes, Total	U		15.8	75.0	50	04/06/2020 14:04	WG1456142
(S) Toluene-d8	*108*			*80.0-120*		*04/06/2020 14:04*	WG1456142
(S) 4-Bromofluorobenzene	*91.3*			*77.0-126*		*04/06/2020 14:04*	WG1456142
(S) 1,2-Dichloroethane-d4	*103*			*70.0-130*		*04/06/2020 14:04*	WG1456142

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Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	196000		2710	20000	1	04/06/2020 23:08	WG1455985

Sample Narrative:

L1204945-08 WG1455985: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	11600		51.9	1000	1	04/02/2020 16:59	WG1454414
Nitrate	U		22.7	100	1	04/02/2020 16:59	WG1454414
Sulfate	5720		77.4	5000	1	04/02/2020 16:59	WG1454414

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	2750	~~B~~	102	1000	1	04/03/2020 19:57	WG1455135

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	2760		15.0	100	1	04/03/2020 12:03	WG1454757
Manganese	393		0.250	5.00	1	04/03/2020 12:03	WG1454757

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	92.4	U ~~B J~~	31.6	100	1	04/03/2020 18:47	WG1454847
(S) a,a,a-Trifluorotoluene(FID)	*98.2*			*78.0-120*		*04/03/2020 18:47*	WG1454847

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	40.1		0.287	0.678	1	04/03/2020 11:12	WG1454571
Ethane	U		0.296	1.29	1	04/03/2020 11:12	WG1454571
Ethene	U		0.422	1.27	1	04/03/2020 11:12	WG1454571

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U		1.05	25.0	1	04/05/2020 21:53	WG1455710
Acrylonitrile	U		0.873	5.00	1	04/05/2020 21:53	WG1455710
Benzene	U		0.0896	0.500	1	04/05/2020 21:53	WG1455710
Bromobenzene	U		0.133	0.500	1	04/05/2020 21:53	WG1455710
Bromodichloromethane	U		0.0800	0.500	1	04/05/2020 21:53	WG1455710
Bromochloromethane	U		0.145	0.500	1	04/05/2020 21:53	WG1455710
Bromoform	U	UJ J0	0.186	0.500	1	04/05/2020 21:53	WG1455710
Bromomethane	U	UJ J0	0.157	2.50	1	04/05/2020 21:53	WG1455710
n-Butylbenzene	U		0.143	0.500	1	04/05/2020 21:53	WG1455710
sec-Butylbenzene	U		0.134	0.500	1	04/05/2020 21:53	WG1455710
tert-Butylbenzene	U		0.183	0.500	1	04/05/2020 21:53	WG1455710
Carbon disulfide	U		0.101	0.500	1	04/05/2020 21:53	WG1455710
Carbon tetrachloride	U		0.159	0.500	1	04/05/2020 21:53	WG1455710

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MW104-040120

Collected date/time: 04/01/20 14:20

SAMPLE RESULTS - 08

L1204945

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

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chlorobenzene	U		0.140	0.500	1	04/05/2020 21:53	WG1455710
Chlorodibromomethane	U		0.128	0.500	1	04/05/2020 21:53	WG1455710
Chloroethane	U		0.141	2.50	1	04/05/2020 21:53	WG1455710
Chloroform	U		0.0860	0.500	1	04/05/2020 21:53	WG1455710
Chloromethane	U	UJ J0	0.153	1.25	1	04/05/2020 21:53	WG1455710
2-Chlorotoluene	U		0.111	0.500	1	04/05/2020 21:53	WG1455710
4-Chlorotoluene	U		0.0972	0.500	1	04/05/2020 21:53	WG1455710
1,2-Dibromo-3-Chloropropane	U	UJ J0	0.325	2.50	1	04/05/2020 21:53	WG1455710
1,2-Dibromoethane	U		0.193	0.500	1	04/05/2020 21:53	WG1455710
Dibromomethane	U		0.117	0.500	1	04/05/2020 21:53	WG1455710
1,2-Dichlorobenzene	U		0.101	0.500	1	04/05/2020 21:53	WG1455710
1,3-Dichlorobenzene	U		0.130	0.500	1	04/05/2020 21:53	WG1455710
1,4-Dichlorobenzene	U		0.121	0.500	1	04/05/2020 21:53	WG1455710
Dichlorodifluoromethane	U		0.127	2.50	1	04/05/2020 21:53	WG1455710
1,1-Dichloroethane	U		0.114	0.500	1	04/05/2020 21:53	WG1455710
1,2-Dichloroethane	U		0.108	0.500	1	04/05/2020 21:53	WG1455710
1,1-Dichloroethene	6.47		0.188	0.500	1	04/05/2020 21:53	WG1455710
cis-1,2-Dichloroethene	21.1		0.0933	0.500	1	04/05/2020 21:53	WG1455710
trans-1,2-Dichloroethene	2.50		0.152	0.500	1	04/05/2020 21:53	WG1455710
1,2-Dichloropropane	U		0.190	0.500	1	04/05/2020 21:53	WG1455710
1,1-Dichloropropene	U		0.128	0.500	1	04/05/2020 21:53	WG1455710
1,3-Dichloropropane	U		0.147	1.00	1	04/05/2020 21:53	WG1455710
cis-1,3-Dichloropropene	U		0.0976	0.500	1	04/05/2020 21:53	WG1455710
trans-1,3-Dichloropropene	U		0.222	0.500	1	04/05/2020 21:53	WG1455710
trans-1,4-Dichloro-2-butene	U	UJ J0	0.257	5.00	1	04/05/2020 21:53	WG1455710
2,2-Dichloropropane	U		0.0929	0.500	1	04/05/2020 21:53	WG1455710
Di-isopropyl ether	U		0.0924	0.500	1	04/05/2020 21:53	WG1455710
Ethylbenzene	U		0.158	0.500	1	04/05/2020 21:53	WG1455710
Hexachloro-1,3-butadiene	U		0.157	1.00	1	04/05/2020 21:53	WG1455710
2-Hexanone	U		0.757	5.00	1	04/05/2020 21:53	WG1455710
n-Hexane	U		0.305	5.00	1	04/05/2020 21:53	WG1455710
Iodomethane	U	UJ J0	0.377	10.0	1	04/05/2020 21:53	WG1455710
Isopropylbenzene	U		0.126	0.500	1	04/05/2020 21:53	WG1455710
p-Isopropyltoluene	U		0.138	0.500	1	04/05/2020 21:53	WG1455710
2-Butanone (MEK)	U		1.28	5.00	1	04/05/2020 21:53	WG1455710
Methylene Chloride	U		1.07	2.50	1	04/05/2020 21:53	WG1455710
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	04/05/2020 21:53	WG1455710
Methyl tert-butyl ether	U		0.102	0.500	1	04/05/2020 21:53	WG1455710
Naphthalene	U	UJ J0	0.174	2.50	1	04/05/2020 21:53	WG1455710
n-Propylbenzene	U		0.162	0.500	1	04/05/2020 21:53	WG1455710
Styrene	U		0.117	0.500	1	04/05/2020 21:53	WG1455710
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	04/05/2020 21:53	WG1455710
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	04/05/2020 21:53	WG1455710
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	04/05/2020 21:53	WG1455710
Tetrachloroethene	53.1		0.199	0.500	1	04/05/2020 21:53	WG1455710
Toluene	U		0.412	0.500	1	04/05/2020 21:53	WG1455710
1,2,3-Trichlorobenzene	U	UJ J0	0.164	0.500	1	04/05/2020 21:53	WG1455710
1,2,4-Trichlorobenzene	U	UJ J0	0.355	0.500	1	04/05/2020 21:53	WG1455710
1,1,1-Trichloroethane	U		0.0940	0.500	1	04/05/2020 21:53	WG1455710
1,1,2-Trichloroethane	U		0.186	0.500	1	04/05/2020 21:53	WG1455710
Trichloroethene	108		0.153	0.500	1	04/05/2020 21:53	WG1455710
Trichlorofluoromethane	U		0.130	2.50	1	04/05/2020 21:53	WG1455710
1,2,3-Trichloropropane	U		0.247	2.50	1	04/05/2020 21:53	WG1455710
1,2,4-Trimethylbenzene	U		0.123	0.500	1	04/05/2020 21:53	WG1455710
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	04/05/2020 21:53	WG1455710
1,3,5-Trimethylbenzene	U		0.124	0.500	1	04/05/2020 21:53	WG1455710

JC 5/6/202

MW104-040120

Collected date/time: 04/01/20 14:20

SAMPLE RESULTS - 08

L1204945

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Vinyl acetate	U	UJ J0	0.645	5.00	1	04/05/2020 21:53	WG1455710
Vinyl chloride	4.63		0.118	0.500	1	04/05/2020 21:53	WG1455710
Xylenes, Total	U		0.316	1.50	1	04/05/2020 21:53	WG1455710
(S) Toluene-d8	*99.7*			*80.0-120*		*04/05/2020 21:53*	WG1455710
(S) 4-Bromofluorobenzene	*97.9*			*77.0-126*		*04/05/2020 21:53*	WG1455710
(S) 1,2-Dichloroethane-d4	*112*			*70.0-130*		*04/05/2020 21:53*	WG1455710

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

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U		1.05	25.0	1	04/05/2020 22:13	WG1455710
Acrylonitrile	U		0.873	5.00	1	04/05/2020 22:13	WG1455710
Benzene	95.1		0.0896	0.500	1	04/05/2020 22:13	WG1455710
Bromobenzene	U		0.133	0.500	1	04/05/2020 22:13	WG1455710
Bromodichloromethane	U		0.0800	0.500	1	04/05/2020 22:13	WG1455710
Bromochloromethane	U		0.145	0.500	1	04/05/2020 22:13	WG1455710
Bromoform	U	UJ J0	0.186	0.500	1	04/05/2020 22:13	WG1455710
Bromomethane	U	UJ J0	0.157	2.50	1	04/05/2020 22:13	WG1455710
n-Butylbenzene	3.02		0.143	0.500	1	04/05/2020 22:13	WG1455710
sec-Butylbenzene	3.00		0.134	0.500	1	04/05/2020 22:13	WG1455710
tert-Butylbenzene	U		0.183	0.500	1	04/05/2020 22:13	WG1455710
Carbon disulfide	U		0.101	0.500	1	04/05/2020 22:13	WG1455710
Carbon tetrachloride	U		0.159	0.500	1	04/05/2020 22:13	WG1455710
Chlorobenzene	U		0.140	0.500	1	04/05/2020 22:13	WG1455710
Chlorodibromomethane	U		0.128	0.500	1	04/05/2020 22:13	WG1455710
Chloroethane	U		0.141	2.50	1	04/05/2020 22:13	WG1455710
Chloroform	U		0.0860	0.500	1	04/05/2020 22:13	WG1455710
Chloromethane	U	UJ J0	0.153	1.25	1	04/05/2020 22:13	WG1455710
2-Chlorotoluene	U		0.111	0.500	1	04/05/2020 22:13	WG1455710
4-Chlorotoluene	U		0.0972	0.500	1	04/05/2020 22:13	WG1455710
1,2-Dibromo-3-Chloropropane	U	UJ J0	0.325	2.50	1	04/05/2020 22:13	WG1455710
1,2-Dibromoethane	U		0.193	0.500	1	04/05/2020 22:13	WG1455710
Dibromomethane	U		0.117	0.500	1	04/05/2020 22:13	WG1455710
1,2-Dichlorobenzene	U		0.101	0.500	1	04/05/2020 22:13	WG1455710
1,3-Dichlorobenzene	U		0.130	0.500	1	04/05/2020 22:13	WG1455710
1,4-Dichlorobenzene	U		0.121	0.500	1	04/05/2020 22:13	WG1455710
Dichlorodifluoromethane	U		0.127	2.50	1	04/05/2020 22:13	WG1455710
1,1-Dichloroethane	U		0.114	0.500	1	04/05/2020 22:13	WG1455710
1,2-Dichloroethane	U		0.108	0.500	1	04/05/2020 22:13	WG1455710
1,1-Dichloroethene	U		0.188	0.500	1	04/05/2020 22:13	WG1455710
cis-1,2-Dichloroethene	0.550		0.0933	0.500	1	04/05/2020 22:13	WG1455710
trans-1,2-Dichloroethene	U		0.152	0.500	1	04/05/2020 22:13	WG1455710
1,2-Dichloropropane	U		0.190	0.500	1	04/05/2020 22:13	WG1455710
1,1-Dichloropropene	U		0.128	0.500	1	04/05/2020 22:13	WG1455710
1,3-Dichloropropane	U		0.147	1.00	1	04/05/2020 22:13	WG1455710
cis-1,3-Dichloropropene	U		0.0976	0.500	1	04/05/2020 22:13	WG1455710
trans-1,3-Dichloropropene	U		0.222	0.500	1	04/05/2020 22:13	WG1455710
trans-1,4-Dichloro-2-butene	U	UJ J0	0.257	5.00	1	04/05/2020 22:13	WG1455710
2,2-Dichloropropane	U		0.0929	0.500	1	04/05/2020 22:13	WG1455710
Di-isopropyl ether	U		0.0924	0.500	1	04/05/2020 22:13	WG1455710
Ethylbenzene	47.4		0.158	0.500	1	04/05/2020 22:13	WG1455710
Hexachloro-1,3-butadiene	U		0.157	1.00	1	04/05/2020 22:13	WG1455710
2-Hexanone	U		0.757	5.00	1	04/05/2020 22:13	WG1455710
n-Hexane	24.0		0.305	5.00	1	04/05/2020 22:13	WG1455710
Iodomethane	U	UJ J0	0.377	10.0	1	04/05/2020 22:13	WG1455710
Isopropylbenzene	72.5		0.126	0.500	1	04/05/2020 22:13	WG1455710
p-Isopropyltoluene	0.721		0.138	0.500	1	04/05/2020 22:13	WG1455710
2-Butanone (MEK)	U		1.28	5.00	1	04/05/2020 22:13	WG1455710
Methylene Chloride	U		1.07	2.50	1	04/05/2020 22:13	WG1455710
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	04/05/2020 22:13	WG1455710
Methyl tert-butyl ether	U		0.102	0.500	1	04/05/2020 22:13	WG1455710
Naphthalene	2.74	J B J0	0.174	2.50	1	04/05/2020 22:13	WG1455710
n-Propylbenzene	128		0.162	0.500	1	04/05/2020 22:13	WG1455710
Styrene	U		0.117	0.500	1	04/05/2020 22:13	WG1455710
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	04/05/2020 22:13	WG1455710
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	04/05/2020 22:13	WG1455710

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	04/05/2020 22:13	WG1455710
Tetrachloroethene	U		0.199	0.500	1	04/05/2020 22:13	WG1455710
Toluene	11.3		0.412	0.500	1	04/05/2020 22:13	WG1455710
1,2,3-Trichlorobenzene	U	UJ J0	0.164	0.500	1	04/05/2020 22:13	WG1455710
1,2,4-Trichlorobenzene	U	UJ J0	0.355	0.500	1	04/05/2020 22:13	WG1455710
1,1,1-Trichloroethane	U		0.0940	0.500	1	04/05/2020 22:13	WG1455710
1,1,2-Trichloroethane	U		0.186	0.500	1	04/05/2020 22:13	WG1455710
Trichloroethene	U		0.153	0.500	1	04/05/2020 22:13	WG1455710
Trichlorofluoromethane	U		0.130	2.50	1	04/05/2020 22:13	WG1455710
1,2,3-Trichloropropane	U		0.247	2.50	1	04/05/2020 22:13	WG1455710
1,2,4-Trimethylbenzene	0.329	U B J	0.123	0.500	1	04/05/2020 22:13	WG1455710
1,2,3-Trimethylbenzene	8.88		0.0739	0.500	1	04/05/2020 22:13	WG1455710
1,3,5-Trimethylbenzene	2.50		0.124	0.500	1	04/05/2020 22:13	WG1455710
Vinyl acetate	U	UJ J0	0.645	5.00	1	04/05/2020 22:13	WG1455710
Vinyl chloride	U		0.118	0.500	1	04/05/2020 22:13	WG1455710
Xylenes, Total	23.4		0.316	1.50	1	04/05/2020 22:13	WG1455710
(S) Toluene-d8	*98.1*			*80.0-120*		*04/05/2020 22:13*	WG1455710
(S) 4-Bromofluorobenzene	*106*			*77.0-126*		*04/05/2020 22:13*	WG1455710
(S) 1,2-Dichloroethane-d4	*114*			*70.0-130*		*04/05/2020 22:13*	WG1455710

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Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	1400000		2710	20000	1	04/06/2020 00:23	WG1455323

Sample Narrative:

L1205427-01 WG1455323: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	122000		260	5000	5	04/03/2020 16:16	WG1455131
Nitrate	U		22.7	100	1	04/03/2020 16:03	WG1455131
Sulfate	10100		77.4	5000	1	04/03/2020 16:03	WG1455131

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	73200		102	1000	1	04/07/2020 23:42	WG1456781

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	40600		15.0	100	1	04/04/2020 10:56	WG1455253
Manganese	8350		0.250	5.00	1	04/04/2020 10:56	WG1455253

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	424	Z, J+	31.6	100	1	04/05/2020 13:39	WG1455833
(S) a,a,a-Trifluorotoluene(FID)	*101*			*78.0-120*		*04/05/2020 13:39*	WG1455833

Sample Narrative:

L1205427-01 WG1455833: No discernable petroleum pattern present.

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	17800		2.87	6.78	10	04/08/2020 12:52	WG1456921
Ethane	10.2		0.296	1.29	1	04/04/2020 15:08	WG1455178
Ethene	60.9		0.422	1.27	1	04/04/2020 15:08	WG1455178

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	44.3	J	21.0	500	20	04/06/2020 00:52	WG1455710
Acrylonitrile	U		17.5	100	20	04/06/2020 00:52	WG1455710
Benzene	U		1.79	10.0	20	04/06/2020 00:52	WG1455710
Bromobenzene	U		2.66	10.0	20	04/06/2020 00:52	WG1455710
Bromodichloromethane	U		1.60	10.0	20	04/06/2020 00:52	WG1455710
Bromochloromethane	U		2.90	10.0	20	04/06/2020 00:52	WG1455710
Bromoform	U	UJ J0	3.72	10.0	20	04/06/2020 00:52	WG1455710
Bromomethane	U	UJ J0	3.14	50.0	20	04/06/2020 00:52	WG1455710
n-Butylbenzene	U		2.86	10.0	20	04/06/2020 00:52	WG1455710
sec-Butylbenzene	U		2.68	10.0	20	04/06/2020 00:52	WG1455710

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
tert-Butylbenzene	U		3.66	10.0	20	04/06/2020 00:52	WG1455710
Carbon disulfide	U		2.02	10.0	20	04/06/2020 00:52	WG1455710
Carbon tetrachloride	U		3.18	10.0	20	04/06/2020 00:52	WG1455710
Chlorobenzene	U		2.80	10.0	20	04/06/2020 00:52	WG1455710
Chlorodibromomethane	U		2.56	10.0	20	04/06/2020 00:52	WG1455710
Chloroethane	23.3	J	2.82	50.0	20	04/06/2020 00:52	WG1455710
Chloroform	U		1.72	10.0	20	04/06/2020 00:52	WG1455710
Chloromethane	U	UJ J0	3.06	25.0	20	04/06/2020 00:52	WG1455710
2-Chlorotoluene	U		2.22	10.0	20	04/06/2020 00:52	WG1455710
4-Chlorotoluene	U		1.94	10.0	20	04/06/2020 00:52	WG1455710
1,2-Dibromo-3-Chloropropane	U	UJ J0	6.50	50.0	20	04/06/2020 00:52	WG1455710
1,2-Dibromoethane	U		3.86	10.0	20	04/06/2020 00:52	WG1455710
Dibromomethane	U		2.34	10.0	20	04/06/2020 00:52	WG1455710
1,2-Dichlorobenzene	U		2.02	10.0	20	04/06/2020 00:52	WG1455710
1,3-Dichlorobenzene	U		2.60	10.0	20	04/06/2020 00:52	WG1455710
1,4-Dichlorobenzene	U		2.42	10.0	20	04/06/2020 00:52	WG1455710
Dichlorodifluoromethane	U		2.54	50.0	20	04/06/2020 00:52	WG1455710
1,1-Dichloroethane	U		2.28	10.0	20	04/06/2020 00:52	WG1455710
1,2-Dichloroethane	U		2.16	10.0	20	04/06/2020 00:52	WG1455710
1,1-Dichloroethene	U		3.76	10.0	20	04/06/2020 00:52	WG1455710
cis-1,2-Dichloroethene	817		1.87	10.0	20	04/06/2020 00:52	WG1455710
trans-1,2-Dichloroethene	5.99	J	3.04	10.0	20	04/06/2020 00:52	WG1455710
1,2-Dichloropropane	U		3.80	10.0	20	04/06/2020 00:52	WG1455710
1,1-Dichloropropene	U		2.56	10.0	20	04/06/2020 00:52	WG1455710
1,3-Dichloropropane	U		2.94	20.0	20	04/06/2020 00:52	WG1455710
cis-1,3-Dichloropropene	U		1.95	10.0	20	04/06/2020 00:52	WG1455710
trans-1,3-Dichloropropene	U		4.44	10.0	20	04/06/2020 00:52	WG1455710
trans-1,4-Dichloro-2-butene	U	UJ J0	5.14	100	20	04/06/2020 00:52	WG1455710
2,2-Dichloropropane	U		1.86	10.0	20	04/06/2020 00:52	WG1455710
Di-isopropyl ether	U		1.85	10.0	20	04/06/2020 00:52	WG1455710
Ethylbenzene	U		3.16	10.0	20	04/06/2020 00:52	WG1455710
Hexachloro-1,3-butadiene	U		3.14	20.0	20	04/06/2020 00:52	WG1455710
2-Hexanone	U		15.1	100	20	04/06/2020 00:52	WG1455710
n-Hexane	U		6.10	100	20	04/06/2020 00:52	WG1455710
Iodomethane	U	UJ J0	7.54	200	20	04/06/2020 00:52	WG1455710
Isopropylbenzene	U		2.52	10.0	20	04/06/2020 00:52	WG1455710
p-Isopropyltoluene	U		2.76	10.0	20	04/06/2020 00:52	WG1455710
2-Butanone (MEK)	U		25.6	100	20	04/06/2020 00:52	WG1455710
Methylene Chloride	U		21.4	50.0	20	04/06/2020 00:52	WG1455710
4-Methyl-2-pentanone (MIBK)	U		16.5	100	20	04/06/2020 00:52	WG1455710
Methyl tert-butyl ether	U		2.04	10.0	20	04/06/2020 00:52	WG1455710
Naphthalene	U	UJ J0	3.48	50.0	20	04/06/2020 00:52	WG1455710
n-Propylbenzene	U		3.24	10.0	20	04/06/2020 00:52	WG1455710
Styrene	U		2.34	10.0	20	04/06/2020 00:52	WG1455710
1,1,1,2-Tetrachloroethane	U		2.40	10.0	20	04/06/2020 00:52	WG1455710
1,1,2,2-Tetrachloroethane	U		2.60	10.0	20	04/06/2020 00:52	WG1455710
1,1,2-Trichlorotrifluoroethane	U		3.28	10.0	20	04/06/2020 00:52	WG1455710
Tetrachloroethene	62.3		3.98	10.0	20	04/06/2020 00:52	WG1455710
Toluene	U		8.24	10.0	20	04/06/2020 00:52	WG1455710
1,2,3-Trichlorobenzene	U	UJ J0	3.28	10.0	20	04/06/2020 00:52	WG1455710
1,2,4-Trichlorobenzene	U	UJ J0	7.10	10.0	20	04/06/2020 00:52	WG1455710
1,1,1-Trichloroethane	U		1.88	10.0	20	04/06/2020 00:52	WG1455710
1,1,2-Trichloroethane	U		3.72	10.0	20	04/06/2020 00:52	WG1455710
Trichloroethene	45.0		3.06	10.0	20	04/06/2020 00:52	WG1455710
Trichlorofluoromethane	U		2.60	50.0	20	04/06/2020 00:52	WG1455710
1,2,3-Trichloropropane	U		4.94	50.0	20	04/06/2020 00:52	WG1455710

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,2,4-Trimethylbenzene	U		2.46	10.0	20	04/06/2020 00:52	WG1455710
1,2,3-Trimethylbenzene	U		1.48	10.0	20	04/06/2020 00:52	WG1455710
1,3,5-Trimethylbenzene	U		2.48	10.0	20	04/06/2020 00:52	WG1455710
Vinyl acetate	U UJ	J0	12.9	100	20	04/06/2020 00:52	WG1455710
Vinyl chloride	152		2.36	10.0	20	04/06/2020 00:52	WG1455710
Xylenes, Total	U		6.32	30.0	20	04/06/2020 00:52	WG1455710
(S) Toluene-d8	*96.9*			*80.0-120*		*04/06/2020 00:52*	WG1455710
(S) 4-Bromofluorobenzene	*95.3*			*77.0-126*		*04/06/2020 00:52*	WG1455710
(S) 1,2-Dichloroethane-d4	*109*			*70.0-130*		*04/06/2020 00:52*	WG1455710

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

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Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	1890000		13600	100000	5	04/07/2020 23:04	WG1455324

Sample Narrative:

L1205427-02 WG1455324: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	185000		260	5000	5	04/03/2020 17:09	WG1455131
Nitrate	37.6	J	22.7	100	1	04/03/2020 16:29	WG1455131
Sulfate	U		77.4	5000	1	04/03/2020 16:29	WG1455131

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	84200		102	1000	1	04/08/2020 00:04	WG1456781

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	57200		15.0	100	1	04/06/2020 19:54	WG1455812
Manganese	4610		0.250	5.00	1	04/06/2020 19:54	WG1455812

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	31.7	U ~~B J~~	31.6	100	1	04/05/2020 14:01	WG1455833
(S) a,a,a-Trifluorotoluene(FID)	*103*			*78.0-120*		*04/05/2020 14:01*	WG1455833

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	7150		2.87	6.78	10	04/08/2020 12:55	WG1456921
Ethane	417		0.296	1.29	1	04/04/2020 15:21	WG1455178
Ethene	39.6		0.422	1.27	1	04/04/2020 15:21	WG1455178

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	28.6		1.05	25.0	1	04/05/2020 22:33	WG1455710
Acrylonitrile	U		0.873	5.00	1	04/05/2020 22:33	WG1455710
Benzene	0.150	J	0.0896	0.500	1	04/05/2020 22:33	WG1455710
Bromobenzene	U		0.133	0.500	1	04/05/2020 22:33	WG1455710
Bromodichloromethane	U		0.0800	0.500	1	04/05/2020 22:33	WG1455710
Bromochloromethane	U		0.145	0.500	1	04/05/2020 22:33	WG1455710
Bromoform	U UJ	J0	0.186	0.500	1	04/05/2020 22:33	WG1455710
Bromomethane	U UJ	J0	0.157	2.50	1	04/05/2020 22:33	WG1455710
n-Butylbenzene	U		0.143	0.500	1	04/05/2020 22:33	WG1455710
sec-Butylbenzene	U		0.134	0.500	1	04/05/2020 22:33	WG1455710
tert-Butylbenzene	U		0.183	0.500	1	04/05/2020 22:33	WG1455710
Carbon disulfide	U		0.101	0.500	1	04/05/2020 22:33	WG1455710
Carbon tetrachloride	U		0.159	0.500	1	04/05/2020 22:33	WG1455710

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chlorobenzene	U		0.140	0.500	1	04/05/2020 22:33	WG1455710
Chlorodibromomethane	U		0.128	0.500	1	04/05/2020 22:33	WG1455710
Chloroethane	U		0.141	2.50	1	04/05/2020 22:33	WG1455710
Chloroform	U		0.0860	0.500	1	04/05/2020 22:33	WG1455710
Chloromethane	U	UJ J0	0.153	1.25	1	04/05/2020 22:33	WG1455710
2-Chlorotoluene	U		0.111	0.500	1	04/05/2020 22:33	WG1455710
4-Chlorotoluene	U		0.0972	0.500	1	04/05/2020 22:33	WG1455710
1,2-Dibromo-3-Chloropropane	U	UJ J0	0.325	2.50	1	04/05/2020 22:33	WG1455710
1,2-Dibromoethane	U		0.193	0.500	1	04/05/2020 22:33	WG1455710
Dibromomethane	U		0.117	0.500	1	04/05/2020 22:33	WG1455710
1,2-Dichlorobenzene	U		0.101	0.500	1	04/05/2020 22:33	WG1455710
1,3-Dichlorobenzene	U		0.130	0.500	1	04/05/2020 22:33	WG1455710
1,4-Dichlorobenzene	U		0.121	0.500	1	04/05/2020 22:33	WG1455710
Dichlorodifluoromethane	U		0.127	2.50	1	04/05/2020 22:33	WG1455710
1,1-Dichloroethane	U		0.114	0.500	1	04/05/2020 22:33	WG1455710
1,2-Dichloroethane	U		0.108	0.500	1	04/05/2020 22:33	WG1455710
1,1-Dichloroethene	U		0.188	0.500	1	04/05/2020 22:33	WG1455710
cis-1,2-Dichloroethene	1.03		0.0933	0.500	1	04/05/2020 22:33	WG1455710
trans-1,2-Dichloroethene	4.20		0.152	0.500	1	04/05/2020 22:33	WG1455710
1,2-Dichloropropane	U		0.190	0.500	1	04/05/2020 22:33	WG1455710
1,1-Dichloropropene	U		0.128	0.500	1	04/05/2020 22:33	WG1455710
1,3-Dichloropropane	U		0.147	1.00	1	04/05/2020 22:33	WG1455710
cis-1,3-Dichloropropene	U		0.0976	0.500	1	04/05/2020 22:33	WG1455710
trans-1,3-Dichloropropene	U		0.222	0.500	1	04/05/2020 22:33	WG1455710
trans-1,4-Dichloro-2-butene	U	UJ J0	0.257	5.00	1	04/05/2020 22:33	WG1455710
2,2-Dichloropropane	U		0.0929	0.500	1	04/05/2020 22:33	WG1455710
Di-isopropyl ether	U		0.0924	0.500	1	04/05/2020 22:33	WG1455710
Ethylbenzene	0.202	J	0.158	0.500	1	04/05/2020 22:33	WG1455710
Hexachloro-1,3-butadiene	U		0.157	1.00	1	04/05/2020 22:33	WG1455710
2-Hexanone	U		0.757	5.00	1	04/05/2020 22:33	WG1455710
n-Hexane	U		0.305	5.00	1	04/05/2020 22:33	WG1455710
Iodomethane	U	UJ J0	0.377	10.0	1	04/05/2020 22:33	WG1455710
Isopropylbenzene	0.351	J	0.126	0.500	1	04/05/2020 22:33	WG1455710
p-Isopropyltoluene	U		0.138	0.500	1	04/05/2020 22:33	WG1455710
2-Butanone (MEK)	23.1		1.28	5.00	1	04/05/2020 22:33	WG1455710
Methylene Chloride	U		1.07	2.50	1	04/05/2020 22:33	WG1455710
4-Methyl-2-pentanone (MIBK)	1.73	J	0.823	5.00	1	04/05/2020 22:33	WG1455710
Methyl tert-butyl ether	U		0.102	0.500	1	04/05/2020 22:33	WG1455710
Naphthalene	0.204	U ~~B J J0~~	0.174	2.50	1	04/05/2020 22:33	WG1455710
n-Propylbenzene	0.965		0.162	0.500	1	04/05/2020 22:33	WG1455710
Styrene	U		0.117	0.500	1	04/05/2020 22:33	WG1455710
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	04/05/2020 22:33	WG1455710
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	04/05/2020 22:33	WG1455710
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	04/05/2020 22:33	WG1455710
Tetrachloroethene	U		0.199	0.500	1	04/05/2020 22:33	WG1455710
Toluene	U		0.412	0.500	1	04/05/2020 22:33	WG1455710
1,2,3-Trichlorobenzene	U	UJ J0	0.164	0.500	1	04/05/2020 22:33	WG1455710
1,2,4-Trichlorobenzene	U	UJ J0	0.355	0.500	1	04/05/2020 22:33	WG1455710
1,1,1-Trichloroethane	U		0.0940	0.500	1	04/05/2020 22:33	WG1455710
1,1,2-Trichloroethane	U		0.186	0.500	1	04/05/2020 22:33	WG1455710
Trichloroethene	U		0.153	0.500	1	04/05/2020 22:33	WG1455710
Trichlorofluoromethane	U		0.130	2.50	1	04/05/2020 22:33	WG1455710
1,2,3-Trichloropropane	U		0.247	2.50	1	04/05/2020 22:33	WG1455710
1,2,4-Trimethylbenzene	U		0.123	0.500	1	04/05/2020 22:33	WG1455710
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	04/05/2020 22:33	WG1455710
1,3,5-Trimethylbenzene	U		0.124	0.500	1	04/05/2020 22:33	WG1455710

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

Analyte	Result ug/l		Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Vinyl acetate	U	UJ	J0	0.645	5.00	1	04/05/2020 22:33	WG1455710
Vinyl chloride	2.79			0.118	0.500	1	04/05/2020 22:33	WG1455710
Xylenes, Total	U			0.316	1.50	1	04/05/2020 22:33	WG1455710
(S) Toluene-d8	*96.8*				*80.0-120*		*04/05/2020 22:33*	WG1455710
(S) 4-Bromofluorobenzene	*99.2*				*77.0-126*		*04/05/2020 22:33*	WG1455710
(S) 1,2-Dichloroethane-d4	*107*				*70.0-130*		*04/05/2020 22:33*	WG1455710

JC 5/6/2020

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

Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	201000		2710	20000	1	04/07/2020 23:48	WG1455324

Sample Narrative:

L1205427-03 WG1455324: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	22600		51.9	1000	1	04/03/2020 17:22	WG1455131
Nitrate	31.5	J	22.7	100	1	04/03/2020 17:22	WG1455131
Sulfate	41800		77.4	5000	1	04/03/2020 17:22	WG1455131

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	8490		102	1000	1	04/08/2020 00:22	WG1456781

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	4780		15.0	100	1	04/04/2020 10:59	WG1455253
Manganese	2580		0.250	5.00	1	04/04/2020 10:59	WG1455253

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result ug/l		Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	5310	Z, J+		31.6	100	1	04/05/2020 14:37	WG1455833
(S) a,a,a-Trifluorotoluene(FID)	*108*				*78.0-120*		*04/05/2020 14:37*	WG1455833

Sample Narrative:

L1205427-03 WG1455833: No discernable petroleum pattern present.

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	34.7		0.287	0.678	1	04/04/2020 15:27	WG1455178
Ethane	U		0.296	1.29	1	04/04/2020 15:27	WG1455178
Ethene	U		0.422	1.27	1	04/04/2020 15:27	WG1455178

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

Analyte	Result ug/l		Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch	
Acetone	930	J	J J0	525	12500	500	04/06/2020 00:17	WG1455980	
Acrylonitrile	U			437	2500	500	04/06/2020 00:17	WG1455980	
Benzene	U			44.8	250	500	04/06/2020 00:17	WG1455980	
Bromobenzene	U			66.5	250	500	04/06/2020 00:17	WG1455980	
Bromodichloromethane	U			40.0	250	500	04/06/2020 00:17	WG1455980	
Bromochloromethane	U			72.5	250	500	04/06/2020 00:17	WG1455980	
Bromoform	U			93.0	250	500	04/06/2020 00:17	WG1455980	
Bromomethane	U	UJ	J0	78.5	1250	500	04/06/2020 00:17	WG1455980	
n-Butylbenzene	U			71.5	250	500	04/06/2020 00:17	WG1455980	JC 5/6/2020
sec-Butylbenzene	U			67.0	250	500	04/06/2020 00:17	WG1455980	

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
tert-Butylbenzene	U		91.5	250	500	04/06/2020 00:17	WG1455980
Carbon disulfide	U		50.5	250	500	04/06/2020 00:17	WG1455980
Carbon tetrachloride	U		79.5	250	500	04/06/2020 00:17	WG1455980
Chlorobenzene	U		70.0	250	500	04/06/2020 00:17	WG1455980
Chlorodibromomethane	U		64.0	250	500	04/06/2020 00:17	WG1455980
Chloroethane	U	UJ J0	70.5	1250	500	04/06/2020 00:17	WG1455980
Chloroform	U		43.0	250	500	04/06/2020 00:17	WG1455980
Chloromethane	U		76.5	625	500	04/06/2020 00:17	WG1455980
2-Chlorotoluene	U		55.5	250	500	04/06/2020 00:17	WG1455980
4-Chlorotoluene	U		48.6	250	500	04/06/2020 00:17	WG1455980
1,2-Dibromo-3-Chloropropane	U		163	1250	500	04/06/2020 00:17	WG1455980
1,2-Dibromoethane	U		96.5	250	500	04/06/2020 00:17	WG1455980
Dibromomethane	U		58.5	250	500	04/06/2020 00:17	WG1455980
1,2-Dichlorobenzene	U		50.5	250	500	04/06/2020 00:17	WG1455980
1,3-Dichlorobenzene	U		65.0	250	500	04/06/2020 00:17	WG1455980
1,4-Dichlorobenzene	U		60.5	250	500	04/06/2020 00:17	WG1455980
Dichlorodifluoromethane	U		63.5	1250	500	04/06/2020 00:17	WG1455980
1,1-Dichloroethane	U		57.0	250	500	04/06/2020 00:17	WG1455980
1,2-Dichloroethane	U		54.0	250	500	04/06/2020 00:17	WG1455980
1,1-Dichloroethene	U		94.0	250	500	04/06/2020 00:17	WG1455980
cis-1,2-Dichloroethene	452		46.7	250	500	04/06/2020 00:17	WG1455980
trans-1,2-Dichloroethene	U		76.0	250	500	04/06/2020 00:17	WG1455980
1,2-Dichloropropane	U		95.0	250	500	04/06/2020 00:17	WG1455980
1,1-Dichloropropene	U		64.0	250	500	04/06/2020 00:17	WG1455980
1,3-Dichloropropane	U		73.5	500	500	04/06/2020 00:17	WG1455980
cis-1,3-Dichloropropene	U		48.8	250	500	04/06/2020 00:17	WG1455980
trans-1,3-Dichloropropene	U		111	250	500	04/06/2020 00:17	WG1455980
trans-1,4-Dichloro-2-butene	U	UJ J0	129	2500	500	04/06/2020 00:17	WG1455980
2,2-Dichloropropane	U		46.5	250	500	04/06/2020 00:17	WG1455980
Di-isopropyl ether	U		46.2	250	500	04/06/2020 00:17	WG1455980
Ethylbenzene	U		79.0	250	500	04/06/2020 00:17	WG1455980
Hexachloro-1,3-butadiene	U		78.5	500	500	04/06/2020 00:17	WG1455980
2-Hexanone	U		379	2500	500	04/06/2020 00:17	WG1455980
n-Hexane	U		153	2500	500	04/06/2020 00:17	WG1455980
Iodomethane	U		189	5000	500	04/06/2020 00:17	WG1455980
Isopropylbenzene	U		63.0	250	500	04/06/2020 00:17	WG1455980
p-Isopropyltoluene	U		69.0	250	500	04/06/2020 00:17	WG1455980
2-Butanone (MEK)	U		640	2500	500	04/06/2020 00:17	WG1455980
Methylene Chloride	U		535	1250	500	04/06/2020 00:17	WG1455980
4-Methyl-2-pentanone (MIBK)	U		412	2500	500	04/06/2020 00:17	WG1455980
Methyl tert-butyl ether	U		51.0	250	500	04/06/2020 00:17	WG1455980
Naphthalene	U		87.0	1250	500	04/06/2020 00:17	WG1455980
n-Propylbenzene	U		81.0	250	500	04/06/2020 00:17	WG1455980
Styrene	U		58.5	250	500	04/06/2020 00:17	WG1455980
1,1,1,2-Tetrachloroethane	U		60.0	250	500	04/06/2020 00:17	WG1455980
1,1,2,2-Tetrachloroethane	U		65.0	250	500	04/06/2020 00:17	WG1455980
1,1,2-Trichlorotrifluoroethane	U		82.0	250	500	04/06/2020 00:17	WG1455980
Tetrachloroethene	9670		99.5	250	500	04/06/2020 00:17	WG1455980
Toluene	U		206	250	500	04/06/2020 00:17	WG1455980
1,2,3-Trichlorobenzene	U		82.0	250	500	04/06/2020 00:17	WG1455980
1,2,4-Trichlorobenzene	U		178	250	500	04/06/2020 00:17	WG1455980
1,1,1-Trichloroethane	U		47.0	250	500	04/06/2020 00:17	WG1455980
1,1,2-Trichloroethane	U		93.0	250	500	04/06/2020 00:17	WG1455980
Trichloroethene	4480		76.5	250	500	04/06/2020 00:17	WG1455980
Trichlorofluoromethane	U		65.0	1250	500	04/06/2020 00:17	WG1455980
1,2,3-Trichloropropane	U		123	1250	500	04/06/2020 00:17	WG1455980

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,2,4-Trimethylbenzene	U		61.5	250	500	04/06/2020 00:17	WG1455980
1,2,3-Trimethylbenzene	U		36.9	250	500	04/06/2020 00:17	WG1455980
1,3,5-Trimethylbenzene	U		62.0	250	500	04/06/2020 00:17	WG1455980
Vinyl acetate	U		322	2500	500	04/06/2020 00:17	WG1455980
Vinyl chloride	U		59.0	250	500	04/06/2020 00:17	WG1455980
Xylenes, Total	U		158	750	500	04/06/2020 00:17	WG1455980
(S) Toluene-d8	*115*			*80.0-120*		*04/06/2020 00:17*	WG1455980
(S) 4-Bromofluorobenzene	*99.2*			*77.0-126*		*04/06/2020 00:17*	WG1455980
(S) 1,2-Dichloroethane-d4	*103*			*70.0-130*		*04/06/2020 00:17*	WG1455980

Sample Narrative:

L1205427-03 WG1455980: Target compounds too high to run at a lower dilution.

JC 5/6/2020

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

Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	488000		2710	20000	1	04/07/2020 20:58	WG1455324

Sample Narrative:

L1205427-04 WG1455324: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	174000		260	5000	5	04/03/2020 18:02	WG1455131
Nitrate	U		22.7	100	1	04/03/2020 17:48	WG1455131
Sulfate	41100		77.4	5000	1	04/03/2020 17:48	WG1455131

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	16700		102	1000	1	04/07/2020 13:17	WG1456783

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	10800		15.0	100	1	04/04/2020 11:03	WG1455253
Manganese	1050		0.250	5.00	1	04/04/2020 11:03	WG1455253

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result ug/l		Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	17000	Z, J+		632	2000	20	04/05/2020 14:58	WG1455833
(S) a,a,a-Trifluorotoluene(FID)	*104*				*78.0-120*		*04/05/2020 14:58*	WG1455833

Sample Narrative:

L1205427-04 WG1455833: No discernable petroleum pattern present.

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	9400		2.87	6.78	10	04/08/2020 12:57	WG1456921
Ethane	44.8		0.296	1.29	1	04/04/2020 15:38	WG1455178
Ethene	986		0.422	1.27	1	04/04/2020 15:38	WG1455178

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

Analyte	Result ug/l		Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	1040	J	J J0	525	12500	500	04/06/2020 00:38	WG1455980
Acrylonitrile	U			437	2500	500	04/06/2020 00:38	WG1455980
Benzene	U			44.8	250	500	04/06/2020 00:38	WG1455980
Bromobenzene	U			66.5	250	500	04/06/2020 00:38	WG1455980
Bromodichloromethane	U			40.0	250	500	04/06/2020 00:38	WG1455980
Bromochloromethane	U			72.5	250	500	04/06/2020 00:38	WG1455980
Bromoform	U			93.0	250	500	04/06/2020 00:38	WG1455980
Bromomethane	U	UJ	J0	78.5	1250	500	04/06/2020 00:38	WG1455980
n-Butylbenzene	U			71.5	250	500	04/06/2020 00:38	WG1455980
sec-Butylbenzene	U			67.0	250	500	04/06/2020 00:38	WG1455980

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
tert-Butylbenzene	U		91.5	250	500	04/06/2020 00:38	WG1455980
Carbon disulfide	U		50.5	250	500	04/06/2020 00:38	WG1455980
Carbon tetrachloride	U		79.5	250	500	04/06/2020 00:38	WG1455980
Chlorobenzene	U		70.0	250	500	04/06/2020 00:38	WG1455980
Chlorodibromomethane	U		64.0	250	500	04/06/2020 00:38	WG1455980
Chloroethane	U	UJ J0	70.5	1250	500	04/06/2020 00:38	WG1455980
Chloroform	U		43.0	250	500	04/06/2020 00:38	WG1455980
Chloromethane	U		76.5	625	500	04/06/2020 00:38	WG1455980
2-Chlorotoluene	U		55.5	250	500	04/06/2020 00:38	WG1455980
4-Chlorotoluene	U		48.6	250	500	04/06/2020 00:38	WG1455980
1,2-Dibromo-3-Chloropropane	U		163	1250	500	04/06/2020 00:38	WG1455980
1,2-Dibromoethane	U		96.5	250	500	04/06/2020 00:38	WG1455980
Dibromomethane	U		58.5	250	500	04/06/2020 00:38	WG1455980
1,2-Dichlorobenzene	U		50.5	250	500	04/06/2020 00:38	WG1455980
1,3-Dichlorobenzene	U		65.0	250	500	04/06/2020 00:38	WG1455980
1,4-Dichlorobenzene	U		60.5	250	500	04/06/2020 00:38	WG1455980
Dichlorodifluoromethane	U		63.5	1250	500	04/06/2020 00:38	WG1455980
1,1-Dichloroethane	U		57.0	250	500	04/06/2020 00:38	WG1455980
1,2-Dichloroethane	U		54.0	250	500	04/06/2020 00:38	WG1455980
1,1-Dichloroethene	U		94.0	250	500	04/06/2020 00:38	WG1455980
cis-1,2-Dichloroethene	30900		46.7	250	500	04/06/2020 00:38	WG1455980
trans-1,2-Dichloroethene	160	J	76.0	250	500	04/06/2020 00:38	WG1455980
1,2-Dichloropropane	U		95.0	250	500	04/06/2020 00:38	WG1455980
1,1-Dichloropropene	U		64.0	250	500	04/06/2020 00:38	WG1455980
1,3-Dichloropropane	U		73.5	500	500	04/06/2020 00:38	WG1455980
cis-1,3-Dichloropropene	U		48.8	250	500	04/06/2020 00:38	WG1455980
trans-1,3-Dichloropropene	U		111	250	500	04/06/2020 00:38	WG1455980
trans-1,4-Dichloro-2-butene	U	UJ J0	129	2500	500	04/06/2020 00:38	WG1455980
2,2-Dichloropropane	U		46.5	250	500	04/06/2020 00:38	WG1455980
Di-isopropyl ether	U		46.2	250	500	04/06/2020 00:38	WG1455980
Ethylbenzene	U		79.0	250	500	04/06/2020 00:38	WG1455980
Hexachloro-1,3-butadiene	U		78.5	500	500	04/06/2020 00:38	WG1455980
2-Hexanone	U		379	2500	500	04/06/2020 00:38	WG1455980
n-Hexane	U		153	2500	500	04/06/2020 00:38	WG1455980
Iodomethane	U		189	5000	500	04/06/2020 00:38	WG1455980
Isopropylbenzene	U		63.0	250	500	04/06/2020 00:38	WG1455980
p-Isopropyltoluene	U		69.0	250	500	04/06/2020 00:38	WG1455980
2-Butanone (MEK)	U		640	2500	500	04/06/2020 00:38	WG1455980
Methylene Chloride	U		535	1250	500	04/06/2020 00:38	WG1455980
4-Methyl-2-pentanone (MIBK)	U		412	2500	500	04/06/2020 00:38	WG1455980
Methyl tert-butyl ether	U		51.0	250	500	04/06/2020 00:38	WG1455980
Naphthalene	U		87.0	1250	500	04/06/2020 00:38	WG1455980
n-Propylbenzene	U		81.0	250	500	04/06/2020 00:38	WG1455980
Styrene	U		58.5	250	500	04/06/2020 00:38	WG1455980
1,1,1,2-Tetrachloroethane	U		60.0	250	500	04/06/2020 00:38	WG1455980
1,1,2,2-Tetrachloroethane	U		65.0	250	500	04/06/2020 00:38	WG1455980
1,1,2-Trichlorotrifluoroethane	U		82.0	250	500	04/06/2020 00:38	WG1455980
Tetrachloroethene	2470		99.5	250	500	04/06/2020 00:38	WG1455980
Toluene	U		206	250	500	04/06/2020 00:38	WG1455980
1,2,3-Trichlorobenzene	U		82.0	250	500	04/06/2020 00:38	WG1455980
1,2,4-Trichlorobenzene	U		178	250	500	04/06/2020 00:38	WG1455980
1,1,1-Trichloroethane	U		47.0	250	500	04/06/2020 00:38	WG1455980
1,1,2-Trichloroethane	U		93.0	250	500	04/06/2020 00:38	WG1455980
Trichloroethene	3100		76.5	250	500	04/06/2020 00:38	WG1455980
Trichlorofluoromethane	U		65.0	1250	500	04/06/2020 00:38	WG1455980
1,2,3-Trichloropropane	U		123	1250	500	04/06/2020 00:38	WG1455980

JC 5/6/2020

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,2,4-Trimethylbenzene	U		61.5	250	500	04/06/2020 00:38	WG1455980
1,2,3-Trimethylbenzene	U		36.9	250	500	04/06/2020 00:38	WG1455980
1,3,5-Trimethylbenzene	U		62.0	250	500	04/06/2020 00:38	WG1455980
Vinyl acetate	U		322	2500	500	04/06/2020 00:38	WG1455980
Vinyl chloride	5940		59.0	250	500	04/06/2020 00:38	WG1455980
Xylenes, Total	U		158	750	500	04/06/2020 00:38	WG1455980
(S) Toluene-d8	*114*			*80.0-120*		*04/06/2020 00:38*	WG1455980
(S) 4-Bromofluorobenzene	*101*			*77.0-126*		*04/06/2020 00:38*	WG1455980
(S) 1,2-Dichloroethane-d4	*104*			*70.0-130*		*04/06/2020 00:38*	WG1455980

Sample Narrative:

L1205427-04 WG1455980: Target compounds too high to run at a lower dilution.

JC 5/6/2020

Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	271000		2710	20000	1	04/07/2020 21:07	WG1455324

Sample Narrative:

L1205427-05 WG1455324: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	31200		51.9	1000	1	04/03/2020 18:15	WG1455131
Nitrate	U		22.7	100	1	04/03/2020 18:15	WG1455131
Sulfate	5270		77.4	5000	1	04/03/2020 18:15	WG1455131

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	5330		102	1000	1	04/07/2020 13:31	WG1456783

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	13100		15.0	100	1	04/04/2020 11:06	WG1455253
Manganese	195		0.250	5.00	1	04/04/2020 11:06	WG1455253

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	35.3	U ~~B J~~	31.6	100	1	04/05/2020 15:20	WG1455833
(S) a,a,a-Trifluorotoluene(FID)	*104*			*78.0-120*		*04/05/2020 15:20*	WG1455833

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	896		0.287	0.678	1	04/04/2020 15:53	WG1455178
Ethane	5.34		0.296	1.29	1	04/04/2020 15:53	WG1455178
Ethene	57.0		0.422	1.27	1	04/04/2020 15:53	WG1455178

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U		1.05	25.0	1	04/05/2020 12:49	WG1455831
Acrylonitrile	U		0.873	5.00	1	04/05/2020 12:49	WG1455831
Benzene	U		0.0896	0.500	1	04/05/2020 12:49	WG1455831
Bromobenzene	U		0.133	0.500	1	04/05/2020 12:49	WG1455831
Bromodichloromethane	U		0.0800	0.500	1	04/05/2020 12:49	WG1455831
Bromochloromethane	U		0.145	0.500	1	04/05/2020 12:49	WG1455831
Bromoform	U		0.186	0.500	1	04/05/2020 12:49	WG1455831
Bromomethane	U		0.157	2.50	1	04/05/2020 12:49	WG1455831
n-Butylbenzene	U		0.143	0.500	1	04/05/2020 12:49	WG1455831
sec-Butylbenzene	U		0.134	0.500	1	04/05/2020 12:49	WG1455831
tert-Butylbenzene	U		0.183	0.500	1	04/05/2020 12:49	WG1455831
Carbon disulfide	0.494	J	0.101	0.500	1	04/05/2020 12:49	WG1455831
Carbon tetrachloride	U	~~J4~~	0.159	0.500	1	04/05/2020 12:49	WG1455831

JC 5/6/2020

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

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chlorobenzene	U		0.140	0.500	1	04/05/2020 12:49	WG1455831
Chlorodibromomethane	U		0.128	0.500	1	04/05/2020 12:49	WG1455831
Chloroethane	U		0.141	2.50	1	04/05/2020 12:49	WG1455831
Chloroform	U		0.0860	0.500	1	04/05/2020 12:49	WG1455831
Chloromethane	U		0.153	1.25	1	04/05/2020 12:49	WG1455831
2-Chlorotoluene	U		0.111	0.500	1	04/05/2020 12:49	WG1455831
4-Chlorotoluene	U		0.0972	0.500	1	04/05/2020 12:49	WG1455831
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	04/05/2020 12:49	WG1455831
1,2-Dibromoethane	U		0.193	0.500	1	04/05/2020 12:49	WG1455831
Dibromomethane	U		0.117	0.500	1	04/05/2020 12:49	WG1455831
1,2-Dichlorobenzene	U		0.101	0.500	1	04/05/2020 12:49	WG1455831
1,3-Dichlorobenzene	U		0.130	0.500	1	04/05/2020 12:49	WG1455831
1,4-Dichlorobenzene	U		0.121	0.500	1	04/05/2020 12:49	WG1455831
Dichlorodifluoromethane	U		0.127	2.50	1	04/05/2020 12:49	WG1455831
1,1-Dichloroethane	U		0.114	0.500	1	04/05/2020 12:49	WG1455831
1,2-Dichloroethane	U		0.108	0.500	1	04/05/2020 12:49	WG1455831
1,1-Dichloroethene	U		0.188	0.500	1	04/05/2020 12:49	WG1455831
cis-1,2-Dichloroethene	11.4		0.0933	0.500	1	04/05/2020 12:49	WG1455831
trans-1,2-Dichloroethene	U		0.152	0.500	1	04/05/2020 12:49	WG1455831
1,2-Dichloropropane	U		0.190	0.500	1	04/05/2020 12:49	WG1455831
1,1-Dichloropropene	U		0.128	0.500	1	04/05/2020 12:49	WG1455831
1,3-Dichloropropane	U		0.147	1.00	1	04/05/2020 12:49	WG1455831
cis-1,3-Dichloropropene	U		0.0976	0.500	1	04/05/2020 12:49	WG1455831
trans-1,3-Dichloropropene	U		0.222	0.500	1	04/05/2020 12:49	WG1455831
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	04/05/2020 12:49	WG1455831
2,2-Dichloropropane	U		0.0929	0.500	1	04/05/2020 12:49	WG1455831
Di-isopropyl ether	U		0.0924	0.500	1	04/05/2020 12:49	WG1455831
Ethylbenzene	U		0.158	0.500	1	04/05/2020 12:49	WG1455831
Hexachloro-1,3-butadiene	U		0.157	1.00	1	04/05/2020 12:49	WG1455831
2-Hexanone	U		0.757	5.00	1	04/05/2020 12:49	WG1455831
n-Hexane	U		0.305	5.00	1	04/05/2020 12:49	WG1455831
Iodomethane	U		0.377	10.0	1	04/05/2020 12:49	WG1455831
Isopropylbenzene	U		0.126	0.500	1	04/05/2020 12:49	WG1455831
p-Isopropyltoluene	U		0.138	0.500	1	04/05/2020 12:49	WG1455831
2-Butanone (MEK)	U		1.28	5.00	1	04/05/2020 12:49	WG1455831
Methylene Chloride	U		1.07	2.50	1	04/05/2020 12:49	WG1455831
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	04/05/2020 12:49	WG1455831
Methyl tert-butyl ether	U		0.102	0.500	1	04/05/2020 12:49	WG1455831
Naphthalene	U		0.174	2.50	1	04/05/2020 12:49	WG1455831
n-Propylbenzene	U		0.162	0.500	1	04/05/2020 12:49	WG1455831
Styrene	U		0.117	0.500	1	04/05/2020 12:49	WG1455831
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	04/05/2020 12:49	WG1455831
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	04/05/2020 12:49	WG1455831
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	04/05/2020 12:49	WG1455831
Tetrachloroethene	0.255	J	0.199	0.500	1	04/05/2020 12:49	WG1455831
Toluene	U		0.412	0.500	1	04/05/2020 12:49	WG1455831
1,2,3-Trichlorobenzene	U		0.164	0.500	1	04/05/2020 12:49	WG1455831
1,2,4-Trichlorobenzene	U		0.355	0.500	1	04/05/2020 12:49	WG1455831
1,1,1-Trichloroethane	U		0.0940	0.500	1	04/05/2020 12:49	WG1455831
1,1,2-Trichloroethane	U		0.186	0.500	1	04/05/2020 12:49	WG1455831
Trichloroethene	0.257	J J ~~J4~~	0.153	0.500	1	04/05/2020 12:49	WG1455831
Trichlorofluoromethane	U		0.130	2.50	1	04/05/2020 12:49	WG1455831
1,2,3-Trichloropropane	U		0.247	2.50	1	04/05/2020 12:49	WG1455831
1,2,4-Trimethylbenzene	U		0.123	0.500	1	04/05/2020 12:49	WG1455831
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	04/05/2020 12:49	WG1455831
1,3,5-Trimethylbenzene	U		0.124	0.500	1	04/05/2020 12:49	WG1455831

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Vinyl acetate	U		0.645	5.00	1	04/08/2020 17:39	WG1457615
Vinyl chloride	26.2		0.118	0.500	1	04/05/2020 12:49	WG1455831
Xylenes, Total	U		0.316	1.50	1	04/05/2020 12:49	WG1455831
(S) Toluene-d8	*104*			*80.0-120*		*04/05/2020 12:49*	WG1455831
(S) Toluene-d8	*93.9*			*80.0-120*		*04/08/2020 17:39*	WG1457615
(S) 4-Bromofluorobenzene	*102*			*77.0-126*		*04/05/2020 12:49*	WG1455831
(S) 4-Bromofluorobenzene	*103*			*77.0-126*		*04/08/2020 17:39*	WG1457615
(S) 1,2-Dichloroethane-d4	*115*			*70.0-130*		*04/05/2020 12:49*	WG1455831
(S) 1,2-Dichloroethane-d4	*118*			*70.0-130*		*04/08/2020 17:39*	WG1457615

JC 5/6/2020

Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	174000		2710	20000	1	04/07/2020 21:16	WG1455324

Sample Narrative:

L1205430-01 WG1455324: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	11300		51.9	1000	1	04/03/2020 18:54	WG1455131
Nitrate	25.4	J	22.7	100	1	04/03/2020 18:54	WG1455131
Sulfate	653	U ~~B J~~	77.4	5000	1	04/03/2020 18:54	WG1455131

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	6870		102	1000	1	04/07/2020 13:44	WG1456783

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	3870		15.0	100	1	04/04/2020 11:23	WG1455253
Manganese	137		0.250	5.00	1	04/04/2020 11:23	WG1455253

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	U		31.6	100	1	04/05/2020 15:41	WG1455833
(S) a,a,a-Trifluorotoluene(FID)	*104*			*78.0-120*		*04/05/2020 15:41*	WG1455833

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	3360		0.287	0.678	1	04/04/2020 15:55	WG1455178
Ethane	3.91		0.296	1.29	1	04/04/2020 15:55	WG1455178
Ethene	14.8		0.422	1.27	1	04/04/2020 15:55	WG1455178

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	32.3		1.05	25.0	1	04/05/2020 13:10	WG1455831
Acrylonitrile	U		0.873	5.00	1	04/05/2020 13:10	WG1455831
Benzene	U		0.0896	0.500	1	04/05/2020 13:10	WG1455831
Bromobenzene	U		0.133	0.500	1	04/05/2020 13:10	WG1455831
Bromodichloromethane	U		0.0800	0.500	1	04/05/2020 13:10	WG1455831
Bromochloromethane	U		0.145	0.500	1	04/05/2020 13:10	WG1455831
Bromoform	U		0.186	0.500	1	04/05/2020 13:10	WG1455831
Bromomethane	U		0.157	2.50	1	04/05/2020 13:10	WG1455831
n-Butylbenzene	U		0.143	0.500	1	04/05/2020 13:10	WG1455831
sec-Butylbenzene	U		0.134	0.500	1	04/05/2020 13:10	WG1455831
tert-Butylbenzene	U		0.183	0.500	1	04/05/2020 13:10	WG1455831
Carbon disulfide	0.576		0.101	0.500	1	04/05/2020 13:10	WG1455831
Carbon tetrachloride	U	~~J4~~	0.159	0.500	1	04/05/2020 13:10	WG1455831

JC 5/6/2020

MW-183-040220

Collected date/time: 04/02/20 09:00

SAMPLE RESULTS - 01

L1205430

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

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chlorobenzene	U		0.140	0.500	1	04/05/2020 13:10	WG1455831
Chlorodibromomethane	U		0.128	0.500	1	04/05/2020 13:10	WG1455831
Chloroethane	U		0.141	2.50	1	04/05/2020 13:10	WG1455831
Chloroform	U		0.0860	0.500	1	04/05/2020 13:10	WG1455831
Chloromethane	U		0.153	1.25	1	04/05/2020 13:10	WG1455831
2-Chlorotoluene	U		0.111	0.500	1	04/05/2020 13:10	WG1455831
4-Chlorotoluene	U		0.0972	0.500	1	04/05/2020 13:10	WG1455831
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	04/05/2020 13:10	WG1455831
1,2-Dibromoethane	U		0.193	0.500	1	04/05/2020 13:10	WG1455831
Dibromomethane	U		0.117	0.500	1	04/05/2020 13:10	WG1455831
1,2-Dichlorobenzene	U		0.101	0.500	1	04/05/2020 13:10	WG1455831
1,3-Dichlorobenzene	U		0.130	0.500	1	04/05/2020 13:10	WG1455831
1,4-Dichlorobenzene	U		0.121	0.500	1	04/05/2020 13:10	WG1455831
Dichlorodifluoromethane	U		0.127	2.50	1	04/05/2020 13:10	WG1455831
1,1-Dichloroethane	U		0.114	0.500	1	04/05/2020 13:10	WG1455831
1,2-Dichloroethane	U		0.108	0.500	1	04/05/2020 13:10	WG1455831
1,1-Dichloroethene	U		0.188	0.500	1	04/05/2020 13:10	WG1455831
cis-1,2-Dichloroethene	3.03		0.0933	0.500	1	04/05/2020 13:10	WG1455831
trans-1,2-Dichloroethene	U		0.152	0.500	1	04/05/2020 13:10	WG1455831
1,2-Dichloropropane	U		0.190	0.500	1	04/05/2020 13:10	WG1455831
1,1-Dichloropropene	U		0.128	0.500	1	04/05/2020 13:10	WG1455831
1,3-Dichloropropane	U		0.147	1.00	1	04/05/2020 13:10	WG1455831
cis-1,3-Dichloropropene	U		0.0976	0.500	1	04/05/2020 13:10	WG1455831
trans-1,3-Dichloropropene	U		0.222	0.500	1	04/05/2020 13:10	WG1455831
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	04/05/2020 13:10	WG1455831
2,2-Dichloropropane	U		0.0929	0.500	1	04/05/2020 13:10	WG1455831
Di-isopropyl ether	U		0.0924	0.500	1	04/05/2020 13:10	WG1455831
Ethylbenzene	U		0.158	0.500	1	04/05/2020 13:10	WG1455831
Hexachloro-1,3-butadiene	U		0.157	1.00	1	04/05/2020 13:10	WG1455831
2-Hexanone	U		0.757	5.00	1	04/05/2020 13:10	WG1455831
n-Hexane	U		0.305	5.00	1	04/05/2020 13:10	WG1455831
Iodomethane	U		0.377	10.0	1	04/05/2020 13:10	WG1455831
Isopropylbenzene	U		0.126	0.500	1	04/05/2020 13:10	WG1455831
p-Isopropyltoluene	U		0.138	0.500	1	04/05/2020 13:10	WG1455831
2-Butanone (MEK)	U		1.28	5.00	1	04/05/2020 13:10	WG1455831
Methylene Chloride	U		1.07	2.50	1	04/05/2020 13:10	WG1455831
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	04/05/2020 13:10	WG1455831
Methyl tert-butyl ether	U		0.102	0.500	1	04/05/2020 13:10	WG1455831
Naphthalene	U		0.174	2.50	1	04/05/2020 13:10	WG1455831
n-Propylbenzene	U		0.162	0.500	1	04/05/2020 13:10	WG1455831
Styrene	U		0.117	0.500	1	04/05/2020 13:10	WG1455831
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	04/05/2020 13:10	WG1455831
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	04/05/2020 13:10	WG1455831
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	04/05/2020 13:10	WG1455831
Tetrachloroethene	U		0.199	0.500	1	04/05/2020 13:10	WG1455831
Toluene	U		0.412	0.500	1	04/05/2020 13:10	WG1455831
1,2,3-Trichlorobenzene	U		0.164	0.500	1	04/05/2020 13:10	WG1455831
1,2,4-Trichlorobenzene	U		0.355	0.500	1	04/05/2020 13:10	WG1455831
1,1,1-Trichloroethane	U		0.0940	0.500	1	04/05/2020 13:10	WG1455831
1,1,2-Trichloroethane	U		0.186	0.500	1	04/05/2020 13:10	WG1455831
Trichloroethene	U	~~J4~~	0.153	0.500	1	04/05/2020 13:10	WG1455831
Trichlorofluoromethane	U		0.130	2.50	1	04/05/2020 13:10	WG1455831
1,2,3-Trichloropropane	U		0.247	2.50	1	04/05/2020 13:10	WG1455831
1,2,4-Trimethylbenzene	U		0.123	0.500	1	04/05/2020 13:10	WG1455831
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	04/05/2020 13:10	WG1455831
1,3,5-Trimethylbenzene	U		0.124	0.500	1	04/05/2020 13:10	WG1455831

JC 5/6/2020

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Vinyl acetate	U		0.645	5.00	1	04/08/2020 17:59	WG1457615
Vinyl chloride	10.0		0.118	0.500	1	04/05/2020 13:10	WG1455831
Xylenes, Total	U		0.316	1.50	1	04/05/2020 13:10	WG1455831
(S) Toluene-d8	*106*			*80.0-120*		*04/05/2020 13:10*	WG1455831
(S) Toluene-d8	*98.0*			*80.0-120*		*04/08/2020 17:59*	WG1457615
(S) 4-Bromofluorobenzene	*104*			*77.0-126*		*04/05/2020 13:10*	WG1455831
(S) 4-Bromofluorobenzene	*106*			*77.0-126*		*04/08/2020 17:59*	WG1457615
(S) 1,2-Dichloroethane-d4	*113*			*70.0-130*		*04/05/2020 13:10*	WG1455831
(S) 1,2-Dichloroethane-d4	*119*			*70.0-130*		*04/08/2020 17:59*	WG1457615

JC 5/6/2020

Wet Chemistry by Method 2320 B-2011

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Alkalinity	198000		2710	20000	1	04/07/2020 21:25	WG1455324

Sample Narrative:

L1205430-02 WG1455324: Endpoint pH 4.5

Wet Chemistry by Method 9056A

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Chloride	25400		51.9	1000	1	04/03/2020 19:07	WG1455131
Nitrate	U		22.7	100	1	04/03/2020 19:07	WG1455131
Sulfate	31800		77.4	5000	1	04/03/2020 19:07	WG1455131

Wet Chemistry by Method 9060A

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
TOC (Total Organic Carbon)	1030	~~B~~	102	1000	1	04/07/2020 13:56	WG1456783

Metals (ICPMS) by Method 6020B

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Iron	4980		15.0	100	1	04/04/2020 11:26	WG1455253
Manganese	476		0.250	5.00	1	04/04/2020 11:26	WG1455253

Volatile Organic Compounds (GC) by Method NWTPHGX

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Gasoline Range Organics-NWTPH	U		31.6	100	1	04/06/2020 12:29	WG1456127
(S) a,a,a-Trifluorotoluene(FID)	*98.4*			*78.0-120*		*04/06/2020 12:29*	WG1456127

Volatile Organic Compounds (GC) by Method RSK175

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Methane	204		0.287	0.678	1	04/04/2020 15:58	WG1455178
Ethane	U		0.296	1.29	1	04/04/2020 15:58	WG1455178
Ethene	U		0.422	1.27	1	04/04/2020 15:58	WG1455178

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

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Acetone	U		1.05	25.0	1	04/05/2020 13:30	WG1455831
Acrylonitrile	U		0.873	5.00	1	04/05/2020 13:30	WG1455831
Benzene	U		0.0896	0.500	1	04/05/2020 13:30	WG1455831
Bromobenzene	U		0.133	0.500	1	04/05/2020 13:30	WG1455831
Bromodichloromethane	U		0.0800	0.500	1	04/05/2020 13:30	WG1455831
Bromochloromethane	U		0.145	0.500	1	04/05/2020 13:30	WG1455831
Bromoform	U		0.186	0.500	1	04/05/2020 13:30	WG1455831
Bromomethane	U		0.157	2.50	1	04/05/2020 13:30	WG1455831
n-Butylbenzene	U		0.143	0.500	1	04/05/2020 13:30	WG1455831
sec-Butylbenzene	U		0.134	0.500	1	04/05/2020 13:30	WG1455831
tert-Butylbenzene	U		0.183	0.500	1	04/05/2020 13:30	WG1455831
Carbon disulfide	U		0.101	0.500	1	04/05/2020 13:30	WG1455831
Carbon tetrachloride	U	~~J4~~	0.159	0.500	1	04/05/2020 13:30	WG1455831

JC 5/6/2020

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

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chlorobenzene	U		0.140	0.500	1	04/05/2020 13:30	WG1455831
Chlorodibromomethane	U		0.128	0.500	1	04/05/2020 13:30	WG1455831
Chloroethane	U		0.141	2.50	1	04/05/2020 13:30	WG1455831
Chloroform	U		0.0860	0.500	1	04/05/2020 13:30	WG1455831
Chloromethane	U		0.153	1.25	1	04/05/2020 13:30	WG1455831
2-Chlorotoluene	U		0.111	0.500	1	04/05/2020 13:30	WG1455831
4-Chlorotoluene	U		0.0972	0.500	1	04/05/2020 13:30	WG1455831
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	04/05/2020 13:30	WG1455831
1,2-Dibromoethane	U		0.193	0.500	1	04/05/2020 13:30	WG1455831
Dibromomethane	U		0.117	0.500	1	04/05/2020 13:30	WG1455831
1,2-Dichlorobenzene	U		0.101	0.500	1	04/05/2020 13:30	WG1455831
1,3-Dichlorobenzene	U		0.130	0.500	1	04/05/2020 13:30	WG1455831
1,4-Dichlorobenzene	U		0.121	0.500	1	04/05/2020 13:30	WG1455831
Dichlorodifluoromethane	U		0.127	2.50	1	04/05/2020 13:30	WG1455831
1,1-Dichloroethane	U		0.114	0.500	1	04/05/2020 13:30	WG1455831
1,2-Dichloroethane	U		0.108	0.500	1	04/05/2020 13:30	WG1455831
1,1-Dichloroethene	U		0.188	0.500	1	04/05/2020 13:30	WG1455831
cis-1,2-Dichloroethene	U		0.0933	0.500	1	04/05/2020 13:30	WG1455831
trans-1,2-Dichloroethene	U		0.152	0.500	1	04/05/2020 13:30	WG1455831
1,2-Dichloropropane	U		0.190	0.500	1	04/05/2020 13:30	WG1455831
1,1-Dichloropropene	U		0.128	0.500	1	04/05/2020 13:30	WG1455831
1,3-Dichloropropane	U		0.147	1.00	1	04/05/2020 13:30	WG1455831
cis-1,3-Dichloropropene	U		0.0976	0.500	1	04/05/2020 13:30	WG1455831
trans-1,3-Dichloropropene	U		0.222	0.500	1	04/05/2020 13:30	WG1455831
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	04/05/2020 13:30	WG1455831
2,2-Dichloropropane	U		0.0929	0.500	1	04/05/2020 13:30	WG1455831
Di-isopropyl ether	U		0.0924	0.500	1	04/05/2020 13:30	WG1455831
Ethylbenzene	U		0.158	0.500	1	04/05/2020 13:30	WG1455831
Hexachloro-1,3-butadiene	U		0.157	1.00	1	04/05/2020 13:30	WG1455831
2-Hexanone	U		0.757	5.00	1	04/05/2020 13:30	WG1455831
n-Hexane	U		0.305	5.00	1	04/05/2020 13:30	WG1455831
Iodomethane	U		0.377	10.0	1	04/05/2020 13:30	WG1455831
Isopropylbenzene	U		0.126	0.500	1	04/05/2020 13:30	WG1455831
p-Isopropyltoluene	U		0.138	0.500	1	04/05/2020 13:30	WG1455831
2-Butanone (MEK)	U		1.28	5.00	1	04/05/2020 13:30	WG1455831
Methylene Chloride	U		1.07	2.50	1	04/05/2020 13:30	WG1455831
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	04/05/2020 13:30	WG1455831
Methyl tert-butyl ether	U		0.102	0.500	1	04/05/2020 13:30	WG1455831
Naphthalene	U		0.174	2.50	1	04/05/2020 13:30	WG1455831
n-Propylbenzene	U		0.162	0.500	1	04/05/2020 13:30	WG1455831
Styrene	U		0.117	0.500	1	04/05/2020 13:30	WG1455831
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	04/05/2020 13:30	WG1455831
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	04/05/2020 13:30	WG1455831
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	04/05/2020 13:30	WG1455831
Tetrachloroethene	U		0.199	0.500	1	04/05/2020 13:30	WG1455831
Toluene	U		0.412	0.500	1	04/05/2020 13:30	WG1455831
1,2,3-Trichlorobenzene	U		0.164	0.500	1	04/05/2020 13:30	WG1455831
1,2,4-Trichlorobenzene	U		0.355	0.500	1	04/05/2020 13:30	WG1455831
1,1,1-Trichloroethane	U		0.0940	0.500	1	04/05/2020 13:30	WG1455831
1,1,2-Trichloroethane	U		0.186	0.500	1	04/05/2020 13:30	WG1455831
Trichloroethene	U	~~J4~~	0.153	0.500	1	04/05/2020 13:30	WG1455831
Trichlorofluoromethane	U		0.130	2.50	1	04/05/2020 13:30	WG1455831
1,2,3-Trichloropropane	U		0.247	2.50	1	04/05/2020 13:30	WG1455831
1,2,4-Trimethylbenzene	U		0.123	0.500	1	04/05/2020 13:30	WG1455831
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	04/05/2020 13:30	WG1455831
1,3,5-Trimethylbenzene	U		0.124	0.500	1	04/05/2020 13:30	WG1455831

JC 5/6/2020

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

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Vinyl acetate	U		0.645	5.00	1	04/08/2020 18:19	WG1457615
Vinyl chloride	U		0.118	0.500	1	04/05/2020 13:30	WG1455831
Xylenes, Total	U		0.316	1.50	1	04/05/2020 13:30	WG1455831
(S) Toluene-d8	*106*			*80.0-120*		*04/05/2020 13:30*	WG1455831
(S) Toluene-d8	*94.1*			*80.0-120*		*04/08/2020 18:19*	WG1457615
(S) 4-Bromofluorobenzene	*101*			*77.0-126*		*04/05/2020 13:30*	WG1455831
(S) 4-Bromofluorobenzene	*96.8*			*77.0-126*		*04/08/2020 18:19*	WG1457615
(S) 1,2-Dichloroethane-d4	*114*			*70.0-130*		*04/05/2020 13:30*	WG1455831
(S) 1,2-Dichloroethane-d4	*120*			*70.0-130*		*04/08/2020 18:19*	WG1457615

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

JC 5/6/2020

MW-186-040220

Collected date/time: 04/02/20 12:00

SAMPLE RESULTS - 03

L1205430

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

Wet Chemistry by Method 2320 B-2011

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Alkalinity	322000		2710	20000	1	04/07/2020 21:34	WG1455324

Sample Narrative:

L1205430-03 WG1455324: Endpoint pH 4.5

Wet Chemistry by Method 9056A

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Chloride	60100		51.9	1000	1	04/03/2020 19:46	WG1455131
Nitrate	32.5	J	22.7	100	1	04/03/2020 19:46	WG1455131
Sulfate	18200		77.4	5000	1	04/03/2020 19:46	WG1455131

Wet Chemistry by Method 9060A

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
TOC (Total Organic Carbon)	6250		102	1000	1	04/07/2020 14:10	WG1456783

Metals (ICPMS) by Method 6020B

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Iron	6130		15.0	100	1	04/04/2020 11:30	WG1455253
Manganese	298		0.250	5.00	1	04/04/2020 11:30	WG1455253

Volatile Organic Compounds (GC) by Method NWTPHGX

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Gasoline Range Organics-NWTPH	U		31.6	100	1	04/06/2020 12:50	WG1456127
(S) a,a,a-Trifluorotoluene(FID)	*98.1*			*78.0-120*		*04/06/2020 12:50*	WG1456127

Volatile Organic Compounds (GC) by Method RSK175

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Methane	3710		0.287	0.678	1	04/04/2020 16:01	WG1455178
Ethane	21.2		0.296	1.29	1	04/04/2020 16:01	WG1455178
Ethene	23.7		0.422	1.27	1	04/04/2020 16:01	WG1455178

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

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Acetone	U		1.05	25.0	1	04/05/2020 13:51	WG1455831
Acrylonitrile	U		0.873	5.00	1	04/05/2020 13:51	WG1455831
Benzene	U		0.0896	0.500	1	04/05/2020 13:51	WG1455831
Bromobenzene	U		0.133	0.500	1	04/05/2020 13:51	WG1455831
Bromodichloromethane	U		0.0800	0.500	1	04/05/2020 13:51	WG1455831
Bromochloromethane	U		0.145	0.500	1	04/05/2020 13:51	WG1455831
Bromoform	U		0.186	0.500	1	04/05/2020 13:51	WG1455831
Bromomethane	U		0.157	2.50	1	04/05/2020 13:51	WG1455831
n-Butylbenzene	U		0.143	0.500	1	04/05/2020 13:51	WG1455831
sec-Butylbenzene	U		0.134	0.500	1	04/05/2020 13:51	WG1455831
tert-Butylbenzene	U		0.183	0.500	1	04/05/2020 13:51	WG1455831
Carbon disulfide	U		0.101	0.500	1	04/05/2020 13:51	WG1455831
Carbon tetrachloride	U	~~J4~~	0.159	0.500	1	04/05/2020 13:51	WG1455831

JC 5/6/2020

MW-186-040220
Collected date/time: 04/02/20 12:00

SAMPLE RESULTS - 03

L1205430

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chlorobenzene	U		0.140	0.500	1	04/05/2020 13:51	WG1455831
Chlorodibromomethane	U		0.128	0.500	1	04/05/2020 13:51	WG1455831
Chloroethane	U		0.141	2.50	1	04/05/2020 13:51	WG1455831
Chloroform	U		0.0860	0.500	1	04/05/2020 13:51	WG1455831
Chloromethane	U		0.153	1.25	1	04/05/2020 13:51	WG1455831
2-Chlorotoluene	U		0.111	0.500	1	04/05/2020 13:51	WG1455831
4-Chlorotoluene	U		0.0972	0.500	1	04/05/2020 13:51	WG1455831
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	04/05/2020 13:51	WG1455831
1,2-Dibromoethane	U		0.193	0.500	1	04/05/2020 13:51	WG1455831
Dibromomethane	U		0.117	0.500	1	04/05/2020 13:51	WG1455831
1,2-Dichlorobenzene	U		0.101	0.500	1	04/05/2020 13:51	WG1455831
1,3-Dichlorobenzene	U		0.130	0.500	1	04/05/2020 13:51	WG1455831
1,4-Dichlorobenzene	U		0.121	0.500	1	04/05/2020 13:51	WG1455831
Dichlorodifluoromethane	U		0.127	2.50	1	04/05/2020 13:51	WG1455831
1,1-Dichloroethane	U		0.114	0.500	1	04/05/2020 13:51	WG1455831
1,2-Dichloroethane	U		0.108	0.500	1	04/05/2020 13:51	WG1455831
1,1-Dichloroethene	U		0.188	0.500	1	04/05/2020 13:51	WG1455831
cis-1,2-Dichloroethene	0.476	J	0.0933	0.500	1	04/05/2020 13:51	WG1455831
trans-1,2-Dichloroethene	U		0.152	0.500	1	04/05/2020 13:51	WG1455831
1,2-Dichloropropane	U		0.190	0.500	1	04/05/2020 13:51	WG1455831
1,1-Dichloropropene	U		0.128	0.500	1	04/05/2020 13:51	WG1455831
1,3-Dichloropropane	U		0.147	1.00	1	04/05/2020 13:51	WG1455831
cis-1,3-Dichloropropene	U		0.0976	0.500	1	04/05/2020 13:51	WG1455831
trans-1,3-Dichloropropene	U		0.222	0.500	1	04/05/2020 13:51	WG1455831
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	04/05/2020 13:51	WG1455831
2,2-Dichloropropane	U		0.0929	0.500	1	04/05/2020 13:51	WG1455831
Di-isopropyl ether	U		0.0924	0.500	1	04/05/2020 13:51	WG1455831
Ethylbenzene	U		0.158	0.500	1	04/05/2020 13:51	WG1455831
Hexachloro-1,3-butadiene	U		0.157	1.00	1	04/05/2020 13:51	WG1455831
2-Hexanone	U		0.757	5.00	1	04/05/2020 13:51	WG1455831
n-Hexane	U		0.305	5.00	1	04/05/2020 13:51	WG1455831
Iodomethane	U		0.377	10.0	1	04/05/2020 13:51	WG1455831
Isopropylbenzene	U		0.126	0.500	1	04/05/2020 13:51	WG1455831
p-Isopropyltoluene	U		0.138	0.500	1	04/05/2020 13:51	WG1455831
2-Butanone (MEK)	U		1.28	5.00	1	04/05/2020 13:51	WG1455831
Methylene Chloride	U		1.07	2.50	1	04/05/2020 13:51	WG1455831
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	04/05/2020 13:51	WG1455831
Methyl tert-butyl ether	U		0.102	0.500	1	04/05/2020 13:51	WG1455831
Naphthalene	U		0.174	2.50	1	04/05/2020 13:51	WG1455831
n-Propylbenzene	U		0.162	0.500	1	04/05/2020 13:51	WG1455831
Styrene	U		0.117	0.500	1	04/05/2020 13:51	WG1455831
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	04/05/2020 13:51	WG1455831
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	04/05/2020 13:51	WG1455831
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	04/05/2020 13:51	WG1455831
Tetrachloroethene	U		0.199	0.500	1	04/05/2020 13:51	WG1455831
Toluene	U		0.412	0.500	1	04/05/2020 13:51	WG1455831
1,2,3-Trichlorobenzene	U		0.164	0.500	1	04/05/2020 13:51	WG1455831
1,2,4-Trichlorobenzene	U		0.355	0.500	1	04/05/2020 13:51	WG1455831
1,1,1-Trichloroethane	U		0.0940	0.500	1	04/05/2020 13:51	WG1455831
1,1,2-Trichloroethane	U		0.186	0.500	1	04/05/2020 13:51	WG1455831
Trichloroethene	0.205 J	J J4	0.153	0.500	1	04/05/2020 13:51	WG1455831
Trichlorofluoromethane	U		0.130	2.50	1	04/05/2020 13:51	WG1455831
1,2,3-Trichloropropane	U		0.247	2.50	1	04/05/2020 13:51	WG1455831
1,2,4-Trimethylbenzene	U		0.123	0.500	1	04/05/2020 13:51	WG1455831
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	04/05/2020 13:51	WG1455831
1,3,5-Trimethylbenzene	U		0.124	0.500	1	04/05/2020 13:51	WG1455831

JC 5/6/2020

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

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Vinyl acetate	U		0.645	5.00	1	04/08/2020 18:39	WG1457615
Vinyl chloride	5.93		0.118	0.500	1	04/05/2020 13:51	WG1455831
Xylenes, Total	U		0.316	1.50	1	04/05/2020 13:51	WG1455831
(S) Toluene-d8	*105*			*80.0-120*		*04/05/2020 13:51*	WG1455831
(S) Toluene-d8	*98.3*			*80.0-120*		*04/08/2020 18:39*	WG1457615
(S) 4-Bromofluorobenzene	*103*			*77.0-126*		*04/05/2020 13:51*	WG1455831
(S) 4-Bromofluorobenzene	*103*			*77.0-126*		*04/08/2020 18:39*	WG1457615
(S) 1,2-Dichloroethane-d4	*116*			*70.0-130*		*04/05/2020 13:51*	WG1455831
(S) 1,2-Dichloroethane-d4	*124*			*70.0-130*		*04/08/2020 18:39*	WG1457615

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

JC 5/6/2020

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

Wet Chemistry by Method 2320 B-2011

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Alkalinity	1190000		2710	20000	1	04/07/2020 21:43	WG1455324

Sample Narrative:

L1205430-04 WG1455324: Endpoint pH 4.5

Wet Chemistry by Method 9056A

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Chloride	157000		260	5000	5	04/03/2020 20:13	WG1455131
Nitrate	U		22.7	100	1	04/03/2020 20:00	WG1455131
Sulfate	273	U ~~B J~~	77.4	5000	1	04/03/2020 20:00	WG1455131

Wet Chemistry by Method 9060A

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
TOC (Total Organic Carbon)	20000		102	1000	1	04/07/2020 14:24	WG1456783

Metals (ICPMS) by Method 6020B

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Iron	25200		15.0	100	1	04/04/2020 11:33	WG1455253
Manganese	3410		0.250	5.00	1	04/04/2020 11:33	WG1455253

Volatile Organic Compounds (GC) by Method NWTPHGX

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Gasoline Range Organics-NWTPH	U		31.6	100	1	04/06/2020 13:10	WG1456127
(S) a,a,a-Trifluorotoluene(FID)	*97.9*			*78.0-120*		*04/06/2020 13:10*	WG1456127

Volatile Organic Compounds (GC) by Method RSK175

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Methane	23300		2.87	6.78	10	04/08/2020 13:05	WG1456921
Ethane	227		0.296	1.29	1	04/04/2020 16:04	WG1455178
Ethene	U		0.422	1.27	1	04/04/2020 16:04	WG1455178

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

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Acetone	2.34	J J J0	1.05	25.0	1	04/06/2020 00:58	WG1455980
Acrylonitrile	U		0.873	5.00	1	04/06/2020 00:58	WG1455980
Benzene	0.192	J	0.0896	0.500	1	04/06/2020 00:58	WG1455980
Bromobenzene	U		0.133	0.500	1	04/06/2020 00:58	WG1455980
Bromodichloromethane	U		0.0800	0.500	1	04/06/2020 00:58	WG1455980
Bromochloromethane	U		0.145	0.500	1	04/06/2020 00:58	WG1455980
Bromoform	U		0.186	0.500	1	04/06/2020 00:58	WG1455980
Bromomethane	U	UJ J0	0.157	2.50	1	04/06/2020 00:58	WG1455980
n-Butylbenzene	U		0.143	0.500	1	04/06/2020 00:58	WG1455980
sec-Butylbenzene	U		0.134	0.500	1	04/06/2020 00:58	WG1455980
tert-Butylbenzene	U		0.183	0.500	1	04/06/2020 00:58	WG1455980
Carbon disulfide	0.168	J	0.101	0.500	1	04/06/2020 00:58	WG1455980
Carbon tetrachloride	U		0.159	0.500	1	04/06/2020 00:58	WG1455980

JC 5/6/2020

MW-185-040220

Collected date/time: 04/02/20 13:15

SAMPLE RESULTS - 04

L1205430

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

Analyte	Result ug/l		Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chlorobenzene	U			0.140	0.500	1	04/06/2020 00:58	WG1455980
Chlorodibromomethane	U			0.128	0.500	1	04/06/2020 00:58	WG1455980
Chloroethane	0.309	J	J J0	0.141	2.50	1	04/06/2020 00:58	WG1455980
Chloroform	U			0.0860	0.500	1	04/06/2020 00:58	WG1455980
Chloromethane	U			0.153	1.25	1	04/06/2020 00:58	WG1455980
2-Chlorotoluene	U			0.111	0.500	1	04/06/2020 00:58	WG1455980
4-Chlorotoluene	U			0.0972	0.500	1	04/06/2020 00:58	WG1455980
1,2-Dibromo-3-Chloropropane	U			0.325	2.50	1	04/06/2020 00:58	WG1455980
1,2-Dibromoethane	U			0.193	0.500	1	04/06/2020 00:58	WG1455980
Dibromomethane	U			0.117	0.500	1	04/06/2020 00:58	WG1455980
1,2-Dichlorobenzene	U			0.101	0.500	1	04/06/2020 00:58	WG1455980
1,3-Dichlorobenzene	U			0.130	0.500	1	04/06/2020 00:58	WG1455980
1,4-Dichlorobenzene	U			0.121	0.500	1	04/06/2020 00:58	WG1455980
Dichlorodifluoromethane	U			0.127	2.50	1	04/06/2020 00:58	WG1455980
1,1-Dichloroethane	U			0.114	0.500	1	04/06/2020 00:58	WG1455980
1,2-Dichloroethane	U			0.108	0.500	1	04/06/2020 00:58	WG1455980
1,1-Dichloroethene	U			0.188	0.500	1	04/06/2020 00:58	WG1455980
cis-1,2-Dichloroethene	1.18			0.0933	0.500	1	04/06/2020 00:58	WG1455980
trans-1,2-Dichloroethene	0.729			0.152	0.500	1	04/06/2020 00:58	WG1455980
1,2-Dichloropropane	U			0.190	0.500	1	04/06/2020 00:58	WG1455980
1,1-Dichloropropene	U			0.128	0.500	1	04/06/2020 00:58	WG1455980
1,3-Dichloropropane	U			0.147	1.00	1	04/06/2020 00:58	WG1455980
cis-1,3-Dichloropropene	U			0.0976	0.500	1	04/06/2020 00:58	WG1455980
trans-1,3-Dichloropropene	U			0.222	0.500	1	04/06/2020 00:58	WG1455980
trans-1,4-Dichloro-2-butene	U			0.257	5.00	1	04/06/2020 00:58	WG1455980
2,2-Dichloropropane	U			0.0929	0.500	1	04/06/2020 00:58	WG1455980
Di-isopropyl ether	U			0.0924	0.500	1	04/06/2020 00:58	WG1455980
Ethylbenzene	U			0.158	0.500	1	04/06/2020 00:58	WG1455980
Hexachloro-1,3-butadiene	U			0.157	1.00	1	04/06/2020 00:58	WG1455980
2-Hexanone	U			0.757	5.00	1	04/06/2020 00:58	WG1455980
n-Hexane	U			0.305	5.00	1	04/06/2020 00:58	WG1455980
Iodomethane	U	UJ	J0	0.377	10.0	1	04/06/2020 00:58	WG1455980
Isopropylbenzene	U			0.126	0.500	1	04/06/2020 00:58	WG1455980
p-Isopropyltoluene	U			0.138	0.500	1	04/06/2020 00:58	WG1455980
2-Butanone (MEK)	U			1.28	5.00	1	04/06/2020 00:58	WG1455980
Methylene Chloride	U			1.07	2.50	1	04/06/2020 00:58	WG1455980
4-Methyl-2-pentanone (MIBK)	1.00		J	0.823	5.00	1	04/06/2020 00:58	WG1455980
Methyl tert-butyl ether	U			0.102	0.500	1	04/06/2020 00:58	WG1455980
Naphthalene	U			0.174	2.50	1	04/06/2020 00:58	WG1455980
n-Propylbenzene	U			0.162	0.500	1	04/06/2020 00:58	WG1455980
Styrene	U			0.117	0.500	1	04/06/2020 00:58	WG1455980
1,1,1,2-Tetrachloroethane	U			0.120	0.500	1	04/06/2020 00:58	WG1455980
1,1,2,2-Tetrachloroethane	U			0.130	0.500	1	04/06/2020 00:58	WG1455980
1,1,2-Trichlorotrifluoroethane	U			0.164	0.500	1	04/06/2020 00:58	WG1455980
Tetrachloroethene	U			0.199	0.500	1	04/06/2020 00:58	WG1455980
Toluene	U			0.412	0.500	1	04/06/2020 00:58	WG1455980
1,2,3-Trichlorobenzene	U			0.164	0.500	1	04/06/2020 00:58	WG1455980
1,2,4-Trichlorobenzene	U			0.355	0.500	1	04/06/2020 00:58	WG1455980
1,1,1-Trichloroethane	U			0.0940	0.500	1	04/06/2020 00:58	WG1455980
1,1,2-Trichloroethane	U			0.186	0.500	1	04/06/2020 00:58	WG1455980
Trichloroethene	U			0.153	0.500	1	04/06/2020 00:58	WG1455980
Trichlorofluoromethane	U			0.130	2.50	1	04/06/2020 00:58	WG1455980
1,2,3-Trichloropropane	U			0.247	2.50	1	04/06/2020 00:58	WG1455980
1,2,4-Trimethylbenzene	U			0.123	0.500	1	04/06/2020 00:58	WG1455980
1,2,3-Trimethylbenzene	U			0.0739	0.500	1	04/06/2020 00:58	WG1455980
1,3,5-Trimethylbenzene	U			0.124	0.500	1	04/06/2020 00:58	WG1455980

JC 5/6/2020

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Vinyl acetate	U		0.645	5.00	1	04/06/2020 00:58	WG1455980
Vinyl chloride	0.512		0.118	0.500	1	04/06/2020 00:58	WG1455980
Xylenes, Total	U		0.316	1.50	1	04/06/2020 00:58	WG1455980
(S) Toluene-d8	*114*			*80.0-120*		*04/06/2020 00:58*	WG1455980
(S) 4-Bromofluorobenzene	*101*			*77.0-126*		*04/06/2020 00:58*	WG1455980
(S) 1,2-Dichloroethane-d4	*104*			*70.0-130*		*04/06/2020 00:58*	WG1455980

JC 5/6/2020

MW-187-040220
Collected date/time: 04/02/20 14:45

SAMPLE RESULTS - 05

L1205430

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

Wet Chemistry by Method 2320 B-2011

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Alkalinity	201000		2710	20000	1	04/07/2020 22:01	WG1455324

Sample Narrative:

L1205430-05 WG1455324: Endpoint pH 4.5

Wet Chemistry by Method 9056A

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Chloride	18500		51.9	1000	1	04/03/2020 20:26	WG1455131
Nitrate	30.8	J	22.7	100	1	04/03/2020 20:26	WG1455131
Sulfate	14900		77.4	5000	1	04/03/2020 20:26	WG1455131

Wet Chemistry by Method 9060A

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
TOC (Total Organic Carbon)	3000	~~B~~	102	1000	1	04/07/2020 16:12	WG1456783

Metals (ICPMS) by Method 6020B

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Iron	2720		15.0	100	1	04/04/2020 11:36	WG1455253
Manganese	117		0.250	5.00	1	04/04/2020 11:36	WG1455253

Volatile Organic Compounds (GC) by Method NWTPHGX

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Gasoline Range Organics-NWTPH	U		31.6	100	1	04/06/2020 13:31	WG1456127
(S) a,a,a-Trifluorotoluene(FID)	*98.8*			*78.0-120*		*04/06/2020 13:31*	WG1456127

Volatile Organic Compounds (GC) by Method RSK175

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Methane	167		0.287	0.678	1	04/04/2020 16:11	WG1455178
Ethane	U		0.296	1.29	1	04/04/2020 16:11	WG1455178
Ethene	U		0.422	1.27	1	04/04/2020 16:11	WG1455178

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

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Acetone	U	UJ J0	1.05	25.0	1	04/06/2020 01:18	WG1455980
Acrylonitrile	U		0.873	5.00	1	04/06/2020 01:18	WG1455980
Benzene	U		0.0896	0.500	1	04/06/2020 01:18	WG1455980
Bromobenzene	U		0.133	0.500	1	04/06/2020 01:18	WG1455980
Bromodichloromethane	U		0.0800	0.500	1	04/06/2020 01:18	WG1455980
Bromochloromethane	U		0.145	0.500	1	04/06/2020 01:18	WG1455980
Bromoform	U		0.186	0.500	1	04/06/2020 01:18	WG1455980
Bromomethane	U	UJ J0	0.157	2.50	1	04/06/2020 01:18	WG1455980
n-Butylbenzene	U		0.143	0.500	1	04/06/2020 01:18	WG1455980
sec-Butylbenzene	U		0.134	0.500	1	04/06/2020 01:18	WG1455980
tert-Butylbenzene	U		0.183	0.500	1	04/06/2020 01:18	WG1455980
Carbon disulfide	U		0.101	0.500	1	04/06/2020 01:18	WG1455980
Carbon tetrachloride	U		0.159	0.500	1	04/06/2020 01:18	WG1455980

JC 5/6/2020

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chlorobenzene	U		0.140	0.500	1	04/06/2020 01:18	WG1455980
Chlorodibromomethane	U		0.128	0.500	1	04/06/2020 01:18	WG1455980
Chloroethane	U	UJ J0	0.141	2.50	1	04/06/2020 01:18	WG1455980
Chloroform	U		0.0860	0.500	1	04/06/2020 01:18	WG1455980
Chloromethane	U		0.153	1.25	1	04/06/2020 01:18	WG1455980
2-Chlorotoluene	U		0.111	0.500	1	04/06/2020 01:18	WG1455980
4-Chlorotoluene	U		0.0972	0.500	1	04/06/2020 01:18	WG1455980
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	04/06/2020 01:18	WG1455980
1,2-Dibromoethane	U		0.193	0.500	1	04/06/2020 01:18	WG1455980
Dibromomethane	U		0.117	0.500	1	04/06/2020 01:18	WG1455980
1,2-Dichlorobenzene	U		0.101	0.500	1	04/06/2020 01:18	WG1455980
1,3-Dichlorobenzene	U		0.130	0.500	1	04/06/2020 01:18	WG1455980
1,4-Dichlorobenzene	U		0.121	0.500	1	04/06/2020 01:18	WG1455980
Dichlorodifluoromethane	U		0.127	2.50	1	04/06/2020 01:18	WG1455980
1,1-Dichloroethane	U		0.114	0.500	1	04/06/2020 01:18	WG1455980
1,2-Dichloroethane	U		0.108	0.500	1	04/06/2020 01:18	WG1455980
1,1-Dichloroethene	U		0.188	0.500	1	04/06/2020 01:18	WG1455980
cis-1,2-Dichloroethene	0.234	J	0.0933	0.500	1	04/06/2020 01:18	WG1455980
trans-1,2-Dichloroethene	U		0.152	0.500	1	04/06/2020 01:18	WG1455980
1,2-Dichloropropane	U		0.190	0.500	1	04/06/2020 01:18	WG1455980
1,1-Dichloropropene	U		0.128	0.500	1	04/06/2020 01:18	WG1455980
1,3-Dichloropropane	U		0.147	1.00	1	04/06/2020 01:18	WG1455980
cis-1,3-Dichloropropene	U		0.0976	0.500	1	04/06/2020 01:18	WG1455980
trans-1,3-Dichloropropene	U		0.222	0.500	1	04/06/2020 01:18	WG1455980
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	04/06/2020 01:18	WG1455980
2,2-Dichloropropane	U		0.0929	0.500	1	04/06/2020 01:18	WG1455980
Di-isopropyl ether	U		0.0924	0.500	1	04/06/2020 01:18	WG1455980
Ethylbenzene	U		0.158	0.500	1	04/06/2020 01:18	WG1455980
Hexachloro-1,3-butadiene	U		0.157	1.00	1	04/06/2020 01:18	WG1455980
2-Hexanone	U		0.757	5.00	1	04/06/2020 01:18	WG1455980
n-Hexane	U		0.305	5.00	1	04/06/2020 01:18	WG1455980
Iodomethane	U	UJ J0	0.377	10.0	1	04/06/2020 01:18	WG1455980
Isopropylbenzene	U		0.126	0.500	1	04/06/2020 01:18	WG1455980
p-Isopropyltoluene	U		0.138	0.500	1	04/06/2020 01:18	WG1455980
2-Butanone (MEK)	U		1.28	5.00	1	04/06/2020 01:18	WG1455980
Methylene Chloride	U		1.07	2.50	1	04/06/2020 01:18	WG1455980
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	04/06/2020 01:18	WG1455980
Methyl tert-butyl ether	U		0.102	0.500	1	04/06/2020 01:18	WG1455980
Naphthalene	U		0.174	2.50	1	04/06/2020 01:18	WG1455980
n-Propylbenzene	U		0.162	0.500	1	04/06/2020 01:18	WG1455980
Styrene	U		0.117	0.500	1	04/06/2020 01:18	WG1455980
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	04/06/2020 01:18	WG1455980
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	04/06/2020 01:18	WG1455980
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	04/06/2020 01:18	WG1455980
Tetrachloroethene	U		0.199	0.500	1	04/06/2020 01:18	WG1455980
Toluene	U		0.412	0.500	1	04/06/2020 01:18	WG1455980
1,2,3-Trichlorobenzene	U		0.164	0.500	1	04/06/2020 01:18	WG1455980
1,2,4-Trichlorobenzene	U		0.355	0.500	1	04/06/2020 01:18	WG1455980
1,1,1-Trichloroethane	U		0.0940	0.500	1	04/06/2020 01:18	WG1455980
1,1,2-Trichloroethane	U		0.186	0.500	1	04/06/2020 01:18	WG1455980
Trichloroethene	U		0.153	0.500	1	04/06/2020 01:18	WG1455980
Trichlorofluoromethane	U		0.130	2.50	1	04/06/2020 01:18	WG1455980
1,2,3-Trichloropropane	U		0.247	2.50	1	04/06/2020 01:18	WG1455980
1,2,4-Trimethylbenzene	U		0.123	0.500	1	04/06/2020 01:18	WG1455980
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	04/06/2020 01:18	WG1455980
1,3,5-Trimethylbenzene	U		0.124	0.500	1	04/06/2020 01:18	WG1455980

JC 5/6/2020

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Vinyl acetate	U		0.645	5.00	1	04/06/2020 01:18	WG1455980
Vinyl chloride	U		0.118	0.500	1	04/06/2020 01:18	WG1455980
Xylenes, Total	U		0.316	1.50	1	04/06/2020 01:18	WG1455980
(S) Toluene-d8	*116*			*80.0-120*		*04/06/2020 01:18*	WG1455980
(S) 4-Bromofluorobenzene	*101*			*77.0-126*		*04/06/2020 01:18*	WG1455980
(S) 1,2-Dichloroethane-d4	*104*			*70.0-130*		*04/06/2020 01:18*	WG1455980

JC 5/6/2020

Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	260000		2710	20000	1	04/07/2020 22:09	WG1455324

Sample Narrative:

L1205456-01 WG1455324: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	20100		51.9	1000	1	04/03/2020 20:39	WG1455131
Nitrate	U		22.7	100	1	04/03/2020 20:39	WG1455131
Sulfate	1070	~~BJ~~	77.4	5000	1	04/03/2020 20:39	WG1455131

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	6870		102	1000	1	04/07/2020 16:25	WG1456783

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	1390		15.0	100	1	04/04/2020 11:40	WG1455253
Manganese	342		0.250	5.00	1	04/04/2020 11:40	WG1455253

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	U		31.6	100	1	04/06/2020 13:51	WG1456127
(S) a,a,a-Trifluorotoluene(FID)	*99.1*			*78.0-120*		*04/06/2020 13:51*	WG1456127

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	2050		0.287	0.678	1	04/04/2020 16:13	WG1455178
Ethane	5.34		0.296	1.29	1	04/04/2020 16:13	WG1455178
Ethene	U		0.422	1.27	1	04/04/2020 16:13	WG1455178

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

Analyte	Result ug/l		Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	3.73	J	J J0	1.05	25.0	1	04/06/2020 01:39	WG1455980
Acrylonitrile	U			0.873	5.00	1	04/06/2020 01:39	WG1455980
Benzene	U			0.0896	0.500	1	04/06/2020 01:39	WG1455980
Bromobenzene	U			0.133	0.500	1	04/06/2020 01:39	WG1455980
Bromodichloromethane	U			0.0800	0.500	1	04/06/2020 01:39	WG1455980
Bromochloromethane	U			0.145	0.500	1	04/06/2020 01:39	WG1455980
Bromoform	U			0.186	0.500	1	04/06/2020 01:39	WG1455980
Bromomethane	U	UJ	J0	0.157	2.50	1	04/06/2020 01:39	WG1455980
n-Butylbenzene	U			0.143	0.500	1	04/06/2020 01:39	WG1455980
sec-Butylbenzene	U			0.134	0.500	1	04/06/2020 01:39	WG1455980
tert-Butylbenzene	U			0.183	0.500	1	04/06/2020 01:39	WG1455980
Carbon disulfide	0.398		J	0.101	0.500	1	04/06/2020 01:39	WG1455980
Carbon tetrachloride	U			0.159	0.500	1	04/06/2020 01:39	WG1455980

JC 5/6/2020

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

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chlorobenzene	U		0.140	0.500	1	04/06/2020 01:39	WG1455980
Chlorodibromomethane	U		0.128	0.500	1	04/06/2020 01:39	WG1455980
Chloroethane	U UJ	J0	0.141	2.50	1	04/06/2020 01:39	WG1455980
Chloroform	U		0.0860	0.500	1	04/06/2020 01:39	WG1455980
Chloromethane	U		0.153	1.25	1	04/06/2020 01:39	WG1455980
2-Chlorotoluene	U		0.111	0.500	1	04/06/2020 01:39	WG1455980
4-Chlorotoluene	U		0.0972	0.500	1	04/06/2020 01:39	WG1455980
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	04/06/2020 01:39	WG1455980
1,2-Dibromoethane	U		0.193	0.500	1	04/06/2020 01:39	WG1455980
Dibromomethane	U		0.117	0.500	1	04/06/2020 01:39	WG1455980
1,2-Dichlorobenzene	U		0.101	0.500	1	04/06/2020 01:39	WG1455980
1,3-Dichlorobenzene	U		0.130	0.500	1	04/06/2020 01:39	WG1455980
1,4-Dichlorobenzene	U		0.121	0.500	1	04/06/2020 01:39	WG1455980
Dichlorodifluoromethane	U		0.127	2.50	1	04/06/2020 01:39	WG1455980
1,1-Dichloroethane	U		0.114	0.500	1	04/06/2020 01:39	WG1455980
1,2-Dichloroethane	U		0.108	0.500	1	04/06/2020 01:39	WG1455980
1,1-Dichloroethene	U		0.188	0.500	1	04/06/2020 01:39	WG1455980
cis-1,2-Dichloroethene	0.293	J	0.0933	0.500	1	04/06/2020 01:39	WG1455980
trans-1,2-Dichloroethene	U		0.152	0.500	1	04/06/2020 01:39	WG1455980
1,2-Dichloropropane	U		0.190	0.500	1	04/06/2020 01:39	WG1455980
1,1-Dichloropropene	U		0.128	0.500	1	04/06/2020 01:39	WG1455980
1,3-Dichloropropane	U		0.147	1.00	1	04/06/2020 01:39	WG1455980
cis-1,3-Dichloropropene	U		0.0976	0.500	1	04/06/2020 01:39	WG1455980
trans-1,3-Dichloropropene	U		0.222	0.500	1	04/06/2020 01:39	WG1455980
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	04/06/2020 01:39	WG1455980
2,2-Dichloropropane	U		0.0929	0.500	1	04/06/2020 01:39	WG1455980
Di-isopropyl ether	U		0.0924	0.500	1	04/06/2020 01:39	WG1455980
Ethylbenzene	U		0.158	0.500	1	04/06/2020 01:39	WG1455980
Hexachloro-1,3-butadiene	U		0.157	1.00	1	04/06/2020 01:39	WG1455980
2-Hexanone	U		0.757	5.00	1	04/06/2020 01:39	WG1455980
n-Hexane	U		0.305	5.00	1	04/06/2020 01:39	WG1455980
Iodomethane	U UJ	J0	0.377	10.0	1	04/06/2020 01:39	WG1455980
Isopropylbenzene	U		0.126	0.500	1	04/06/2020 01:39	WG1455980
p-Isopropyltoluene	U		0.138	0.500	1	04/06/2020 01:39	WG1455980
2-Butanone (MEK)	U		1.28	5.00	1	04/06/2020 01:39	WG1455980
Methylene Chloride	U		1.07	2.50	1	04/06/2020 01:39	WG1455980
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	04/06/2020 01:39	WG1455980
Methyl tert-butyl ether	U		0.102	0.500	1	04/06/2020 01:39	WG1455980
Naphthalene	U		0.174	2.50	1	04/06/2020 01:39	WG1455980
n-Propylbenzene	U		0.162	0.500	1	04/06/2020 01:39	WG1455980
Styrene	U		0.117	0.500	1	04/06/2020 01:39	WG1455980
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	04/06/2020 01:39	WG1455980
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	04/06/2020 01:39	WG1455980
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	04/06/2020 01:39	WG1455980
Tetrachloroethene	U		0.199	0.500	1	04/06/2020 01:39	WG1455980
Toluene	U		0.412	0.500	1	04/06/2020 01:39	WG1455980
1,2,3-Trichlorobenzene	U		0.164	0.500	1	04/06/2020 01:39	WG1455980
1,2,4-Trichlorobenzene	U		0.355	0.500	1	04/06/2020 01:39	WG1455980
1,1,1-Trichloroethane	U		0.0940	0.500	1	04/06/2020 01:39	WG1455980
1,1,2-Trichloroethane	U		0.186	0.500	1	04/06/2020 01:39	WG1455980
Trichloroethene	U		0.153	0.500	1	04/06/2020 01:39	WG1455980
Trichlorofluoromethane	U		0.130	2.50	1	04/06/2020 01:39	WG1455980
1,2,3-Trichloropropane	U		0.247	2.50	1	04/06/2020 01:39	WG1455980
1,2,4-Trimethylbenzene	U		0.123	0.500	1	04/06/2020 01:39	WG1455980
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	04/06/2020 01:39	WG1455980
1,3,5-Trimethylbenzene	U		0.124	0.500	1	04/06/2020 01:39	WG1455980

JC 5/6/2020

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Vinyl acetate	U		0.645	5.00	1	04/06/2020 01:39	WG1455980
Vinyl chloride	U		0.118	0.500	1	04/06/2020 01:39	WG1455980
Xylenes, Total	U		0.316	1.50	1	04/06/2020 01:39	WG1455980
(S) Toluene-d8	*115*			*80.0-120*		*04/06/2020 01:39*	WG1455980
(S) 4-Bromofluorobenzene	*103*			*77.0-126*		*04/06/2020 01:39*	WG1455980
(S) 1,2-Dichloroethane-d4	*107*			*70.0-130*		*04/06/2020 01:39*	WG1455980

JC 5/6/2020

MW-144R-040220
Collected date/time: 04/02/20 10:30

SAMPLE RESULTS - 02
L1205456

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

Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	624000		2710	20000	1	04/07/2020 22:19	WG1455324

Sample Narrative:
L1205456-02 WG1455324: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	96800		51.9	1000	1	04/03/2020 20:52	WG1455131
Nitrate	25.2	J	22.7	100	1	04/03/2020 20:52	WG1455131
Sulfate	370	U ~~BJ~~	77.4	5000	1	04/03/2020 20:52	WG1455131

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	24000		102	1000	1	04/07/2020 17:10	WG1456783

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	6490		15.0	100	1	04/04/2020 11:43	WG1455253
Manganese	1510		0.250	5.00	1	04/04/2020 11:43	WG1455253

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	U		31.6	100	1	04/06/2020 14:12	WG1456127
(S) a,a,a-Trifluorotoluene(FID)	*97.9*			*78.0-120*		*04/06/2020 14:12*	WG1456127

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	13900		2.87	6.78	10	04/08/2020 13:07	WG1456921
Ethane	28.1		0.296	1.29	1	04/04/2020 16:16	WG1455178
Ethene	466		0.422	1.27	1	04/04/2020 16:16	WG1455178

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	9.03	U ~~BJ~~	1.05	25.0	1	04/06/2020 23:05	WG1456345
Acrylonitrile	U	U J	0.873	5.00	1	04/06/2020 23:05	WG1456345
Benzene	U		0.0896	0.500	1	04/06/2020 23:05	WG1456345
Bromobenzene	U		0.133	0.500	1	04/06/2020 23:05	WG1456345
Bromodichloromethane	U		0.0800	0.500	1	04/06/2020 23:05	WG1456345
Bromochloromethane	U		0.145	0.500	1	04/06/2020 23:05	WG1456345
Bromoform	U		0.186	0.500	1	04/06/2020 23:05	WG1456345
Bromomethane	U		0.157	2.50	1	04/06/2020 23:05	WG1456345
n-Butylbenzene	U		0.143	0.500	1	04/06/2020 23:05	WG1456345
sec-Butylbenzene	U		0.134	0.500	1	04/06/2020 23:05	WG1456345
tert-Butylbenzene	U		0.183	0.500	1	04/06/2020 23:05	WG1456345
Carbon disulfide	0.283	J J	0.101	0.500	1	04/06/2020 23:05	WG1456345
Carbon tetrachloride	U	UJ	0.159	0.500	1	04/06/2020 23:05	WG1456345

NO Bias Assigned gc

JC 5/6/2020

SAMPLE RESULTS - 02

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chlorobenzene	U	UJ	0.140	0.500	1	04/06/2020 23:05	WG1456345
Chlorodibromomethane	U		0.128	0.500	1	04/06/2020 23:05	WG1456345
Chloroethane	U		0.141	2.50	1	04/06/2020 23:05	WG1456345
Chloroform	U	UJ	0.0860	0.500	1	04/06/2020 23:05	WG1456345
Chloromethane	U		0.153	1.25	1	04/07/2020 13:04	WG1456698
2-Chlorotoluene	U	UJ	0.111	0.500	1	04/06/2020 23:05	WG1456345
4-Chlorotoluene	U		0.0972	0.500	1	04/06/2020 23:05	WG1456345
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	04/06/2020 23:05	WG1456345
1,2-Dibromoethane	U		0.193	0.500	1	04/06/2020 23:05	WG1456345
Dibromomethane	U	~~J4~~	0.117	0.500	1	04/06/2020 23:05	WG1456345
1,2-Dichlorobenzene	U		0.101	0.500	1	04/06/2020 23:05	WG1456345
1,3-Dichlorobenzene	U		0.130	0.500	1	04/06/2020 23:05	WG1456345
1,4-Dichlorobenzene	U		0.121	0.500	1	04/06/2020 23:05	WG1456345
Dichlorodifluoromethane	U		0.127	2.50	1	04/06/2020 23:05	WG1456345
1,1-Dichloroethane	U		0.114	0.500	1	04/06/2020 23:05	WG1456345
1,2-Dichloroethane	U		0.108	0.500	1	04/06/2020 23:05	WG1456345
1,1-Dichloroethene	U		0.188	0.500	1	04/06/2020 23:05	WG1456345
cis-1,2-Dichloroethene	2.01	R J	0.0933	0.500	1	04/06/2020 23:05	WG1456345
trans-1,2-Dichloroethene	U	UJ	0.152	0.500	1	04/06/2020 23:05	WG1456345
1,2-Dichloropropane	U	UJ	0.190	0.500	1	04/06/2020 23:05	WG1456345
1,1-Dichloropropene	U		0.128	0.500	1	04/06/2020 23:05	WG1456345
1,3-Dichloropropane	U		0.147	1.00	1	04/06/2020 23:05	WG1456345
cis-1,3-Dichloropropene	U		0.0976	0.500	1	04/06/2020 23:05	WG1456345
trans-1,3-Dichloropropene	U		0.222	0.500	1	04/06/2020 23:05	WG1456345
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	04/06/2020 23:05	WG1456345
2,2-Dichloropropane	U		0.0929	0.500	1	04/06/2020 23:05	WG1456345
Di-isopropyl ether	U		0.0924	0.500	1	04/06/2020 23:05	WG1456345
Ethylbenzene	U		0.158	0.500	1	04/06/2020 23:05	WG1456345
Hexachloro-1,3-butadiene	U		0.157	1.00	1	04/06/2020 23:05	WG1456345
2-Hexanone	U		0.757	5.00	1	04/06/2020 23:05	WG1456345
n-Hexane	U		0.305	5.00	1	04/06/2020 23:05	WG1456345
Iodomethane	U		0.377	10.0	1	04/07/2020 13:04	WG1456698
Isopropylbenzene	U	UJ	0.126	0.500	1	04/06/2020 23:05	WG1456345
p-Isopropyltoluene	U		0.138	0.500	1	04/06/2020 23:05	WG1456345
2-Butanone (MEK)	2.50	R J	1.28	5.00	1	04/06/2020 23:05	WG1456345
Methylene Chloride	U	UJ	1.07	2.50	1	04/06/2020 23:05	WG1456345
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	04/06/2020 23:05	WG1456345
Methyl tert-butyl ether	U		0.102	0.500	1	04/06/2020 23:05	WG1456345
Naphthalene	U	UJ J0	0.174	2.50	1	04/06/2020 23:05	WG1456345
n-Propylbenzene	U	UJ	0.162	0.500	1	04/06/2020 23:05	WG1456345
Styrene	U		0.117	0.500	1	04/06/2020 23:05	WG1456345
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	04/06/2020 23:05	WG1456345
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	04/06/2020 23:05	WG1456345
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	04/06/2020 23:05	WG1456345
Tetrachloroethene	U		0.199	0.500	1	04/06/2020 23:05	WG1456345
Toluene	U	~~UUJJUJUJ~~ UJ	0.412	0.500	1	04/06/2020 23:05	WG1456345
1,2,3-Trichlorobenzene	U		0.164	0.500	1	04/06/2020 23:05	WG1456345
1,2,4-Trichlorobenzene	U		0.355	0.500	1	04/06/2020 23:05	WG1456345
1,1,1-Trichloroethane	U		0.0940	0.500	1	04/06/2020 23:05	WG1456345
1,1,2-Trichloroethane	U		0.186	0.500	1	04/06/2020 23:05	WG1456345
Trichloroethene	U		0.153	0.500	1	04/06/2020 23:05	WG1456345
Trichlorofluoromethane	U		0.130	2.50	1	04/06/2020 23:05	WG1456345
1,2,3-Trichloropropane	U		0.247	2.50	1	04/06/2020 23:05	WG1456345
1,2,4-Trimethylbenzene	U		0.123	0.500	1	04/06/2020 23:05	WG1456345
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	04/06/2020 23:05	WG1456345
1,3,5-Trimethylbenzene	U		0.124	0.500	1	04/06/2020 23:05	WG1456345

No bias assigned
Jc.

No bias assigned
Jc.

JC 5/6/2020

MW-144R-040220
Collected date/time: 04/02/20 10:30

SAMPLE RESULTS - 02
L1205456

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Vinyl acetate	U	UJ	0.645	5.00	1	04/06/2020 23:05	WG1456345
Vinyl chloride	14.1	J-	0.118	0.500	1	04/06/2020 23:05	WG1456345
Xylenes, Total	U	UJ	0.316	1.50	1	04/06/2020 23:05	WG1456345
(S) Toluene-d8	*106*			*80.0-120*		*04/06/2020 23:05*	WG1456345
(S) Toluene-d8	*110*			*80.0-120*		*04/07/2020 13:04*	WG1456698
(S) 4-Bromofluorobenzene	*72.1*	J2		*77.0-126*		*04/06/2020 23:05*	WG1456345
(S) 4-Bromofluorobenzene	*108*			*77.0-126*		*04/07/2020 13:04*	WG1456698
(S) 1,2-Dichloroethane-d4	*112*			*70.0-130*		*04/06/2020 23:05*	WG1456345
(S) 1,2-Dichloroethane-d4	*111*			*70.0-130*		*04/07/2020 13:04*	WG1456698

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

JC 5/6/2020

Wet Chemistry by Method 2320 B-2011

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Alkalinity	165000		2710	20000	1	04/07/2020 22:27	WG1455324

Sample Narrative:

L1205456-03 WG1455324: Endpoint pH 4.5

Wet Chemistry by Method 9056A

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Chloride	5520		51.9	1000	1	04/03/2020 21:18	WG1455131
Nitrate	30.0	J	22.7	100	1	04/03/2020 21:18	WG1455131
Sulfate	4020	J	77.4	5000	1	04/03/2020 21:18	WG1455131

Wet Chemistry by Method 9060A

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
TOC (Total Organic Carbon)	1150	~~B~~	102	1000	1	04/07/2020 17:21	WG1456783

Metals (ICPMS) by Method 6020B

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Iron	3020		15.0	100	1	04/04/2020 11:47	WG1455253
Manganese	246		0.250	5.00	1	04/04/2020 11:47	WG1455253

Volatile Organic Compounds (GC) by Method NWTPHGX

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Gasoline Range Organics-NWTPH	U		31.6	100	1	04/06/2020 14:32	WG1456127
(S) a,a,a-Trifluorotoluene(FID)	*104*			*78.0-120*		*04/06/2020 14:32*	WG1456127

Volatile Organic Compounds (GC) by Method RSK175

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Methane	10.1		0.287	0.678	1	04/04/2020 16:25	WG1455178
Ethane	U		0.296	1.29	1	04/04/2020 16:25	WG1455178
Ethene	U		0.422	1.27	1	04/04/2020 16:25	WG1455178

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

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Acetone	U UJ	J0	1.05	25.0	1	04/06/2020 02:19	WG1455980
Acrylonitrile	U		0.873	5.00	1	04/06/2020 02:19	WG1455980
Benzene	U		0.0896	0.500	1	04/06/2020 02:19	WG1455980
Bromobenzene	U		0.133	0.500	1	04/06/2020 02:19	WG1455980
Bromodichloromethane	U		0.0800	0.500	1	04/06/2020 02:19	WG1455980
Bromochloromethane	U		0.145	0.500	1	04/06/2020 02:19	WG1455980
Bromoform	U		0.186	0.500	1	04/06/2020 02:19	WG1455980
Bromomethane	U UJ	J0	0.157	2.50	1	04/06/2020 02:19	WG1455980
n-Butylbenzene	U		0.143	0.500	1	04/06/2020 02:19	WG1455980
sec-Butylbenzene	U		0.134	0.500	1	04/06/2020 02:19	WG1455980
tert-Butylbenzene	U		0.183	0.500	1	04/06/2020 02:19	WG1455980
Carbon disulfide	U		0.101	0.500	1	04/06/2020 02:19	WG1455980
Carbon tetrachloride	U		0.159	0.500	1	04/06/2020 02:19	WG1455980

JC 5/6/2020

MW102-040220

Collected date/time: 04/02/20 13:00

SAMPLE RESULTS - 03

L1205456

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chlorobenzene	U		0.140	0.500	1	04/06/2020 02:19	WG1455980
Chlorodibromomethane	U		0.128	0.500	1	04/06/2020 02:19	WG1455980
Chloroethane	U UJ	J0	0.141	2.50	1	04/06/2020 02:19	WG1455980
Chloroform	U		0.0860	0.500	1	04/06/2020 02:19	WG1455980
Chloromethane	U		0.153	1.25	1	04/06/2020 02:19	WG1455980
2-Chlorotoluene	U		0.111	0.500	1	04/06/2020 02:19	WG1455980
4-Chlorotoluene	U		0.0972	0.500	1	04/06/2020 02:19	WG1455980
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	04/06/2020 02:19	WG1455980
1,2-Dibromoethane	U		0.193	0.500	1	04/06/2020 02:19	WG1455980
Dibromomethane	U		0.117	0.500	1	04/06/2020 02:19	WG1455980
1,2-Dichlorobenzene	U		0.101	0.500	1	04/06/2020 02:19	WG1455980
1,3-Dichlorobenzene	U		0.130	0.500	1	04/06/2020 02:19	WG1455980
1,4-Dichlorobenzene	U		0.121	0.500	1	04/06/2020 02:19	WG1455980
Dichlorodifluoromethane	U		0.127	2.50	1	04/06/2020 02:19	WG1455980
1,1-Dichloroethane	U		0.114	0.500	1	04/06/2020 02:19	WG1455980
1,2-Dichloroethane	U		0.108	0.500	1	04/06/2020 02:19	WG1455980
1,1-Dichloroethene	U		0.188	0.500	1	04/06/2020 02:19	WG1455980
cis-1,2-Dichloroethene	U		0.0933	0.500	1	04/06/2020 02:19	WG1455980
trans-1,2-Dichloroethene	U		0.152	0.500	1	04/06/2020 02:19	WG1455980
1,2-Dichloropropane	U		0.190	0.500	1	04/06/2020 02:19	WG1455980
1,1-Dichloropropene	U		0.128	0.500	1	04/06/2020 02:19	WG1455980
1,3-Dichloropropane	U		0.147	1.00	1	04/06/2020 02:19	WG1455980
cis-1,3-Dichloropropene	U		0.0976	0.500	1	04/06/2020 02:19	WG1455980
trans-1,3-Dichloropropene	U		0.222	0.500	1	04/06/2020 02:19	WG1455980
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	04/06/2020 02:19	WG1455980
2,2-Dichloropropane	U		0.0929	0.500	1	04/06/2020 02:19	WG1455980
Di-isopropyl ether	U		0.0924	0.500	1	04/06/2020 02:19	WG1455980
Ethylbenzene	U		0.158	0.500	1	04/06/2020 02:19	WG1455980
Hexachloro-1,3-butadiene	U		0.157	1.00	1	04/06/2020 02:19	WG1455980
2-Hexanone	U		0.757	5.00	1	04/06/2020 02:19	WG1455980
n-Hexane	U		0.305	5.00	1	04/06/2020 02:19	WG1455980
Iodomethane	U UJ	J0	0.377	10.0	1	04/06/2020 02:19	WG1455980
Isopropylbenzene	U		0.126	0.500	1	04/06/2020 02:19	WG1455980
p-Isopropyltoluene	U		0.138	0.500	1	04/06/2020 02:19	WG1455980
2-Butanone (MEK)	U		1.28	5.00	1	04/06/2020 02:19	WG1455980
Methylene Chloride	U		1.07	2.50	1	04/06/2020 02:19	WG1455980
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	04/06/2020 02:19	WG1455980
Methyl tert-butyl ether	U		0.102	0.500	1	04/06/2020 02:19	WG1455980
Naphthalene	U		0.174	2.50	1	04/06/2020 02:19	WG1455980
n-Propylbenzene	U		0.162	0.500	1	04/06/2020 02:19	WG1455980
Styrene	U		0.117	0.500	1	04/06/2020 02:19	WG1455980
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	04/06/2020 02:19	WG1455980
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	04/06/2020 02:19	WG1455980
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	04/06/2020 02:19	WG1455980
Tetrachloroethene	U		0.199	0.500	1	04/06/2020 02:19	WG1455980
Toluene	U		0.412	0.500	1	04/06/2020 02:19	WG1455980
1,2,3-Trichlorobenzene	U		0.164	0.500	1	04/06/2020 02:19	WG1455980
1,2,4-Trichlorobenzene	U		0.355	0.500	1	04/06/2020 02:19	WG1455980
1,1,1-Trichloroethane	U		0.0940	0.500	1	04/06/2020 02:19	WG1455980
1,1,2-Trichloroethane	U		0.186	0.500	1	04/06/2020 02:19	WG1455980
Trichloroethene	U		0.153	0.500	1	04/06/2020 02:19	WG1455980
Trichlorofluoromethane	U		0.130	2.50	1	04/06/2020 02:19	WG1455980
1,2,3-Trichloropropane	U		0.247	2.50	1	04/06/2020 02:19	WG1455980
1,2,4-Trimethylbenzene	U		0.123	0.500	1	04/06/2020 02:19	WG1455980
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	04/06/2020 02:19	WG1455980
1,3,5-Trimethylbenzene	U		0.124	0.500	1	04/06/2020 02:19	WG1455980

JC 5/6/2020

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Vinyl acetate	U		0.645	5.00	1	04/06/2020 02:19	WG1455980
Vinyl chloride	U		0.118	0.500	1	04/06/2020 02:19	WG1455980
Xylenes, Total	U		0.316	1.50	1	04/06/2020 02:19	WG1455980
(S) Toluene-d8	*116*			*80.0-120*		*04/06/2020 02:19*	WG1455980
(S) 4-Bromofluorobenzene	*97.3*			*77.0-126*		*04/06/2020 02:19*	WG1455980
(S) 1,2-Dichloroethane-d4	*102*			*70.0-130*		*04/06/2020 02:19*	WG1455980

JC 5/6/2020

Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	180000		2710	20000	1	04/07/2020 22:37	WG1455324

Sample Narrative:

L1205456-04 WG1455324: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	23900		51.9	1000	1	04/03/2020 21:44	WG1455131
Nitrate	U		22.7	100	1	04/03/2020 21:44	WG1455131
Sulfate	22300		77.4	5000	1	04/03/2020 21:44	WG1455131

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	2050	~~B~~	102	1000	1	04/07/2020 17:37	WG1456783

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	2240		15.0	100	1	04/04/2020 11:50	WG1455253
Manganese	420		0.250	5.00	1	04/04/2020 11:50	WG1455253

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	U		31.6	100	1	04/06/2020 14:53	WG1456127
(S) a,a,a-Trifluorotoluene(FID)	*98.4*			*78.0-120*		*04/06/2020 14:53*	WG1456127

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	318		0.287	0.678	1	04/04/2020 16:27	WG1455178
Ethane	U		0.296	1.29	1	04/04/2020 16:27	WG1455178
Ethene	U		0.422	1.27	1	04/04/2020 16:27	WG1455178

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	2.03 J	J J0	1.05	25.0	1	04/06/2020 02:40	WG1455980
Acrylonitrile	U		0.873	5.00	1	04/06/2020 02:40	WG1455980
Benzene	U		0.0896	0.500	1	04/06/2020 02:40	WG1455980
Bromobenzene	U		0.133	0.500	1	04/06/2020 02:40	WG1455980
Bromodichloromethane	U		0.0800	0.500	1	04/06/2020 02:40	WG1455980
Bromochloromethane	U		0.145	0.500	1	04/06/2020 02:40	WG1455980
Bromoform	U		0.186	0.500	1	04/06/2020 02:40	WG1455980
Bromomethane	U UJ	J0	0.157	2.50	1	04/06/2020 02:40	WG1455980
n-Butylbenzene	U		0.143	0.500	1	04/06/2020 02:40	WG1455980
sec-Butylbenzene	U		0.134	0.500	1	04/06/2020 02:40	WG1455980
tert-Butylbenzene	U		0.183	0.500	1	04/06/2020 02:40	WG1455980
Carbon disulfide	1.63		0.101	0.500	1	04/06/2020 02:40	WG1455980
Carbon tetrachloride	U		0.159	0.500	1	04/06/2020 02:40	WG1455980

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chlorobenzene	U		0.140	0.500	1	04/06/2020 02:40	WG1455980
Chlorodibromomethane	U		0.128	0.500	1	04/06/2020 02:40	WG1455980
Chloroethane	U UJ	J0	0.141	2.50	1	04/06/2020 02:40	WG1455980
Chloroform	U		0.0860	0.500	1	04/06/2020 02:40	WG1455980
Chloromethane	U		0.153	1.25	1	04/06/2020 02:40	WG1455980
2-Chlorotoluene	U		0.111	0.500	1	04/06/2020 02:40	WG1455980
4-Chlorotoluene	U		0.0972	0.500	1	04/06/2020 02:40	WG1455980
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	04/06/2020 02:40	WG1455980
1,2-Dibromoethane	U		0.193	0.500	1	04/06/2020 02:40	WG1455980
Dibromomethane	U		0.117	0.500	1	04/06/2020 02:40	WG1455980
1,2-Dichlorobenzene	U		0.101	0.500	1	04/06/2020 02:40	WG1455980
1,3-Dichlorobenzene	U		0.130	0.500	1	04/06/2020 02:40	WG1455980
1,4-Dichlorobenzene	U		0.121	0.500	1	04/06/2020 02:40	WG1455980
Dichlorodifluoromethane	U		0.127	2.50	1	04/06/2020 02:40	WG1455980
1,1-Dichloroethane	U		0.114	0.500	1	04/06/2020 02:40	WG1455980
1,2-Dichloroethane	U		0.108	0.500	1	04/06/2020 02:40	WG1455980
1,1-Dichloroethene	U		0.188	0.500	1	04/06/2020 02:40	WG1455980
cis-1,2-Dichloroethene	2.13		0.0933	0.500	1	04/06/2020 02:40	WG1455980
trans-1,2-Dichloroethene	U		0.152	0.500	1	04/06/2020 02:40	WG1455980
1,2-Dichloropropane	U		0.190	0.500	1	04/06/2020 02:40	WG1455980
1,1-Dichloropropene	U		0.128	0.500	1	04/06/2020 02:40	WG1455980
1,3-Dichloropropane	U		0.147	1.00	1	04/06/2020 02:40	WG1455980
cis-1,3-Dichloropropene	U		0.0976	0.500	1	04/06/2020 02:40	WG1455980
trans-1,3-Dichloropropene	U		0.222	0.500	1	04/06/2020 02:40	WG1455980
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	04/06/2020 02:40	WG1455980
2,2-Dichloropropane	U		0.0929	0.500	1	04/06/2020 02:40	WG1455980
Di-isopropyl ether	U		0.0924	0.500	1	04/06/2020 02:40	WG1455980
Ethylbenzene	U		0.158	0.500	1	04/06/2020 02:40	WG1455980
Hexachloro-1,3-butadiene	U		0.157	1.00	1	04/06/2020 02:40	WG1455980
2-Hexanone	U		0.757	5.00	1	04/06/2020 02:40	WG1455980
n-Hexane	U		0.305	5.00	1	04/06/2020 02:40	WG1455980
Iodomethane	U UJ	J0	0.377	10.0	1	04/06/2020 02:40	WG1455980
Isopropylbenzene	U		0.126	0.500	1	04/06/2020 02:40	WG1455980
p-Isopropyltoluene	U		0.138	0.500	1	04/06/2020 02:40	WG1455980
2-Butanone (MEK)	U		1.28	5.00	1	04/06/2020 02:40	WG1455980
Methylene Chloride	U		1.07	2.50	1	04/06/2020 02:40	WG1455980
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	04/06/2020 02:40	WG1455980
Methyl tert-butyl ether	U		0.102	0.500	1	04/06/2020 02:40	WG1455980
Naphthalene	U		0.174	2.50	1	04/06/2020 02:40	WG1455980
n-Propylbenzene	U		0.162	0.500	1	04/06/2020 02:40	WG1455980
Styrene	U		0.117	0.500	1	04/06/2020 02:40	WG1455980
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	04/06/2020 02:40	WG1455980
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	04/06/2020 02:40	WG1455980
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	04/06/2020 02:40	WG1455980
Tetrachloroethene	U		0.199	0.500	1	04/06/2020 02:40	WG1455980
Toluene	U		0.412	0.500	1	04/06/2020 02:40	WG1455980
1,2,3-Trichlorobenzene	U		0.164	0.500	1	04/06/2020 02:40	WG1455980
1,2,4-Trichlorobenzene	U		0.355	0.500	1	04/06/2020 02:40	WG1455980
1,1,1-Trichloroethane	U		0.0940	0.500	1	04/06/2020 02:40	WG1455980
1,1,2-Trichloroethane	U		0.186	0.500	1	04/06/2020 02:40	WG1455980
Trichloroethene	U		0.153	0.500	1	04/06/2020 02:40	WG1455980
Trichlorofluoromethane	U		0.130	2.50	1	04/06/2020 02:40	WG1455980
1,2,3-Trichloropropane	U		0.247	2.50	1	04/06/2020 02:40	WG1455980
1,2,4-Trimethylbenzene	U		0.123	0.500	1	04/06/2020 02:40	WG1455980
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	04/06/2020 02:40	WG1455980
1,3,5-Trimethylbenzene	U		0.124	0.500	1	04/06/2020 02:40	WG1455980

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Vinyl acetate	U		0.645	5.00	1	04/06/2020 02:40	WG1455980
Vinyl chloride	1.81		0.118	0.500	1	04/06/2020 02:40	WG1455980
Xylenes, Total	U		0.316	1.50	1	04/06/2020 02:40	WG1455980
(S) Toluene-d8	*117*			*80.0-120*		*04/06/2020 02:40*	WG1455980
(S) 4-Bromofluorobenzene	*98.1*			*77.0-126*		*04/06/2020 02:40*	WG1455980
(S) 1,2-Dichloroethane-d4	*103*			*70.0-130*		*04/06/2020 02:40*	WG1455980

JC 5/6/2020

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

Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	163000		8450	20000	1	04/08/2020 16:21	WG1457347

Sample Narrative:

L1205789-01 WG1457347: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	4610		51.9	1000	1	04/04/2020 16:12	WG1455548
Nitrate	26.9	J	22.7	100	1	04/04/2020 16:12	WG1455548
Sulfate	894	J	77.4	5000	1	04/04/2020 16:12	WG1455548

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	1870	~~B~~	102	1000	1	04/08/2020 18:25	WG1457464

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	6360	~~J5~~	15.0	100	1	04/06/2020 13:31	WG1455814
Manganese	468	~~V~~	0.250	5.00	1	04/06/2020 13:31	WG1455814

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	38.9 U	~~B J~~	31.6	100	1	04/07/2020 00:31	WG1456436
(S) a,a,a-Trifluorotoluene(FID)	*113*			*78.0-120*		*04/07/2020 00:31*	WG1456436

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	42.2		0.287	0.678	1	04/07/2020 13:25	WG1456588
Ethane	U		0.296	1.29	1	04/07/2020 13:25	WG1456588
Ethene	U		0.422	1.27	1	04/07/2020 13:25	WG1456588

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U		1.05	25.0	1	04/06/2020 16:42	WG1456237
Acrylonitrile	U		0.873	5.00	1	04/06/2020 16:42	WG1456237
Benzene	U		0.0896	0.500	1	04/06/2020 16:42	WG1456237
Bromobenzene	U		0.133	0.500	1	04/06/2020 16:42	WG1456237
Bromodichloromethane	U		0.0800	0.500	1	04/06/2020 16:42	WG1456237
Bromochloromethane	U		0.145	0.500	1	04/06/2020 16:42	WG1456237
Bromoform	U		0.186	0.500	1	04/06/2020 16:42	WG1456237
Bromomethane	U		0.157	2.50	1	04/06/2020 16:42	WG1456237
n-Butylbenzene	U		0.143	0.500	1	04/06/2020 16:42	WG1456237
sec-Butylbenzene	U		0.134	0.500	1	04/06/2020 16:42	WG1456237
tert-Butylbenzene	U		0.183	0.500	1	04/06/2020 16:42	WG1456237
Carbon disulfide	U		0.101	0.500	1	04/06/2020 16:42	WG1456237
Carbon tetrachloride	U		0.159	0.500	1	04/06/2020 16:42	WG1456237

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chlorobenzene	U		0.140	0.500	1	04/06/2020 16:42	WG1456237
Chlorodibromomethane	U		0.128	0.500	1	04/06/2020 16:42	WG1456237
Chloroethane	U		0.141	2.50	1	04/06/2020 16:42	WG1456237
Chloroform	U		0.0860	0.500	1	04/06/2020 16:42	WG1456237
Chloromethane	U		0.153	1.25	1	04/06/2020 16:42	WG1456237
2-Chlorotoluene	U		0.111	0.500	1	04/06/2020 16:42	WG1456237
4-Chlorotoluene	U		0.0972	0.500	1	04/06/2020 16:42	WG1456237
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	04/06/2020 16:42	WG1456237
1,2-Dibromoethane	U		0.193	0.500	1	04/06/2020 16:42	WG1456237
Dibromomethane	U		0.117	0.500	1	04/06/2020 16:42	WG1456237
1,2-Dichlorobenzene	U		0.101	0.500	1	04/06/2020 16:42	WG1456237
1,3-Dichlorobenzene	U		0.130	0.500	1	04/06/2020 16:42	WG1456237
1,4-Dichlorobenzene	U UJ	J4	0.121	0.500	1	04/06/2020 16:42	WG1456237
Dichlorodifluoromethane	U		0.127	2.50	1	04/06/2020 16:42	WG1456237
1,1-Dichloroethane	U		0.114	0.500	1	04/06/2020 16:42	WG1456237
1,2-Dichloroethane	U		0.108	0.500	1	04/06/2020 16:42	WG1456237
1,1-Dichloroethene	U		0.188	0.500	1	04/06/2020 16:42	WG1456237
cis-1,2-Dichloroethene	U		0.0933	0.500	1	04/06/2020 16:42	WG1456237
trans-1,2-Dichloroethene	U		0.152	0.500	1	04/06/2020 16:42	WG1456237
1,2-Dichloropropane	U		0.190	0.500	1	04/06/2020 16:42	WG1456237
1,1-Dichloropropene	U		0.128	0.500	1	04/06/2020 16:42	WG1456237
1,3-Dichloropropane	U		0.147	1.00	1	04/06/2020 16:42	WG1456237
cis-1,3-Dichloropropene	U		0.0976	0.500	1	04/06/2020 16:42	WG1456237
trans-1,3-Dichloropropene	U		0.222	0.500	1	04/06/2020 16:42	WG1456237
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	04/06/2020 16:42	WG1456237
2,2-Dichloropropane	U		0.0929	0.500	1	04/06/2020 16:42	WG1456237
Di-isopropyl ether	U		0.0924	0.500	1	04/06/2020 16:42	WG1456237
Ethylbenzene	U		0.158	0.500	1	04/06/2020 16:42	WG1456237
Hexachloro-1,3-butadiene	U		0.157	1.00	1	04/06/2020 16:42	WG1456237
2-Hexanone	U		0.757	5.00	1	04/06/2020 16:42	WG1456237
n-Hexane	U		0.305	5.00	1	04/06/2020 16:42	WG1456237
Iodomethane	U		0.377	10.0	1	04/06/2020 16:42	WG1456237
Isopropylbenzene	U		0.126	0.500	1	04/06/2020 16:42	WG1456237
p-Isopropyltoluene	U		0.138	0.500	1	04/06/2020 16:42	WG1456237
2-Butanone (MEK)	U UJ	J0	1.28	5.00	1	04/06/2020 16:42	WG1456237
Methylene Chloride	U		1.07	2.50	1	04/06/2020 16:42	WG1456237
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	04/06/2020 16:42	WG1456237
Methyl tert-butyl ether	U		0.102	0.500	1	04/06/2020 16:42	WG1456237
Naphthalene	U		0.174	2.50	1	04/06/2020 16:42	WG1456237
n-Propylbenzene	U		0.162	0.500	1	04/06/2020 16:42	WG1456237
Styrene	U		0.117	0.500	1	04/06/2020 16:42	WG1456237
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	04/06/2020 16:42	WG1456237
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	04/06/2020 16:42	WG1456237
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	04/06/2020 16:42	WG1456237
Tetrachloroethene	U		0.199	0.500	1	04/06/2020 16:42	WG1456237
Toluene	U		0.412	0.500	1	04/06/2020 16:42	WG1456237
1,2,3-Trichlorobenzene	U		0.164	0.500	1	04/06/2020 16:42	WG1456237
1,2,4-Trichlorobenzene	U		0.355	0.500	1	04/06/2020 16:42	WG1456237
1,1,1-Trichloroethane	U		0.0940	0.500	1	04/06/2020 16:42	WG1456237
1,1,2-Trichloroethane	U		0.186	0.500	1	04/06/2020 16:42	WG1456237
Trichloroethene	U		0.153	0.500	1	04/06/2020 16:42	WG1456237
Trichlorofluoromethane	U		0.130	2.50	1	04/06/2020 16:42	WG1456237
1,2,3-Trichloropropane	U		0.247	2.50	1	04/06/2020 16:42	WG1456237
1,2,4-Trimethylbenzene	U		0.123	0.500	1	04/06/2020 16:42	WG1456237
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	04/06/2020 16:42	WG1456237
1,3,5-Trimethylbenzene	U		0.124	0.500	1	04/06/2020 16:42	WG1456237

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Vinyl acetate	U		0.645	5.00	1	04/06/2020 16:42	WG1456237
Vinyl chloride	U		0.118	0.500	1	04/06/2020 16:42	WG1456237
Xylenes, Total	U		0.316	1.50	1	04/06/2020 16:42	WG1456237
(S) Toluene-d8	*101*			*80.0-120*		*04/06/2020 16:42*	WG1456237
(S) 4-Bromofluorobenzene	*104*			*77.0-126*		*04/06/2020 16:42*	WG1456237
(S) 1,2-Dichloroethane-d4	*99.0*			*70.0-130*		*04/06/2020 16:42*	WG1456237

JC 5/6/2020

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

Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	231000		8450	20000	1	04/08/2020 16:39	WG1457347

Sample Narrative:

L1205789-02 WG1457347: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	28200		51.9	1000	1	04/04/2020 16:38	WG1455548
Nitrate	U		22.7	100	1	04/04/2020 16:38	WG1455548
Sulfate	66300		77.4	5000	1	04/04/2020 16:38	WG1455548

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	2080	~~B~~	102	1000	1	04/08/2020 18:41	WG1457464

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	389		15.0	100	1	04/06/2020 13:44	WG1455814
Manganese	288		0.250	5.00	1	04/06/2020 13:44	WG1455814

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	U		31.6	100	1	04/07/2020 00:52	WG1456436
(S) a,a,a-Trifluorotoluene(FID)	*113*			*78.0-120*		*04/07/2020 00:52*	WG1456436

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	296		0.287	0.678	1	04/07/2020 13:55	WG1456588
Ethane	U		0.296	1.29	1	04/07/2020 13:55	WG1456588
Ethene	U		0.422	1.27	1	04/07/2020 13:55	WG1456588

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U		1.05	25.0	1	04/06/2020 17:01	WG1456237
Acrylonitrile	U		0.873	5.00	1	04/06/2020 17:01	WG1456237
Benzene	U		0.0896	0.500	1	04/06/2020 17:01	WG1456237
Bromobenzene	U		0.133	0.500	1	04/06/2020 17:01	WG1456237
Bromodichloromethane	U		0.0800	0.500	1	04/06/2020 17:01	WG1456237
Bromochloromethane	U		0.145	0.500	1	04/06/2020 17:01	WG1456237
Bromoform	U		0.186	0.500	1	04/06/2020 17:01	WG1456237
Bromomethane	U		0.157	2.50	1	04/06/2020 17:01	WG1456237
n-Butylbenzene	U		0.143	0.500	1	04/06/2020 17:01	WG1456237
sec-Butylbenzene	U		0.134	0.500	1	04/06/2020 17:01	WG1456237
tert-Butylbenzene	U		0.183	0.500	1	04/06/2020 17:01	WG1456237
Carbon disulfide	U		0.101	0.500	1	04/06/2020 17:01	WG1456237
Carbon tetrachloride	U		0.159	0.500	1	04/06/2020 17:01	WG1456237

JC 5/6/2020

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

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch	
Chlorobenzene	U		0.140	0.500	1	04/06/2020 17:01	WG1456237	
Chlorodibromomethane	U		0.128	0.500	1	04/06/2020 17:01	WG1456237	
Chloroethane	U		0.141	2.50	1	04/06/2020 17:01	WG1456237	
Chloroform	U		0.0860	0.500	1	04/06/2020 17:01	WG1456237	
Chloromethane	U		0.153	1.25	1	04/06/2020 17:01	WG1456237	
2-Chlorotoluene	U		0.111	0.500	1	04/06/2020 17:01	WG1456237	
4-Chlorotoluene	U		0.0972	0.500	1	04/06/2020 17:01	WG1456237	
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	04/06/2020 17:01	WG1456237	
1,2-Dibromoethane	U		0.193	0.500	1	04/06/2020 17:01	WG1456237	
Dibromomethane	U		0.117	0.500	1	04/06/2020 17:01	WG1456237	
1,2-Dichlorobenzene	U		0.101	0.500	1	04/06/2020 17:01	WG1456237	
1,3-Dichlorobenzene	U		0.130	0.500	1	04/06/2020 17:01	WG1456237	
1,4-Dichlorobenzene	U UJ	J4	0.121	0.500	1	04/06/2020 17:01	WG1456237	
Dichlorodifluoromethane	U		0.127	2.50	1	04/06/2020 17:01	WG1456237	
1,1-Dichloroethane	U		0.114	0.500	1	04/06/2020 17:01	WG1456237	
1,2-Dichloroethane	U		0.108	0.500	1	04/06/2020 17:01	WG1456237	
1,1-Dichloroethene	U		0.188	0.500	1	04/06/2020 17:01	WG1456237	
cis-1,2-Dichloroethene	0.588		0.0933	0.500	1	04/06/2020 17:01	WG1456237	
trans-1,2-Dichloroethene	U		0.152	0.500	1	04/06/2020 17:01	WG1456237	
1,2-Dichloropropane	U		0.190	0.500	1	04/06/2020 17:01	WG1456237	
1,1-Dichloropropene	U		0.128	0.500	1	04/06/2020 17:01	WG1456237	
1,3-Dichloropropane	U		0.147	1.00	1	04/06/2020 17:01	WG1456237	
cis-1,3-Dichloropropene	U		0.0976	0.500	1	04/06/2020 17:01	WG1456237	
trans-1,3-Dichloropropene	U		0.222	0.500	1	04/06/2020 17:01	WG1456237	
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	04/06/2020 17:01	WG1456237	
2,2-Dichloropropane	U		0.0929	0.500	1	04/06/2020 17:01	WG1456237	
Di-isopropyl ether	U		0.0924	0.500	1	04/06/2020 17:01	WG1456237	
Ethylbenzene	U		0.158	0.500	1	04/06/2020 17:01	WG1456237	
Hexachloro-1,3-butadiene	U		0.157	1.00	1	04/06/2020 17:01	WG1456237	
2-Hexanone	U		0.757	5.00	1	04/06/2020 17:01	WG1456237	
n-Hexane	U		0.305	5.00	1	04/06/2020 17:01	WG1456237	
Iodomethane	U		0.377	10.0	1	04/06/2020 17:01	WG1456237	
Isopropylbenzene	U		0.126	0.500	1	04/06/2020 17:01	WG1456237	
p-Isopropyltoluene	U		0.138	0.500	1	04/06/2020 17:01	WG1456237	
2-Butanone (MEK)	U UJ	J0	1.28	5.00	1	04/06/2020 17:01	WG1456237	
Methylene Chloride	U		1.07	2.50	1	04/06/2020 17:01	WG1456237	
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	04/06/2020 17:01	WG1456237	
Methyl tert-butyl ether	U		0.102	0.500	1	04/06/2020 17:01	WG1456237	
Naphthalene	U		0.174	2.50	1	04/06/2020 17:01	WG1456237	
n-Propylbenzene	U		0.162	0.500	1	04/06/2020 17:01	WG1456237	
Styrene	U		0.117	0.500	1	04/06/2020 17:01	WG1456237	
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	04/06/2020 17:01	WG1456237	
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	04/06/2020 17:01	WG1456237	
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	04/06/2020 17:01	WG1456237	
Tetrachloroethene	U		0.199	0.500	1	04/06/2020 17:01	WG1456237	
Toluene	U		0.412	0.500	1	04/06/2020 17:01	WG1456237	
1,2,3-Trichlorobenzene	U		0.164	0.500	1	04/06/2020 17:01	WG1456237	
1,2,4-Trichlorobenzene	U		0.355	0.500	1	04/06/2020 17:01	WG1456237	
1,1,1-Trichloroethane	U		0.0940	0.500	1	04/06/2020 17:01	WG1456237	
1,1,2-Trichloroethane	U		0.186	0.500	1	04/06/2020 17:01	WG1456237	JC 5/6/2020
Trichloroethene	0.244	J	0.153	0.500	1	04/06/2020 17:01	WG1456237	
Trichlorofluoromethane	U		0.130	2.50	1	04/06/2020 17:01	WG1456237	
1,2,3-Trichloropropane	U		0.247	2.50	1	04/06/2020 17:01	WG1456237	
1,2,4-Trimethylbenzene	U		0.123	0.500	1	04/06/2020 17:01	WG1456237	
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	04/06/2020 17:01	WG1456237	
1,3,5-Trimethylbenzene	U		0.124	0.500	1	04/06/2020 17:01	WG1456237	

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Vinyl acetate	U		0.645	5.00	1	04/06/2020 17:01	WG1456237
Vinyl chloride	3.79		0.118	0.500	1	04/06/2020 17:01	WG1456237
Xylenes, Total	U		0.316	1.50	1	04/06/2020 17:01	WG1456237
(S) Toluene-d8	*102*			*80.0-120*		*04/06/2020 17:01*	WG1456237
(S) 4-Bromofluorobenzene	*102*			*77.0-126*		*04/06/2020 17:01*	WG1456237
(S) 1,2-Dichloroethane-d4	*100*			*70.0-130*		*04/06/2020 17:01*	WG1456237

JC 5/6/2020

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

Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	169000		8450	20000	1	04/08/2020 16:49	WG1457347

Sample Narrative:

L1205789-03 WG1457347: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	12700		51.9	1000	1	04/04/2020 17:30	WG1455548
Nitrate	35.4	J	22.7	100	1	04/04/2020 17:30	WG1455548
Sulfate	39600		77.4	5000	1	04/04/2020 17:30	WG1455548

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	1480	~~B~~	102	1000	1	04/08/2020 18:53	WG1457464

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	1220		15.0	100	1	04/06/2020 13:48	WG1455814
Manganese	652		0.250	5.00	1	04/06/2020 13:48	WG1455814

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	U		31.6	100	1	04/07/2020 01:14	WG1456436
(S) a,a,a-Trifluorotoluene(FID)	*112*			*78.0-120*		*04/07/2020 01:14*	WG1456436

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	77.1		0.287	0.678	1	04/07/2020 13:57	WG1456588
Ethane	U		0.296	1.29	1	04/07/2020 13:57	WG1456588
Ethene	15.2		0.422	1.27	1	04/07/2020 13:57	WG1456588

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U		1.05	25.0	1	04/06/2020 17:20	WG1456237
Acrylonitrile	U		0.873	5.00	1	04/06/2020 17:20	WG1456237
Benzene	U		0.0896	0.500	1	04/06/2020 17:20	WG1456237
Bromobenzene	U		0.133	0.500	1	04/06/2020 17:20	WG1456237
Bromodichloromethane	U		0.0800	0.500	1	04/06/2020 17:20	WG1456237
Bromochloromethane	U		0.145	0.500	1	04/06/2020 17:20	WG1456237
Bromoform	U		0.186	0.500	1	04/06/2020 17:20	WG1456237
Bromomethane	U		0.157	2.50	1	04/06/2020 17:20	WG1456237
n-Butylbenzene	U		0.143	0.500	1	04/06/2020 17:20	WG1456237
sec-Butylbenzene	U		0.134	0.500	1	04/06/2020 17:20	WG1456237
tert-Butylbenzene	U		0.183	0.500	1	04/06/2020 17:20	WG1456237
Carbon disulfide	U		0.101	0.500	1	04/06/2020 17:20	WG1456237
Carbon tetrachloride	U		0.159	0.500	1	04/06/2020 17:20	WG1456237

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chlorobenzene	U		0.140	0.500	1	04/06/2020 17:20	WG1456237
Chlorodibromomethane	U		0.128	0.500	1	04/06/2020 17:20	WG1456237
Chloroethane	U		0.141	2.50	1	04/06/2020 17:20	WG1456237
Chloroform	U		0.0860	0.500	1	04/06/2020 17:20	WG1456237
Chloromethane	U		0.153	1.25	1	04/06/2020 17:20	WG1456237
2-Chlorotoluene	U		0.111	0.500	1	04/06/2020 17:20	WG1456237
4-Chlorotoluene	U		0.0972	0.500	1	04/06/2020 17:20	WG1456237
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	04/06/2020 17:20	WG1456237
1,2-Dibromoethane	U		0.193	0.500	1	04/06/2020 17:20	WG1456237
Dibromomethane	U		0.117	0.500	1	04/06/2020 17:20	WG1456237
1,2-Dichlorobenzene	U		0.101	0.500	1	04/06/2020 17:20	WG1456237
1,3-Dichlorobenzene	U		0.130	0.500	1	04/06/2020 17:20	WG1456237
1,4-Dichlorobenzene	U UJ	J4	0.121	0.500	1	04/06/2020 17:20	WG1456237
Dichlorodifluoromethane	U		0.127	2.50	1	04/06/2020 17:20	WG1456237
1,1-Dichloroethane	U		0.114	0.500	1	04/06/2020 17:20	WG1456237
1,2-Dichloroethane	U		0.108	0.500	1	04/06/2020 17:20	WG1456237
1,1-Dichloroethene	U		0.188	0.500	1	04/06/2020 17:20	WG1456237
cis-1,2-Dichloroethene	0.449	J	0.0933	0.500	1	04/06/2020 17:20	WG1456237
trans-1,2-Dichloroethene	U		0.152	0.500	1	04/06/2020 17:20	WG1456237
1,2-Dichloropropane	U		0.190	0.500	1	04/06/2020 17:20	WG1456237
1,1-Dichloropropene	U		0.128	0.500	1	04/06/2020 17:20	WG1456237
1,3-Dichloropropane	U		0.147	1.00	1	04/06/2020 17:20	WG1456237
cis-1,3-Dichloropropene	U		0.0976	0.500	1	04/06/2020 17:20	WG1456237
trans-1,3-Dichloropropene	U		0.222	0.500	1	04/06/2020 17:20	WG1456237
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	04/06/2020 17:20	WG1456237
2,2-Dichloropropane	U		0.0929	0.500	1	04/06/2020 17:20	WG1456237
Di-isopropyl ether	U		0.0924	0.500	1	04/06/2020 17:20	WG1456237
Ethylbenzene	U		0.158	0.500	1	04/06/2020 17:20	WG1456237
Hexachloro-1,3-butadiene	U		0.157	1.00	1	04/06/2020 17:20	WG1456237
2-Hexanone	U		0.757	5.00	1	04/06/2020 17:20	WG1456237
n-Hexane	U		0.305	5.00	1	04/06/2020 17:20	WG1456237
Iodomethane	U		0.377	10.0	1	04/06/2020 17:20	WG1456237
Isopropylbenzene	U		0.126	0.500	1	04/06/2020 17:20	WG1456237
p-Isopropyltoluene	U		0.138	0.500	1	04/06/2020 17:20	WG1456237
2-Butanone (MEK)	U UJ	J0	1.28	5.00	1	04/06/2020 17:20	WG1456237
Methylene Chloride	U		1.07	2.50	1	04/06/2020 17:20	WG1456237
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	04/06/2020 17:20	WG1456237
Methyl tert-butyl ether	U		0.102	0.500	1	04/06/2020 17:20	WG1456237
Naphthalene	U		0.174	2.50	1	04/06/2020 17:20	WG1456237
n-Propylbenzene	U		0.162	0.500	1	04/06/2020 17:20	WG1456237
Styrene	U		0.117	0.500	1	04/06/2020 17:20	WG1456237
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	04/06/2020 17:20	WG1456237
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	04/06/2020 17:20	WG1456237
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	04/06/2020 17:20	WG1456237
Tetrachloroethene	U		0.199	0.500	1	04/06/2020 17:20	WG1456237
Toluene	U		0.412	0.500	1	04/06/2020 17:20	WG1456237
1,2,3-Trichlorobenzene	U		0.164	0.500	1	04/06/2020 17:20	WG1456237
1,2,4-Trichlorobenzene	U		0.355	0.500	1	04/06/2020 17:20	WG1456237
1,1,1-Trichloroethane	U		0.0940	0.500	1	04/06/2020 17:20	WG1456237
1,1,2-Trichloroethane	U		0.186	0.500	1	04/06/2020 17:20	WG1456237
Trichloroethene	U		0.153	0.500	1	04/06/2020 17:20	WG1456237
Trichlorofluoromethane	U		0.130	2.50	1	04/06/2020 17:20	WG1456237
1,2,3-Trichloropropane	U		0.247	2.50	1	04/06/2020 17:20	WG1456237
1,2,4-Trimethylbenzene	U		0.123	0.500	1	04/06/2020 17:20	WG1456237
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	04/06/2020 17:20	WG1456237
1,3,5-Trimethylbenzene	U		0.124	0.500	1	04/06/2020 17:20	WG1456237

JC 5/6/2020

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Vinyl acetate	U		0.645	5.00	1	04/06/2020 17:20	WG1456237
Vinyl chloride	1.55		0.118	0.500	1	04/06/2020 17:20	WG1456237
Xylenes, Total	U		0.316	1.50	1	04/06/2020 17:20	WG1456237
(S) Toluene-d8	*101*			*80.0-120*		*04/06/2020 17:20*	WG1456237
(S) 4-Bromofluorobenzene	*99.1*			*77.0-126*		*04/06/2020 17:20*	WG1456237
(S) 1,2-Dichloroethane-d4	*97.5*			*70.0-130*		*04/06/2020 17:20*	WG1456237

JC 5/6/2020

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

Wet Chemistry by Method 2320 B-2011

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Alkalinity	170000		8450	20000	1	04/08/2020 16:58	WG1457347

Sample Narrative:

L1205789-04 WG1457347: Endpoint pH 4.5

Wet Chemistry by Method 9056A

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Chloride	12600		51.9	1000	1	04/04/2020 17:43	WG1455548
Nitrate	U		22.7	100	1	04/04/2020 17:43	WG1455548
Sulfate	40000		77.4	5000	1	04/04/2020 17:43	WG1455548

Wet Chemistry by Method 9060A

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
TOC (Total Organic Carbon)	1490	~~B~~	102	1000	1	04/08/2020 20:19	WG1457464

Metals (ICPMS) by Method 6020B

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Iron	1160		15.0	100	1	04/06/2020 13:51	WG1455814
Manganese	658		0.250	5.00	1	04/06/2020 13:51	WG1455814

Volatile Organic Compounds (GC) by Method NWTPHGX

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Gasoline Range Organics-NWTPH	U		31.6	100	1	04/07/2020 01:35	WG1456436
(S) a,a,a-Trifluorotoluene(FID)	*112*			*78.0-120*		*04/07/2020 01:35*	WG1456436

Volatile Organic Compounds (GC) by Method RSK175

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Methane	68.5		0.287	0.678	1	04/07/2020 14:01	WG1456588
Ethane	U		0.296	1.29	1	04/07/2020 14:01	WG1456588
Ethene	16.6		0.422	1.27	1	04/07/2020 14:01	WG1456588

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

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Acetone	U		1.05	25.0	1	04/06/2020 17:39	WG1456237
Acrylonitrile	U		0.873	5.00	1	04/06/2020 17:39	WG1456237
Benzene	U		0.0896	0.500	1	04/06/2020 17:39	WG1456237
Bromobenzene	U		0.133	0.500	1	04/06/2020 17:39	WG1456237
Bromodichloromethane	U		0.0800	0.500	1	04/06/2020 17:39	WG1456237
Bromochloromethane	U		0.145	0.500	1	04/06/2020 17:39	WG1456237
Bromoform	U		0.186	0.500	1	04/06/2020 17:39	WG1456237
Bromomethane	U		0.157	2.50	1	04/06/2020 17:39	WG1456237
n-Butylbenzene	U		0.143	0.500	1	04/06/2020 17:39	WG1456237
sec-Butylbenzene	U		0.134	0.500	1	04/06/2020 17:39	WG1456237
tert-Butylbenzene	U		0.183	0.500	1	04/06/2020 17:39	WG1456237
Carbon disulfide	U		0.101	0.500	1	04/06/2020 17:39	WG1456237
Carbon tetrachloride	U		0.159	0.500	1	04/06/2020 17:39	WG1456237

JC 5/6/2020

MW-189-040320
Collected date/time: 04/03/20 11:10

SAMPLE RESULTS - 04

L1205789

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chlorobenzene	U		0.140	0.500	1	04/06/2020 17:39	WG1456237
Chlorodibromomethane	U		0.128	0.500	1	04/06/2020 17:39	WG1456237
Chloroethane	U		0.141	2.50	1	04/06/2020 17:39	WG1456237
Chloroform	U		0.0860	0.500	1	04/06/2020 17:39	WG1456237
Chloromethane	U		0.153	1.25	1	04/06/2020 17:39	WG1456237
2-Chlorotoluene	U		0.111	0.500	1	04/06/2020 17:39	WG1456237
4-Chlorotoluene	U		0.0972	0.500	1	04/06/2020 17:39	WG1456237
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	04/06/2020 17:39	WG1456237
1,2-Dibromoethane	U		0.193	0.500	1	04/06/2020 17:39	WG1456237
Dibromomethane	U		0.117	0.500	1	04/06/2020 17:39	WG1456237
1,2-Dichlorobenzene	U		0.101	0.500	1	04/06/2020 17:39	WG1456237
1,3-Dichlorobenzene	U		0.130	0.500	1	04/06/2020 17:39	WG1456237
1,4-Dichlorobenzene	U	UJ J4	0.121	0.500	1	04/06/2020 17:39	WG1456237
Dichlorodifluoromethane	U		0.127	2.50	1	04/06/2020 17:39	WG1456237
1,1-Dichloroethane	U		0.114	0.500	1	04/06/2020 17:39	WG1456237
1,2-Dichloroethane	U		0.108	0.500	1	04/06/2020 17:39	WG1456237
1,1-Dichloroethene	U		0.188	0.500	1	04/06/2020 17:39	WG1456237
cis-1,2-Dichloroethene	0.435	J	0.0933	0.500	1	04/06/2020 17:39	WG1456237
trans-1,2-Dichloroethene	U		0.152	0.500	1	04/06/2020 17:39	WG1456237
1,2-Dichloropropane	U		0.190	0.500	1	04/06/2020 17:39	WG1456237
1,1-Dichloropropene	U		0.128	0.500	1	04/06/2020 17:39	WG1456237
1,3-Dichloropropane	U		0.147	1.00	1	04/06/2020 17:39	WG1456237
cis-1,3-Dichloropropene	U		0.0976	0.500	1	04/06/2020 17:39	WG1456237
trans-1,3-Dichloropropene	U		0.222	0.500	1	04/06/2020 17:39	WG1456237
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	04/06/2020 17:39	WG1456237
2,2-Dichloropropane	U		0.0929	0.500	1	04/06/2020 17:39	WG1456237
Di-isopropyl ether	U		0.0924	0.500	1	04/06/2020 17:39	WG1456237
Ethylbenzene	U		0.158	0.500	1	04/06/2020 17:39	WG1456237
Hexachloro-1,3-butadiene	U		0.157	1.00	1	04/06/2020 17:39	WG1456237
2-Hexanone	U		0.757	5.00	1	04/06/2020 17:39	WG1456237
n-Hexane	U		0.305	5.00	1	04/06/2020 17:39	WG1456237
Iodomethane	U		0.377	10.0	1	04/06/2020 17:39	WG1456237
Isopropylbenzene	U		0.126	0.500	1	04/06/2020 17:39	WG1456237
p-Isopropyltoluene	U		0.138	0.500	1	04/06/2020 17:39	WG1456237
2-Butanone (MEK)	U	UJ J0	1.28	5.00	1	04/06/2020 17:39	WG1456237
Methylene Chloride	U		1.07	2.50	1	04/06/2020 17:39	WG1456237
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	04/06/2020 17:39	WG1456237
Methyl tert-butyl ether	U		0.102	0.500	1	04/06/2020 17:39	WG1456237
Naphthalene	U		0.174	2.50	1	04/06/2020 17:39	WG1456237
n-Propylbenzene	U		0.162	0.500	1	04/06/2020 17:39	WG1456237
Styrene	U		0.117	0.500	1	04/06/2020 17:39	WG1456237
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	04/06/2020 17:39	WG1456237
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	04/06/2020 17:39	WG1456237
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	04/06/2020 17:39	WG1456237
Tetrachloroethene	U		0.199	0.500	1	04/06/2020 17:39	WG1456237
Toluene	U		0.412	0.500	1	04/06/2020 17:39	WG1456237
1,2,3-Trichlorobenzene	U		0.164	0.500	1	04/06/2020 17:39	WG1456237
1,2,4-Trichlorobenzene	U		0.355	0.500	1	04/06/2020 17:39	WG1456237
1,1,1-Trichloroethane	U		0.0940	0.500	1	04/06/2020 17:39	WG1456237
1,1,2-Trichloroethane	U		0.186	0.500	1	04/06/2020 17:39	WG1456237
Trichloroethene	U		0.153	0.500	1	04/06/2020 17:39	WG1456237
Trichlorofluoromethane	U		0.130	2.50	1	04/06/2020 17:39	WG1456237
1,2,3-Trichloropropane	U		0.247	2.50	1	04/06/2020 17:39	WG1456237
1,2,4-Trimethylbenzene	U		0.123	0.500	1	04/06/2020 17:39	WG1456237
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	04/06/2020 17:39	WG1456237
1,3,5-Trimethylbenzene	U		0.124	0.500	1	04/06/2020 17:39	WG1456237

JC 5/6/2020

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Vinyl acetate	U		0.645	5.00	1	04/06/2020 17:39	WG1456237
Vinyl chloride	1.58		0.118	0.500	1	04/06/2020 17:39	WG1456237
Xylenes, Total	U		0.316	1.50	1	04/06/2020 17:39	WG1456237
(S) Toluene-d8	*101*			*80.0-120*		*04/06/2020 17:39*	WG1456237
(S) 4-Bromofluorobenzene	*99.6*			*77.0-126*		*04/06/2020 17:39*	WG1456237
(S) 1,2-Dichloroethane-d4	*97.4*			*70.0-130*		*04/06/2020 17:39*	WG1456237

JC 5/6/2020

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

Wet Chemistry by Method 2320 B-2011

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Alkalinity	706000		8450	20000	1	04/08/2020 17:07	WG1457347

Sample Narrative:

L1205789-05 WG1457347: Endpoint pH 4.5

Wet Chemistry by Method 9056A

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Chloride	20100		51.9	1000	1	04/04/2020 17:56	WG1455548
Nitrate	U		22.7	100	1	04/04/2020 17:56	WG1455548
Sulfate	114000		387	25000	5	04/04/2020 18:09	WG1455548

Wet Chemistry by Method 9060A

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
TOC (Total Organic Carbon)	10800		102	1000	1	04/08/2020 20:42	WG1457464

Metals (ICPMS) by Method 6020B

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Iron	7490		15.0	100	1	04/06/2020 13:55	WG1455814
Manganese	879		0.250	5.00	1	04/06/2020 13:55	WG1455814

Volatile Organic Compounds (GC) by Method NWTPHGX

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Gasoline Range Organics-NWTPH	1420	Z, J+	31.6	100	1	04/07/2020 01:57	WG1456436
(S) a,a,a-Trifluorotoluene(FID)	*113*			*78.0-120*		*04/07/2020 01:57*	WG1456436

Sample Narrative:

L1205789-05 WG1456436: No discernable petroleum pattern.

Volatile Organic Compounds (GC) by Method RSK175

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Methane	9040		2.87	6.78	10	04/08/2020 13:10	WG1456921
Ethane	50.5		0.296	1.29	1	04/07/2020 14:03	WG1456588
Ethene	31.9		0.422	1.27	1	04/07/2020 14:03	WG1456588

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

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Acetone	U		1.05	25.0	1	04/06/2020 17:58	WG1456237
Acrylonitrile	U		0.873	5.00	1	04/06/2020 17:58	WG1456237
Benzene	0.298	J	0.0896	0.500	1	04/06/2020 17:58	WG1456237
Bromobenzene	U		0.133	0.500	1	04/06/2020 17:58	WG1456237
Bromodichloromethane	U		0.0800	0.500	1	04/06/2020 17:58	WG1456237
Bromochloromethane	U		0.145	0.500	1	04/06/2020 17:58	WG1456237
Bromoform	U		0.186	0.500	1	04/06/2020 17:58	WG1456237
Bromomethane	U		0.157	2.50	1	04/06/2020 17:58	WG1456237
n-Butylbenzene	U		0.143	0.500	1	04/06/2020 17:58	WG1456237
sec-Butylbenzene	U		0.134	0.500	1	04/06/2020 17:58	WG1456237

JC 5/6/2020

MW107-040320

Collected date/time: 04/03/20 11:15

SAMPLE RESULTS - 05

L1205789

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
tert-Butylbenzene	U		0.183	0.500	1	04/06/2020 17:58	WG1456237
Carbon disulfide	U		0.101	0.500	1	04/06/2020 17:58	WG1456237
Carbon tetrachloride	U		0.159	0.500	1	04/06/2020 17:58	WG1456237
Chlorobenzene	U		0.140	0.500	1	04/06/2020 17:58	WG1456237
Chlorodibromomethane	U		0.128	0.500	1	04/06/2020 17:58	WG1456237
Chloroethane	2.32	J	0.141	2.50	1	04/06/2020 17:58	WG1456237
Chloroform	U		0.0860	0.500	1	04/06/2020 17:58	WG1456237
Chloromethane	U		0.153	1.25	1	04/06/2020 17:58	WG1456237
2-Chlorotoluene	U		0.111	0.500	1	04/06/2020 17:58	WG1456237
4-Chlorotoluene	U		0.0972	0.500	1	04/06/2020 17:58	WG1456237
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	04/06/2020 17:58	WG1456237
1,2-Dibromoethane	U		0.193	0.500	1	04/06/2020 17:58	WG1456237
Dibromomethane	U		0.117	0.500	1	04/06/2020 17:58	WG1456237
1,2-Dichlorobenzene	U		0.101	0.500	1	04/06/2020 17:58	WG1456237
1,3-Dichlorobenzene	U		0.130	0.500	1	04/06/2020 17:58	WG1456237
1,4-Dichlorobenzene	U	UJ J4	0.121	0.500	1	04/06/2020 17:58	WG1456237
Dichlorodifluoromethane	U		0.127	2.50	1	04/06/2020 17:58	WG1456237
1,1-Dichloroethane	U		0.114	0.500	1	04/06/2020 17:58	WG1456237
1,2-Dichloroethane	U		0.108	0.500	1	04/06/2020 17:58	WG1456237
1,1-Dichloroethene	14.5		0.188	0.500	1	04/06/2020 17:58	WG1456237
cis-1,2-Dichloroethene	2720		2.33	12.5	25	04/10/2020 18:48	WG1458866
trans-1,2-Dichloroethene	15.4		0.152	0.500	1	04/06/2020 17:58	WG1456237
1,2-Dichloropropane	U		0.190	0.500	1	04/06/2020 17:58	WG1456237
1,1-Dichloropropene	U		0.128	0.500	1	04/06/2020 17:58	WG1456237
1,3-Dichloropropane	U		0.147	1.00	1	04/06/2020 17:58	WG1456237
cis-1,3-Dichloropropene	U		0.0976	0.500	1	04/06/2020 17:58	WG1456237
trans-1,3-Dichloropropene	U		0.222	0.500	1	04/06/2020 17:58	WG1456237
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	04/06/2020 17:58	WG1456237
2,2-Dichloropropane	U		0.0929	0.500	1	04/06/2020 17:58	WG1456237
Di-isopropyl ether	U		0.0924	0.500	1	04/06/2020 17:58	WG1456237
Ethylbenzene	U		0.158	0.500	1	04/06/2020 17:58	WG1456237
Hexachloro-1,3-butadiene	U		0.157	1.00	1	04/06/2020 17:58	WG1456237
2-Hexanone	U		0.757	5.00	1	04/06/2020 17:58	WG1456237
n-Hexane	U		0.305	5.00	1	04/06/2020 17:58	WG1456237
Iodomethane	U		0.377	10.0	1	04/06/2020 17:58	WG1456237
Isopropylbenzene	U		0.126	0.500	1	04/06/2020 17:58	WG1456237
p-Isopropyltoluene	U		0.138	0.500	1	04/06/2020 17:58	WG1456237
2-Butanone (MEK)	U	UJ J0	1.28	5.00	1	04/06/2020 17:58	WG1456237
Methylene Chloride	U		1.07	2.50	1	04/06/2020 17:58	WG1456237
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	04/06/2020 17:58	WG1456237
Methyl tert-butyl ether	U		0.102	0.500	1	04/06/2020 17:58	WG1456237
Naphthalene	U		0.174	2.50	1	04/06/2020 17:58	WG1456237
n-Propylbenzene	U		0.162	0.500	1	04/06/2020 17:58	WG1456237
Styrene	U		0.117	0.500	1	04/06/2020 17:58	WG1456237
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	04/06/2020 17:58	WG1456237
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	04/06/2020 17:58	WG1456237
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	04/06/2020 17:58	WG1456237
Tetrachloroethene	63.8		0.199	0.500	1	04/06/2020 17:58	WG1456237
Toluene	U		0.412	0.500	1	04/06/2020 17:58	WG1456237
1,2,3-Trichlorobenzene	U		0.164	0.500	1	04/06/2020 17:58	WG1456237
1,2,4-Trichlorobenzene	U		0.355	0.500	1	04/06/2020 17:58	WG1456237
1,1,1-Trichloroethane	U		0.0940	0.500	1	04/06/2020 17:58	WG1456237
1,1,2-Trichloroethane	U		0.186	0.500	1	04/06/2020 17:58	WG1456237
Trichloroethene	700		3.83	12.5	25	04/10/2020 18:48	WG1458866
Trichlorofluoromethane	U		0.130	2.50	1	04/06/2020 17:58	WG1456237
1,2,3-Trichloropropane	U		0.247	2.50	1	04/06/2020 17:58	WG1456237

JC 5/6/2020

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

MW107-040320

Collected date/time: 04/03/20 11:15

SAMPLE RESULTS - 05

L1205789

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,2,4-Trimethylbenzene	U		0.123	0.500	1	04/06/2020 17:58	WG1456237
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	04/06/2020 17:58	WG1456237
1,3,5-Trimethylbenzene	U		0.124	0.500	1	04/06/2020 17:58	WG1456237
Vinyl acetate	U		0.645	5.00	1	04/06/2020 17:58	WG1456237
Vinyl chloride	216		2.95	12.5	25	04/10/2020 18:48	WG1458866
Xylenes, Total	U		0.316	1.50	1	04/06/2020 17:58	WG1456237
(S) Toluene-d8	*102*			*80.0-120*		*04/06/2020 17:58*	WG1456237
(S) Toluene-d8	*114*			*80.0-120*		*04/10/2020 18:48*	WG1458866
(S) 4-Bromofluorobenzene	*102*			*77.0-126*		*04/06/2020 17:58*	WG1456237
(S) 4-Bromofluorobenzene	*102*			*77.0-126*		*04/10/2020 18:48*	WG1458866
(S) 1,2-Dichloroethane-d4	*99.9*			*70.0-130*		*04/06/2020 17:58*	WG1456237
(S) 1,2-Dichloroethane-d4	*106*			*70.0-130*		*04/10/2020 18:48*	WG1458866

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

JC 5/6/2020

Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	233000		8450	20000	1	04/08/2020 17:24	WG1457347

Sample Narrative:

L1205789-07 WG1457347: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	16600		51.9	1000	1	04/04/2020 18:35	WG1455548
Nitrate	U		22.7	100	1	04/04/2020 18:35	WG1455548
Sulfate	8280		77.4	5000	1	04/04/2020 18:35	WG1455548

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	1430	~~B~~	102	1000	1	04/08/2020 21:08	WG1457464

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	318		15.0	100	1	04/06/2020 14:45	WG1455814
Manganese	599		0.250	5.00	1	04/06/2020 14:45	WG1455814

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	49.3 U	~~B J~~	31.6	100	1	04/07/2020 02:40	WG1456436
(S) a,a,a-Trifluorotoluene(FID)	*112*			*78.0-120*		*04/07/2020 02:40*	WG1456436

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	528		0.287	0.678	1	04/07/2020 14:10	WG1456588
Ethane	U		0.296	1.29	1	04/07/2020 14:10	WG1456588
Ethene	U		0.422	1.27	1	04/07/2020 14:10	WG1456588

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U		1.05	25.0	1	04/06/2020 18:36	WG1456237
Acrylonitrile	U		0.873	5.00	1	04/06/2020 18:36	WG1456237
Benzene	U		0.0896	0.500	1	04/06/2020 18:36	WG1456237
Bromobenzene	U		0.133	0.500	1	04/06/2020 18:36	WG1456237
Bromodichloromethane	U		0.0800	0.500	1	04/06/2020 18:36	WG1456237
Bromochloromethane	U		0.145	0.500	1	04/06/2020 18:36	WG1456237
Bromoform	U		0.186	0.500	1	04/06/2020 18:36	WG1456237
Bromomethane	U		0.157	2.50	1	04/06/2020 18:36	WG1456237
n-Butylbenzene	U		0.143	0.500	1	04/06/2020 18:36	WG1456237
sec-Butylbenzene	U		0.134	0.500	1	04/06/2020 18:36	WG1456237
tert-Butylbenzene	U		0.183	0.500	1	04/06/2020 18:36	WG1456237
Carbon disulfide	U		0.101	0.500	1	04/06/2020 18:36	WG1456237
Carbon tetrachloride	U		0.159	0.500	1	04/06/2020 18:36	WG1456237

JC 5/6/2020

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

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chlorobenzene	U		0.140	0.500	1	04/06/2020 18:36	WG1456237
Chlorodibromomethane	U		0.128	0.500	1	04/06/2020 18:36	WG1456237
Chloroethane	U		0.141	2.50	1	04/06/2020 18:36	WG1456237
Chloroform	U		0.0860	0.500	1	04/06/2020 18:36	WG1456237
Chloromethane	U		0.153	1.25	1	04/06/2020 18:36	WG1456237
2-Chlorotoluene	U		0.111	0.500	1	04/06/2020 18:36	WG1456237
4-Chlorotoluene	U		0.0972	0.500	1	04/06/2020 18:36	WG1456237
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	04/06/2020 18:36	WG1456237
1,2-Dibromoethane	U		0.193	0.500	1	04/06/2020 18:36	WG1456237
Dibromomethane	U		0.117	0.500	1	04/06/2020 18:36	WG1456237
1,2-Dichlorobenzene	U		0.101	0.500	1	04/06/2020 18:36	WG1456237
1,3-Dichlorobenzene	U		0.130	0.500	1	04/06/2020 18:36	WG1456237
1,4-Dichlorobenzene	U	UJ J4	0.121	0.500	1	04/06/2020 18:36	WG1456237
Dichlorodifluoromethane	U		0.127	2.50	1	04/06/2020 18:36	WG1456237
1,1-Dichloroethane	U		0.114	0.500	1	04/06/2020 18:36	WG1456237
1,2-Dichloroethane	U		0.108	0.500	1	04/06/2020 18:36	WG1456237
1,1-Dichloroethene	2.67		0.188	0.500	1	04/06/2020 18:36	WG1456237
cis-1,2-Dichloroethene	23.4		0.0933	0.500	1	04/06/2020 18:36	WG1456237
trans-1,2-Dichloroethene	1.27		0.152	0.500	1	04/06/2020 18:36	WG1456237
1,2-Dichloropropane	U		0.190	0.500	1	04/06/2020 18:36	WG1456237
1,1-Dichloropropene	U		0.128	0.500	1	04/06/2020 18:36	WG1456237
1,3-Dichloropropane	U		0.147	1.00	1	04/06/2020 18:36	WG1456237
cis-1,3-Dichloropropene	U		0.0976	0.500	1	04/06/2020 18:36	WG1456237
trans-1,3-Dichloropropene	U		0.222	0.500	1	04/06/2020 18:36	WG1456237
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	04/06/2020 18:36	WG1456237
2,2-Dichloropropane	U		0.0929	0.500	1	04/06/2020 18:36	WG1456237
Di-isopropyl ether	U		0.0924	0.500	1	04/06/2020 18:36	WG1456237
Ethylbenzene	U		0.158	0.500	1	04/06/2020 18:36	WG1456237
Hexachloro-1,3-butadiene	U		0.157	1.00	1	04/06/2020 18:36	WG1456237
2-Hexanone	U		0.757	5.00	1	04/06/2020 18:36	WG1456237
n-Hexane	U		0.305	5.00	1	04/06/2020 18:36	WG1456237
Iodomethane	U		0.377	10.0	1	04/06/2020 18:36	WG1456237
Isopropylbenzene	U		0.126	0.500	1	04/06/2020 18:36	WG1456237
p-Isopropyltoluene	U		0.138	0.500	1	04/06/2020 18:36	WG1456237
2-Butanone (MEK)	U	UJ J0	1.28	5.00	1	04/06/2020 18:36	WG1456237
Methylene Chloride	U		1.07	2.50	1	04/06/2020 18:36	WG1456237
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	04/06/2020 18:36	WG1456237
Methyl tert-butyl ether	U		0.102	0.500	1	04/06/2020 18:36	WG1456237
Naphthalene	U		0.174	2.50	1	04/06/2020 18:36	WG1456237
n-Propylbenzene	U		0.162	0.500	1	04/06/2020 18:36	WG1456237
Styrene	U		0.117	0.500	1	04/06/2020 18:36	WG1456237
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	04/06/2020 18:36	WG1456237
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	04/06/2020 18:36	WG1456237
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	04/06/2020 18:36	WG1456237
Tetrachloroethene	16.7		0.199	0.500	1	04/06/2020 18:36	WG1456237
Toluene	U		0.412	0.500	1	04/06/2020 18:36	WG1456237
1,2,3-Trichlorobenzene	U		0.164	0.500	1	04/06/2020 18:36	WG1456237
1,2,4-Trichlorobenzene	U		0.355	0.500	1	04/06/2020 18:36	WG1456237
1,1,1-Trichloroethane	U		0.0940	0.500	1	04/06/2020 18:36	WG1456237
1,1,2-Trichloroethane	U		0.186	0.500	1	04/06/2020 18:36	WG1456237
Trichloroethene	27.0		0.153	0.500	1	04/06/2020 18:36	WG1456237
Trichlorofluoromethane	U		0.130	2.50	1	04/06/2020 18:36	WG1456237
1,2,3-Trichloropropane	U		0.247	2.50	1	04/06/2020 18:36	WG1456237
1,2,4-Trimethylbenzene	U		0.123	0.500	1	04/06/2020 18:36	WG1456237
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	04/06/2020 18:36	WG1456237
1,3,5-Trimethylbenzene	U		0.124	0.500	1	04/06/2020 18:36	WG1456237

JC 5/6/2020

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Vinyl acetate	U		0.645	5.00	1	04/06/2020 18:36	WG1456237
Vinyl chloride	1.92		0.118	0.500	1	04/06/2020 18:36	WG1456237
Xylenes, Total	U		0.316	1.50	1	04/06/2020 18:36	WG1456237
(S) Toluene-d8	*102*			*80.0-120*		*04/06/2020 18:36*	WG1456237
(S) 4-Bromofluorobenzene	*103*			*77.0-126*		*04/06/2020 18:36*	WG1456237
(S) 1,2-Dichloroethane-d4	*101*			*70.0-130*		*04/06/2020 18:36*	WG1456237

JC 5/6/2020

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U		1.05	25.0	1	04/09/2020 12:09	WG1457994
Acrylonitrile	U		0.873	5.00	1	04/09/2020 12:09	WG1457994
Benzene	U		0.0896	0.500	1	04/09/2020 12:09	WG1457994
Bromobenzene	U		0.133	0.500	1	04/09/2020 12:09	WG1457994
Bromodichloromethane	U		0.0800	0.500	1	04/09/2020 12:09	WG1457994
Bromochloromethane	U		0.145	0.500	1	04/09/2020 12:09	WG1457994
Bromoform	U		0.186	0.500	1	04/09/2020 12:09	WG1457994
Bromomethane	U		0.157	2.50	1	04/09/2020 12:09	WG1457994
n-Butylbenzene	U		0.143	0.500	1	04/09/2020 12:09	WG1457994
sec-Butylbenzene	U		0.134	0.500	1	04/09/2020 12:09	WG1457994
tert-Butylbenzene	U		0.183	0.500	1	04/09/2020 12:09	WG1457994
Carbon disulfide	U		0.101	0.500	1	04/09/2020 12:09	WG1457994
Carbon tetrachloride	U		0.159	0.500	1	04/09/2020 12:09	WG1457994
Chlorobenzene	U		0.140	0.500	1	04/09/2020 12:09	WG1457994
Chlorodibromomethane	U		0.128	0.500	1	04/09/2020 12:09	WG1457994
Chloroethane	U		0.141	2.50	1	04/09/2020 12:09	WG1457994
Chloroform	U		0.0860	0.500	1	04/09/2020 12:09	WG1457994
Chloromethane	U		0.153	1.25	1	04/09/2020 12:09	WG1457994
2-Chlorotoluene	U		0.111	0.500	1	04/09/2020 12:09	WG1457994
4-Chlorotoluene	U		0.0972	0.500	1	04/09/2020 12:09	WG1457994
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	04/09/2020 12:09	WG1457994
1,2-Dibromoethane	U		0.193	0.500	1	04/09/2020 12:09	WG1457994
Dibromomethane	U		0.117	0.500	1	04/09/2020 12:09	WG1457994
1,2-Dichlorobenzene	U		0.101	0.500	1	04/09/2020 12:09	WG1457994
1,3-Dichlorobenzene	U		0.130	0.500	1	04/09/2020 12:09	WG1457994
1,4-Dichlorobenzene	U		0.121	0.500	1	04/09/2020 12:09	WG1457994
Dichlorodifluoromethane	U		0.127	2.50	1	04/09/2020 12:09	WG1457994
1,1-Dichloroethane	U		0.114	0.500	1	04/09/2020 12:09	WG1457994
1,2-Dichloroethane	U		0.108	0.500	1	04/09/2020 12:09	WG1457994
1,1-Dichloroethene	U		0.188	0.500	1	04/09/2020 12:09	WG1457994
cis-1,2-Dichloroethene	U		0.0933	0.500	1	04/09/2020 12:09	WG1457994
trans-1,2-Dichloroethene	U		0.152	0.500	1	04/09/2020 12:09	WG1457994
1,2-Dichloropropane	U		0.190	0.500	1	04/09/2020 12:09	WG1457994
1,1-Dichloropropene	U		0.128	0.500	1	04/09/2020 12:09	WG1457994
1,3-Dichloropropane	U		0.147	1.00	1	04/09/2020 12:09	WG1457994
cis-1,3-Dichloropropene	U		0.0976	0.500	1	04/09/2020 12:09	WG1457994
trans-1,3-Dichloropropene	U		0.222	0.500	1	04/09/2020 12:09	WG1457994
trans-1,4-Dichloro-2-butene	U UJ	J0	0.257	5.00	1	04/09/2020 12:09	WG1457994
2,2-Dichloropropane	U		0.0929	0.500	1	04/09/2020 12:09	WG1457994
Di-isopropyl ether	U		0.0924	0.500	1	04/09/2020 12:09	WG1457994
Ethylbenzene	U		0.158	0.500	1	04/09/2020 12:09	WG1457994
Hexachloro-1,3-butadiene	U		0.157	1.00	1	04/09/2020 12:09	WG1457994
2-Hexanone	U		0.757	5.00	1	04/09/2020 12:09	WG1457994
n-Hexane	U		0.305	5.00	1	04/09/2020 12:09	WG1457994
Iodomethane	U		0.377	10.0	1	04/09/2020 12:09	WG1457994
Isopropylbenzene	U		0.126	0.500	1	04/09/2020 12:09	WG1457994
p-Isopropyltoluene	U		0.138	0.500	1	04/09/2020 12:09	WG1457994
2-Butanone (MEK)	U		1.28	5.00	1	04/09/2020 12:09	WG1457994
Methylene Chloride	U		1.07	2.50	1	04/09/2020 12:09	WG1457994
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	04/09/2020 12:09	WG1457994
Methyl tert-butyl ether	U		0.102	0.500	1	04/09/2020 12:09	WG1457994
Naphthalene	U		0.174	2.50	1	04/09/2020 12:09	WG1457994
n-Propylbenzene	U		0.162	0.500	1	04/09/2020 12:09	WG1457994
Styrene	U		0.117	0.500	1	04/09/2020 12:09	WG1457994
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	04/09/2020 12:09	WG1457994
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	04/09/2020 12:09	WG1457994

JC 4/29/2020

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

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	04/09/2020 12:09	WG1457994
Tetrachloroethene	U		0.199	0.500	1	04/09/2020 12:09	WG1457994
Toluene	U		0.412	0.500	1	04/09/2020 12:09	WG1457994
1,2,3-Trichlorobenzene	U		0.164	0.500	1	04/09/2020 12:09	WG1457994
1,2,4-Trichlorobenzene	U		0.355	0.500	1	04/09/2020 12:09	WG1457994
1,1,1-Trichloroethane	U		0.0940	0.500	1	04/09/2020 12:09	WG1457994
1,1,2-Trichloroethane	U		0.186	0.500	1	04/09/2020 12:09	WG1457994
Trichloroethene	U		0.153	0.500	1	04/09/2020 12:09	WG1457994
Trichlorofluoromethane	U		0.130	2.50	1	04/09/2020 12:09	WG1457994
1,2,3-Trichloropropane	U		0.247	2.50	1	04/09/2020 12:09	WG1457994
1,2,4-Trimethylbenzene	U		0.123	0.500	1	04/09/2020 12:09	WG1457994
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	04/09/2020 12:09	WG1457994
1,3,5-Trimethylbenzene	U		0.124	0.500	1	04/09/2020 12:09	WG1457994
Vinyl acetate	U		0.645	5.00	1	04/09/2020 12:09	WG1457994
Vinyl chloride	U		0.118	0.500	1	04/09/2020 12:09	WG1457994
Xylenes, Total	U		0.316	1.50	1	04/09/2020 12:09	WG1457994
(S) Toluene-d8	*103*			*80.0-120*		*04/09/2020 12:09*	WG1457994
(S) 4-Bromofluorobenzene	*98.6*			*77.0-126*		*04/09/2020 12:09*	WG1457994
(S) 1,2-Dichloroethane-d4	*106*			*70.0-130*		*04/09/2020 12:09*	WG1457994

JC 4/29/2020

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

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Acetone	U		1.05	25.0	1	04/09/2020 12:30	WG1457994
Acrylonitrile	U		0.873	5.00	1	04/09/2020 12:30	WG1457994
Benzene	7.26		0.0896	0.500	1	04/09/2020 12:30	WG1457994
Bromobenzene	U		0.133	0.500	1	04/09/2020 12:30	WG1457994
Bromodichloromethane	U		0.0800	0.500	1	04/09/2020 12:30	WG1457994
Bromochloromethane	U		0.145	0.500	1	04/09/2020 12:30	WG1457994
Bromoform	U		0.186	0.500	1	04/09/2020 12:30	WG1457994
Bromomethane	U		0.157	2.50	1	04/09/2020 12:30	WG1457994
n-Butylbenzene	4.08		0.143	0.500	1	04/09/2020 12:30	WG1457994
sec-Butylbenzene	5.16		0.134	0.500	1	04/09/2020 12:30	WG1457994
tert-Butylbenzene	0.186	J	0.183	0.500	1	04/09/2020 12:30	WG1457994
Carbon disulfide	U		0.101	0.500	1	04/09/2020 12:30	WG1457994
Carbon tetrachloride	U		0.159	0.500	1	04/09/2020 12:30	WG1457994
Chlorobenzene	U		0.140	0.500	1	04/09/2020 12:30	WG1457994
Chlorodibromomethane	U		0.128	0.500	1	04/09/2020 12:30	WG1457994
Chloroethane	U		0.141	2.50	1	04/09/2020 12:30	WG1457994
Chloroform	U		0.0860	0.500	1	04/09/2020 12:30	WG1457994
Chloromethane	U		0.153	1.25	1	04/09/2020 12:30	WG1457994
2-Chlorotoluene	U		0.111	0.500	1	04/09/2020 12:30	WG1457994
4-Chlorotoluene	U		0.0972	0.500	1	04/09/2020 12:30	WG1457994
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	04/09/2020 12:30	WG1457994
1,2-Dibromoethane	U		0.193	0.500	1	04/09/2020 12:30	WG1457994
Dibromomethane	U		0.117	0.500	1	04/09/2020 12:30	WG1457994
1,2-Dichlorobenzene	U		0.101	0.500	1	04/09/2020 12:30	WG1457994
1,3-Dichlorobenzene	U		0.130	0.500	1	04/09/2020 12:30	WG1457994
1,4-Dichlorobenzene	U		0.121	0.500	1	04/09/2020 12:30	WG1457994
Dichlorodifluoromethane	U		0.127	2.50	1	04/09/2020 12:30	WG1457994
1,1-Dichloroethane	U		0.114	0.500	1	04/09/2020 12:30	WG1457994
1,2-Dichloroethane	U		0.108	0.500	1	04/09/2020 12:30	WG1457994
1,1-Dichloroethene	U		0.188	0.500	1	04/09/2020 12:30	WG1457994
cis-1,2-Dichloroethene	U		0.0933	0.500	1	04/09/2020 12:30	WG1457994
trans-1,2-Dichloroethene	U		0.152	0.500	1	04/09/2020 12:30	WG1457994
1,2-Dichloropropane	U		0.190	0.500	1	04/09/2020 12:30	WG1457994
1,1-Dichloropropene	U		0.128	0.500	1	04/09/2020 12:30	WG1457994
1,3-Dichloropropane	U		0.147	1.00	1	04/09/2020 12:30	WG1457994
cis-1,3-Dichloropropene	U		0.0976	0.500	1	04/09/2020 12:30	WG1457994
trans-1,3-Dichloropropene	U		0.222	0.500	1	04/09/2020 12:30	WG1457994
trans-1,4-Dichloro-2-butene	U	UJ J0	0.257	5.00	1	04/09/2020 12:30	WG1457994
2,2-Dichloropropane	U		0.0929	0.500	1	04/09/2020 12:30	WG1457994
Di-isopropyl ether	U		0.0924	0.500	1	04/09/2020 12:30	WG1457994
Ethylbenzene	5.54		0.158	0.500	1	04/09/2020 12:30	WG1457994
Hexachloro-1,3-butadiene	U		0.157	1.00	1	04/09/2020 12:30	WG1457994
2-Hexanone	U		0.757	5.00	1	04/09/2020 12:30	WG1457994
n-Hexane	U		0.305	5.00	1	04/09/2020 12:30	WG1457994
Iodomethane	U		0.377	10.0	1	04/09/2020 12:30	WG1457994
Isopropylbenzene	17.1		0.126	0.500	1	04/09/2020 12:30	WG1457994
p-Isopropyltoluene	U		0.138	0.500	1	04/09/2020 12:30	WG1457994
2-Butanone (MEK)	U		1.28	5.00	1	04/09/2020 12:30	WG1457994
Methylene Chloride	U		1.07	2.50	1	04/09/2020 12:30	WG1457994
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	04/09/2020 12:30	WG1457994
Methyl tert-butyl ether	U		0.102	0.500	1	04/09/2020 12:30	WG1457994
Naphthalene	9.28		0.174	2.50	1	04/09/2020 12:30	WG1457994
n-Propylbenzene	39.9		0.162	0.500	1	04/09/2020 12:30	WG1457994
Styrene	U		0.117	0.500	1	04/09/2020 12:30	WG1457994
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	04/09/2020 12:30	WG1457994
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	04/09/2020 12:30	WG1457994

JC 4/29/2020

SCL-MW101-040720

Collected date/time: 04/07/20 13:45

SAMPLE RESULTS - 02

L1206575

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	04/09/2020 12:30	WG1457994
Tetrachloroethene	U		0.199	0.500	1	04/09/2020 12:30	WG1457994
Toluene	0.868		0.412	0.500	1	04/09/2020 12:30	WG1457994
1,2,3-Trichlorobenzene	U		0.164	0.500	1	04/09/2020 12:30	WG1457994
1,2,4-Trichlorobenzene	U		0.355	0.500	1	04/09/2020 12:30	WG1457994
1,1,1-Trichloroethane	U		0.0940	0.500	1	04/09/2020 12:30	WG1457994
1,1,2-Trichloroethane	U		0.186	0.500	1	04/09/2020 12:30	WG1457994
Trichloroethene	U		0.153	0.500	1	04/09/2020 12:30	WG1457994
Trichlorofluoromethane	U		0.130	2.50	1	04/09/2020 12:30	WG1457994
1,2,3-Trichloropropane	U		0.247	2.50	1	04/09/2020 12:30	WG1457994
1,2,4-Trimethylbenzene	0.970		0.123	0.500	1	04/09/2020 12:30	WG1457994
1,2,3-Trimethylbenzene	1.93		0.0739	0.500	1	04/09/2020 12:30	WG1457994
1,3,5-Trimethylbenzene	0.149	J	0.124	0.500	1	04/09/2020 12:30	WG1457994
Vinyl acetate	U		0.645	5.00	1	04/09/2020 12:30	WG1457994
Vinyl chloride	U		0.118	0.500	1	04/09/2020 12:30	WG1457994
Xylenes, Total	1.74		0.316	1.50	1	04/09/2020 12:30	WG1457994
(S) Toluene-d8	*101*			*80.0-120*		*04/09/2020 12:30*	WG1457994
(S) 4-Bromofluorobenzene	*102*			*77.0-126*		*04/09/2020 12:30*	WG1457994
(S) 1,2-Dichloroethane-d4	*105*			*70.0-130*		*04/09/2020 12:30*	WG1457994

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

JC 4/29/2020

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

Wet Chemistry by Method 2320 B-2011

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Alkalinity	172000		8450	20000	1	04/08/2020 18:42	WG1457347

Sample Narrative:

L1206575-03 WG1457347: Endpoint pH 4.5

Wet Chemistry by Method 9056A

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Chloride	6730		379	1000	1	04/08/2020 14:02	WG1457370
Nitrate	U		48.0	100	1	04/08/2020 14:02	WG1457370
Sulfate	4920	J	594	5000	1	04/08/2020 14:02	WG1457370

Wet Chemistry by Method 9060A

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
TOC (Total Organic Carbon)	1370	~~B~~	102	1000	1	04/09/2020 21:39	WG1458143

Metals (ICPMS) by Method 6020B

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Iron	65.5	J	48.9	100	1	04/09/2020 20:37	WG1457865
Manganese	205		1.32	5.00	1	04/09/2020 20:37	WG1457865

Volatile Organic Compounds (GC) by Method RSK175

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Methane	U		0.287	0.678	1	04/09/2020 13:19	WG1457927
Ethane	U		0.296	1.29	1	04/09/2020 13:19	WG1457927
Ethene	U		0.422	1.27	1	04/09/2020 13:19	WG1457927

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

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Acetone	U		1.05	25.0	1	04/09/2020 12:50	WG1457994
Acrylonitrile	U		0.873	5.00	1	04/09/2020 12:50	WG1457994
Benzene	U		0.0896	0.500	1	04/09/2020 12:50	WG1457994
Bromobenzene	U		0.133	0.500	1	04/09/2020 12:50	WG1457994
Bromodichloromethane	U		0.0800	0.500	1	04/09/2020 12:50	WG1457994
Bromochloromethane	U		0.145	0.500	1	04/09/2020 12:50	WG1457994
Bromoform	U		0.186	0.500	1	04/09/2020 12:50	WG1457994
Bromomethane	U		0.157	2.50	1	04/09/2020 12:50	WG1457994
n-Butylbenzene	U		0.143	0.500	1	04/09/2020 12:50	WG1457994
sec-Butylbenzene	U		0.134	0.500	1	04/09/2020 12:50	WG1457994
tert-Butylbenzene	U		0.183	0.500	1	04/09/2020 12:50	WG1457994
Carbon disulfide	U		0.101	0.500	1	04/09/2020 12:50	WG1457994
Carbon tetrachloride	U		0.159	0.500	1	04/09/2020 12:50	WG1457994
Chlorobenzene	U		0.140	0.500	1	04/09/2020 12:50	WG1457994
Chlorodibromomethane	U		0.128	0.500	1	04/09/2020 12:50	WG1457994
Chloroethane	U		0.141	2.50	1	04/09/2020 12:50	WG1457994
Chloroform	U		0.0860	0.500	1	04/09/2020 12:50	WG1457994
Chloromethane	U		0.153	1.25	1	04/09/2020 12:50	WG1457994
2-Chlorotoluene	U		0.111	0.500	1	04/09/2020 12:50	WG1457994
4-Chlorotoluene	U		0.0972	0.500	1	04/09/2020 12:50	WG1457994

JC 4/29/2020

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	04/09/2020 12:50	WG1457994
1,2-Dibromoethane	U		0.193	0.500	1	04/09/2020 12:50	WG1457994
Dibromomethane	U		0.117	0.500	1	04/09/2020 12:50	WG1457994
1,2-Dichlorobenzene	U		0.101	0.500	1	04/09/2020 12:50	WG1457994
1,3-Dichlorobenzene	U		0.130	0.500	1	04/09/2020 12:50	WG1457994
1,4-Dichlorobenzene	U		0.121	0.500	1	04/09/2020 12:50	WG1457994
Dichlorodifluoromethane	U		0.127	2.50	1	04/09/2020 12:50	WG1457994
1,1-Dichloroethane	U		0.114	0.500	1	04/09/2020 12:50	WG1457994
1,2-Dichloroethane	U		0.108	0.500	1	04/09/2020 12:50	WG1457994
1,1-Dichloroethene	U		0.188	0.500	1	04/09/2020 12:50	WG1457994
cis-1,2-Dichloroethene	U		0.0933	0.500	1	04/09/2020 12:50	WG1457994
trans-1,2-Dichloroethene	U		0.152	0.500	1	04/09/2020 12:50	WG1457994
1,2-Dichloropropane	U		0.190	0.500	1	04/09/2020 12:50	WG1457994
1,1-Dichloropropene	U		0.128	0.500	1	04/09/2020 12:50	WG1457994
1,3-Dichloropropane	U		0.147	1.00	1	04/09/2020 12:50	WG1457994
cis-1,3-Dichloropropene	U		0.0976	0.500	1	04/09/2020 12:50	WG1457994
trans-1,3-Dichloropropene	U		0.222	0.500	1	04/09/2020 12:50	WG1457994
trans-1,4-Dichloro-2-butene	U	UJ J0	0.257	5.00	1	04/09/2020 12:50	WG1457994
2,2-Dichloropropane	U		0.0929	0.500	1	04/09/2020 12:50	WG1457994
Di-isopropyl ether	U		0.0924	0.500	1	04/09/2020 12:50	WG1457994
Ethylbenzene	U		0.158	0.500	1	04/09/2020 12:50	WG1457994
Hexachloro-1,3-butadiene	U		0.157	1.00	1	04/09/2020 12:50	WG1457994
2-Hexanone	U		0.757	5.00	1	04/09/2020 12:50	WG1457994
n-Hexane	U		0.305	5.00	1	04/09/2020 12:50	WG1457994
Iodomethane	U		0.377	10.0	1	04/09/2020 12:50	WG1457994
Isopropylbenzene	U		0.126	0.500	1	04/09/2020 12:50	WG1457994
p-Isopropyltoluene	U		0.138	0.500	1	04/09/2020 12:50	WG1457994
2-Butanone (MEK)	U		1.28	5.00	1	04/09/2020 12:50	WG1457994
Methylene Chloride	U		1.07	2.50	1	04/09/2020 12:50	WG1457994
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	04/09/2020 12:50	WG1457994
Methyl tert-butyl ether	U		0.102	0.500	1	04/09/2020 12:50	WG1457994
Naphthalene	U		0.174	2.50	1	04/09/2020 12:50	WG1457994
n-Propylbenzene	U		0.162	0.500	1	04/09/2020 12:50	WG1457994
Styrene	U		0.117	0.500	1	04/09/2020 12:50	WG1457994
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	04/09/2020 12:50	WG1457994
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	04/09/2020 12:50	WG1457994
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	04/09/2020 12:50	WG1457994
Tetrachloroethene	U		0.199	0.500	1	04/09/2020 12:50	WG1457994
Toluene	U		0.412	0.500	1	04/09/2020 12:50	WG1457994
1,2,3-Trichlorobenzene	U		0.164	0.500	1	04/09/2020 12:50	WG1457994
1,2,4-Trichlorobenzene	U		0.355	0.500	1	04/09/2020 12:50	WG1457994
1,1,1-Trichloroethane	U		0.0940	0.500	1	04/09/2020 12:50	WG1457994
1,1,2-Trichloroethane	U		0.186	0.500	1	04/09/2020 12:50	WG1457994
Trichloroethene	U		0.153	0.500	1	04/09/2020 12:50	WG1457994
Trichlorofluoromethane	U		0.130	2.50	1	04/09/2020 12:50	WG1457994
1,2,3-Trichloropropane	U		0.247	2.50	1	04/09/2020 12:50	WG1457994
1,2,4-Trimethylbenzene	U		0.123	0.500	1	04/09/2020 12:50	WG1457994
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	04/09/2020 12:50	WG1457994
1,3,5-Trimethylbenzene	U		0.124	0.500	1	04/09/2020 12:50	WG1457994
Vinyl acetate	U		0.645	5.00	1	04/09/2020 12:50	WG1457994
Vinyl chloride	U		0.118	0.500	1	04/09/2020 12:50	WG1457994
Xylenes, Total	U		0.316	1.50	1	04/09/2020 12:50	WG1457994
(S) Toluene-d8	*108*			*80.0-120*		*04/09/2020 12:50*	WG1457994
(S) 4-Bromofluorobenzene	*102*			*77.0-126*		*04/09/2020 12:50*	WG1457994
(S) 1,2-Dichloroethane-d4	*106*			*70.0-130*		*04/09/2020 12:50*	WG1457994

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Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	275000		8450	20000	1	04/13/2020 20:08	WG1458503

Sample Narrative:

L1207108-01 WG1458503: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	18700		379	1000	1	04/09/2020 13:24	WG1458059
Nitrate	U		48.0	100	1	04/09/2020 13:24	WG1458059
Sulfate	72200		594	5000	1	04/09/2020 13:24	WG1458059

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	1610	~~B~~	102	1000	1	04/10/2020 18:55	WG1458780

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	721		48.9	100	1	04/10/2020 08:46	WG1458376
Manganese	680		1.32	5.00	1	04/10/2020 08:46	WG1458376

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	144		0.287	0.678	1	04/10/2020 13:54	WG1458051
Ethane	U		0.296	1.29	1	04/10/2020 13:54	WG1458051
Ethene	U		0.422	1.27	1	04/10/2020 13:54	WG1458051

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U		1.05	25.0	1	04/10/2020 10:39	WG1458684
Acrylonitrile	U		0.873	5.00	1	04/10/2020 10:39	WG1458684
Benzene	1.92		0.0896	0.500	1	04/10/2020 10:39	WG1458684
Bromobenzene	U		0.133	0.500	1	04/10/2020 10:39	WG1458684
Bromodichloromethane	U		0.0800	0.500	1	04/10/2020 10:39	WG1458684
Bromochloromethane	U		0.145	0.500	1	04/10/2020 10:39	WG1458684
Bromoform	U		0.186	0.500	1	04/10/2020 10:39	WG1458684
Bromomethane	U		0.157	2.50	1	04/10/2020 10:39	WG1458684
n-Butylbenzene	U		0.143	0.500	1	04/10/2020 10:39	WG1458684
sec-Butylbenzene	U		0.134	0.500	1	04/10/2020 10:39	WG1458684
tert-Butylbenzene	U		0.183	0.500	1	04/10/2020 10:39	WG1458684
Carbon disulfide	0.446	J	0.101	0.500	1	04/10/2020 10:39	WG1458684
Carbon tetrachloride	U		0.159	0.500	1	04/10/2020 10:39	WG1458684
Chlorobenzene	U		0.140	0.500	1	04/10/2020 10:39	WG1458684
Chlorodibromomethane	U		0.128	0.500	1	04/10/2020 10:39	WG1458684
Chloroethane	U		0.141	2.50	1	04/10/2020 10:39	WG1458684
Chloroform	U		0.0860	0.500	1	04/10/2020 10:39	WG1458684
Chloromethane	U		0.153	1.25	1	04/10/2020 10:39	WG1458684
2-Chlorotoluene	U		0.111	0.500	1	04/10/2020 10:39	WG1458684
4-Chlorotoluene	U		0.0972	0.500	1	04/10/2020 10:39	WG1458684

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	04/10/2020 10:39	WG1458684
1,2-Dibromoethane	U		0.193	0.500	1	04/10/2020 10:39	WG1458684
Dibromomethane	U		0.117	0.500	1	04/10/2020 10:39	WG1458684
1,2-Dichlorobenzene	U		0.101	0.500	1	04/10/2020 10:39	WG1458684
1,3-Dichlorobenzene	U		0.130	0.500	1	04/10/2020 10:39	WG1458684
1,4-Dichlorobenzene	U		0.121	0.500	1	04/10/2020 10:39	WG1458684
Dichlorodifluoromethane	U		0.127	2.50	1	04/10/2020 10:39	WG1458684
1,1-Dichloroethane	U		0.114	0.500	1	04/10/2020 10:39	WG1458684
1,2-Dichloroethane	U		0.108	0.500	1	04/10/2020 10:39	WG1458684
1,1-Dichloroethene	U		0.188	0.500	1	04/10/2020 10:39	WG1458684
cis-1,2-Dichloroethene	0.231	J	0.0933	0.500	1	04/10/2020 10:39	WG1458684
trans-1,2-Dichloroethene	U		0.152	0.500	1	04/10/2020 10:39	WG1458684
1,2-Dichloropropane	U		0.190	0.500	1	04/10/2020 10:39	WG1458684
1,1-Dichloropropene	U		0.128	0.500	1	04/10/2020 10:39	WG1458684
1,3-Dichloropropane	U		0.147	1.00	1	04/10/2020 10:39	WG1458684
cis-1,3-Dichloropropene	U		0.0976	0.500	1	04/10/2020 10:39	WG1458684
trans-1,3-Dichloropropene	U		0.222	0.500	1	04/10/2020 10:39	WG1458684
trans-1,4-Dichloro-2-butene	U UJ	J0	0.257	5.00	1	04/10/2020 10:39	WG1458684
2,2-Dichloropropane	U		0.0929	0.500	1	04/10/2020 10:39	WG1458684
Di-isopropyl ether	U		0.0924	0.500	1	04/10/2020 10:39	WG1458684
Ethylbenzene	0.239	J	0.158	0.500	1	04/10/2020 10:39	WG1458684
Hexachloro-1,3-butadiene	U		0.157	1.00	1	04/10/2020 10:39	WG1458684
2-Hexanone	U		0.757	5.00	1	04/10/2020 10:39	WG1458684
n-Hexane	U		0.305	5.00	1	04/10/2020 10:39	WG1458684
Iodomethane	U		0.377	10.0	1	04/10/2020 10:39	WG1458684
Isopropylbenzene	U		0.126	0.500	1	04/10/2020 10:39	WG1458684
p-Isopropyltoluene	U		0.138	0.500	1	04/10/2020 10:39	WG1458684
2-Butanone (MEK)	U		1.28	5.00	1	04/10/2020 10:39	WG1458684
Methylene Chloride	U		1.07	2.50	1	04/10/2020 10:39	WG1458684
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	04/10/2020 10:39	WG1458684
Methyl tert-butyl ether	U		0.102	0.500	1	04/10/2020 10:39	WG1458684
Naphthalene	U		0.174	2.50	1	04/10/2020 10:39	WG1458684
n-Propylbenzene	U		0.162	0.500	1	04/10/2020 10:39	WG1458684
Styrene	U		0.117	0.500	1	04/10/2020 10:39	WG1458684
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	04/10/2020 10:39	WG1458684
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	04/10/2020 10:39	WG1458684
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	04/10/2020 10:39	WG1458684
Tetrachloroethene	U		0.199	0.500	1	04/10/2020 10:39	WG1458684
Toluene	U		0.412	0.500	1	04/10/2020 10:39	WG1458684
1,2,3-Trichlorobenzene	U		0.164	0.500	1	04/10/2020 10:39	WG1458684
1,2,4-Trichlorobenzene	U		0.355	0.500	1	04/10/2020 10:39	WG1458684
1,1,1-Trichloroethane	U		0.0940	0.500	1	04/10/2020 10:39	WG1458684
1,1,2-Trichloroethane	U		0.186	0.500	1	04/10/2020 10:39	WG1458684
Trichloroethene	U		0.153	0.500	1	04/10/2020 10:39	WG1458684
Trichlorofluoromethane	U		0.130	2.50	1	04/10/2020 10:39	WG1458684
1,2,3-Trichloropropane	U		0.247	2.50	1	04/10/2020 10:39	WG1458684
1,2,4-Trimethylbenzene	U		0.123	0.500	1	04/10/2020 10:39	WG1458684
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	04/10/2020 10:39	WG1458684
1,3,5-Trimethylbenzene	U		0.124	0.500	1	04/10/2020 10:39	WG1458684
Vinyl acetate	U		0.645	5.00	1	04/10/2020 10:39	WG1458684
Vinyl chloride	12.6		0.118	0.500	1	04/10/2020 10:39	WG1458684
Xylenes, Total	U		0.316	1.50	1	04/10/2020 10:39	WG1458684
(S) Toluene-d8	*102*			*80.0-120*		*04/10/2020 10:39*	WG1458684
(S) 4-Bromofluorobenzene	*98.7*			*77.0-126*		*04/10/2020 10:39*	WG1458684
(S) 1,2-Dichloroethane-d4	*110*			*70.0-130*		*04/10/2020 10:39*	WG1458684

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MW-308-040820

Collected date/time: 04/08/20 10:30

SAMPLE RESULTS - 02

L1207108

Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	485000		8450	20000	1	04/13/2020 20:17	WG1458503

Sample Narrative:

L1207108-02 WG1458503: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	14600		379	1000	1	04/09/2020 13:37	WG1458059
Nitrate	U		48.0	100	1	04/09/2020 13:37	WG1458059
Sulfate	83200		594	5000	1	04/09/2020 13:37	WG1458059

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	9490		102	1000	1	04/10/2020 19:09	WG1458780

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	9390		48.9	100	1	04/10/2020 08:59	WG1458376
Manganese	2530		1.32	5.00	1	04/10/2020 08:59	WG1458376

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	1870		0.287	0.678	1	04/11/2020 15:12	WG1458238
Ethane	23.9		0.296	1.29	1	04/11/2020 15:12	WG1458238
Ethene	8.43		0.422	1.27	1	04/11/2020 15:12	WG1458238

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	1.42	J	1.05	25.0	1	04/10/2020 11:00	WG1458684
Acrylonitrile	U		0.873	5.00	1	04/10/2020 11:00	WG1458684
Benzene	21.2		0.0896	0.500	1	04/10/2020 11:00	WG1458684
Bromobenzene	U		0.133	0.500	1	04/10/2020 11:00	WG1458684
Bromodichloromethane	U		0.0800	0.500	1	04/10/2020 11:00	WG1458684
Bromochloromethane	U		0.145	0.500	1	04/10/2020 11:00	WG1458684
Bromoform	U		0.186	0.500	1	04/10/2020 11:00	WG1458684
Bromomethane	U		0.157	2.50	1	04/10/2020 11:00	WG1458684
n-Butylbenzene	U		0.143	0.500	1	04/10/2020 11:00	WG1458684
sec-Butylbenzene	U		0.134	0.500	1	04/10/2020 11:00	WG1458684
tert-Butylbenzene	U		0.183	0.500	1	04/10/2020 11:00	WG1458684
Carbon disulfide	3.85		0.101	0.500	1	04/10/2020 11:00	WG1458684
Carbon tetrachloride	U		0.159	0.500	1	04/10/2020 11:00	WG1458684
Chlorobenzene	U		0.140	0.500	1	04/10/2020 11:00	WG1458684
Chlorodibromomethane	U		0.128	0.500	1	04/10/2020 11:00	WG1458684
Chloroethane	U		0.141	2.50	1	04/10/2020 11:00	WG1458684
Chloroform	0.230	J	0.0860	0.500	1	04/10/2020 11:00	WG1458684
Chloromethane	U		0.153	1.25	1	04/10/2020 11:00	WG1458684
2-Chlorotoluene	U		0.111	0.500	1	04/10/2020 11:00	WG1458684
4-Chlorotoluene	U		0.0972	0.500	1	04/10/2020 11:00	WG1458684

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	04/10/2020 11:00	WG1458684
1,2-Dibromoethane	U		0.193	0.500	1	04/10/2020 11:00	WG1458684
Dibromomethane	U		0.117	0.500	1	04/10/2020 11:00	WG1458684
1,2-Dichlorobenzene	U		0.101	0.500	1	04/10/2020 11:00	WG1458684
1,3-Dichlorobenzene	U		0.130	0.500	1	04/10/2020 11:00	WG1458684
1,4-Dichlorobenzene	U		0.121	0.500	1	04/10/2020 11:00	WG1458684
Dichlorodifluoromethane	U		0.127	2.50	1	04/10/2020 11:00	WG1458684
1,1-Dichloroethane	U		0.114	0.500	1	04/10/2020 11:00	WG1458684
1,2-Dichloroethane	U		0.108	0.500	1	04/10/2020 11:00	WG1458684
1,1-Dichloroethene	U		0.188	0.500	1	04/10/2020 11:00	WG1458684
cis-1,2-Dichloroethene	12.5		0.0933	0.500	1	04/10/2020 11:00	WG1458684
trans-1,2-Dichloroethene	0.360	J	0.152	0.500	1	04/10/2020 11:00	WG1458684
1,2-Dichloropropane	U		0.190	0.500	1	04/10/2020 11:00	WG1458684
1,1-Dichloropropene	U		0.128	0.500	1	04/10/2020 11:00	WG1458684
1,3-Dichloropropane	U		0.147	1.00	1	04/10/2020 11:00	WG1458684
cis-1,3-Dichloropropene	U		0.0976	0.500	1	04/10/2020 11:00	WG1458684
trans-1,3-Dichloropropene	U		0.222	0.500	1	04/10/2020 11:00	WG1458684
trans-1,4-Dichloro-2-butene	U UJ	J0	0.257	5.00	1	04/10/2020 11:00	WG1458684
2,2-Dichloropropane	U		0.0929	0.500	1	04/10/2020 11:00	WG1458684
Di-isopropyl ether	U		0.0924	0.500	1	04/10/2020 11:00	WG1458684
Ethylbenzene	U		0.158	0.500	1	04/10/2020 11:00	WG1458684
Hexachloro-1,3-butadiene	U		0.157	1.00	1	04/10/2020 11:00	WG1458684
2-Hexanone	U		0.757	5.00	1	04/10/2020 11:00	WG1458684
n-Hexane	U		0.305	5.00	1	04/10/2020 11:00	WG1458684
Iodomethane	U		0.377	10.0	1	04/10/2020 11:00	WG1458684
Isopropylbenzene	0.582		0.126	0.500	1	04/10/2020 11:00	WG1458684
p-Isopropyltoluene	U		0.138	0.500	1	04/10/2020 11:00	WG1458684
2-Butanone (MEK)	U		1.28	5.00	1	04/10/2020 11:00	WG1458684
Methylene Chloride	U		1.07	2.50	1	04/10/2020 11:00	WG1458684
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	04/10/2020 11:00	WG1458684
Methyl tert-butyl ether	U		0.102	0.500	1	04/10/2020 11:00	WG1458684
Naphthalene	U		0.174	2.50	1	04/10/2020 11:00	WG1458684
n-Propylbenzene	U		0.162	0.500	1	04/10/2020 11:00	WG1458684
Styrene	U		0.117	0.500	1	04/10/2020 11:00	WG1458684
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	04/10/2020 11:00	WG1458684
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	04/10/2020 11:00	WG1458684
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	04/10/2020 11:00	WG1458684
Tetrachloroethene	U		0.199	0.500	1	04/10/2020 11:00	WG1458684
Toluene	U		0.412	0.500	1	04/10/2020 11:00	WG1458684
1,2,3-Trichlorobenzene	U		0.164	0.500	1	04/10/2020 11:00	WG1458684
1,2,4-Trichlorobenzene	U		0.355	0.500	1	04/10/2020 11:00	WG1458684
1,1,1-Trichloroethane	U		0.0940	0.500	1	04/10/2020 11:00	WG1458684
1,1,2-Trichloroethane	U		0.186	0.500	1	04/10/2020 11:00	WG1458684
Trichloroethene	U		0.153	0.500	1	04/10/2020 11:00	WG1458684
Trichlorofluoromethane	U		0.130	2.50	1	04/10/2020 11:00	WG1458684
1,2,3-Trichloropropane	U		0.247	2.50	1	04/10/2020 11:00	WG1458684
1,2,4-Trimethylbenzene	U		0.123	0.500	1	04/10/2020 11:00	WG1458684
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	04/10/2020 11:00	WG1458684
1,3,5-Trimethylbenzene	U		0.124	0.500	1	04/10/2020 11:00	WG1458684
Vinyl acetate	U		0.645	5.00	1	04/10/2020 11:00	WG1458684
Vinyl chloride	12.9		0.118	0.500	1	04/10/2020 11:00	WG1458684
Xylenes, Total	U		0.316	1.50	1	04/10/2020 11:00	WG1458684
(S) Toluene-d8	*106*			*80.0-120*		*04/10/2020 11:00*	WG1458684
(S) 4-Bromofluorobenzene	*99.2*			*77.0-126*		*04/10/2020 11:00*	WG1458684
(S) 1,2-Dichloroethane-d4	*107*			*70.0-130*		*04/10/2020 11:00*	WG1458684

JC 4/29/2020

MW-310-040820

Collected date/time: 04/08/20 12:30

SAMPLE RESULTS - 03

L1207108

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

Wet Chemistry by Method 2320 B-2011

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Alkalinity	814000		8450	20000	1	04/13/2020 23:30	WG1459970

Sample Narrative:

L1207108-03 WG1459970: Endpoint pH 4.5

Wet Chemistry by Method 9056A

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Chloride	10200		379	1000	1	04/09/2020 14:17	WG1458059
Nitrate	U		48.0	100	1	04/09/2020 14:17	WG1458059
Sulfate	54800		594	5000	1	04/09/2020 14:17	WG1458059

Wet Chemistry by Method 9060A

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
TOC (Total Organic Carbon)	8580		102	1000	1	04/10/2020 19:54	WG1458780

Metals (ICPMS) by Method 6020B

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Iron	19500		48.9	100	1	04/10/2020 09:02	WG1458376
Manganese	3660		1.32	5.00	1	04/10/2020 09:02	WG1458376

Volatile Organic Compounds (GC) by Method RSK175

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Methane	714		0.287	0.678	1	04/11/2020 15:14	WG1458238
Ethane	0.770	J	0.296	1.29	1	04/11/2020 15:14	WG1458238
Ethene	U		0.422	1.27	1	04/11/2020 15:14	WG1458238

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

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Acetone	U		1.05	25.0	1	04/10/2020 11:20	WG1458684
Acrylonitrile	U		0.873	5.00	1	04/10/2020 11:20	WG1458684
Benzene	U		0.0896	0.500	1	04/10/2020 11:20	WG1458684
Bromobenzene	U		0.133	0.500	1	04/10/2020 11:20	WG1458684
Bromodichloromethane	U		0.0800	0.500	1	04/10/2020 11:20	WG1458684
Bromochloromethane	U		0.145	0.500	1	04/10/2020 11:20	WG1458684
Bromoform	U		0.186	0.500	1	04/10/2020 11:20	WG1458684
Bromomethane	U		0.157	2.50	1	04/10/2020 11:20	WG1458684
n-Butylbenzene	U		0.143	0.500	1	04/10/2020 11:20	WG1458684
sec-Butylbenzene	0.354	J	0.134	0.500	1	04/10/2020 11:20	WG1458684
tert-Butylbenzene	U		0.183	0.500	1	04/10/2020 11:20	WG1458684
Carbon disulfide	U		0.101	0.500	1	04/10/2020 11:20	WG1458684
Carbon tetrachloride	U		0.159	0.500	1	04/10/2020 11:20	WG1458684
Chlorobenzene	U		0.140	0.500	1	04/10/2020 11:20	WG1458684
Chlorodibromomethane	U		0.128	0.500	1	04/10/2020 11:20	WG1458684
Chloroethane	U		0.141	2.50	1	04/10/2020 11:20	WG1458684
Chloroform	U		0.0860	0.500	1	04/10/2020 11:20	WG1458684
Chloromethane	U		0.153	1.25	1	04/10/2020 11:20	WG1458684
2-Chlorotoluene	U		0.111	0.500	1	04/10/2020 11:20	WG1458684
4-Chlorotoluene	U		0.0972	0.500	1	04/10/2020 11:20	WG1458684

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	04/10/2020 11:20	WG1458684
1,2-Dibromoethane	U		0.193	0.500	1	04/10/2020 11:20	WG1458684
Dibromomethane	U		0.117	0.500	1	04/10/2020 11:20	WG1458684
1,2-Dichlorobenzene	U		0.101	0.500	1	04/10/2020 11:20	WG1458684
1,3-Dichlorobenzene	U		0.130	0.500	1	04/10/2020 11:20	WG1458684
1,4-Dichlorobenzene	U		0.121	0.500	1	04/10/2020 11:20	WG1458684
Dichlorodifluoromethane	U		0.127	2.50	1	04/10/2020 11:20	WG1458684
1,1-Dichloroethane	U		0.114	0.500	1	04/10/2020 11:20	WG1458684
1,2-Dichloroethane	U		0.108	0.500	1	04/10/2020 11:20	WG1458684
1,1-Dichloroethene	U		0.188	0.500	1	04/10/2020 11:20	WG1458684
cis-1,2-Dichloroethene	0.193	J	0.0933	0.500	1	04/10/2020 11:20	WG1458684
trans-1,2-Dichloroethene	U		0.152	0.500	1	04/10/2020 11:20	WG1458684
1,2-Dichloropropane	U		0.190	0.500	1	04/10/2020 11:20	WG1458684
1,1-Dichloropropene	U		0.128	0.500	1	04/10/2020 11:20	WG1458684
1,3-Dichloropropane	U		0.147	1.00	1	04/10/2020 11:20	WG1458684
cis-1,3-Dichloropropene	U		0.0976	0.500	1	04/10/2020 11:20	WG1458684
trans-1,3-Dichloropropene	U		0.222	0.500	1	04/10/2020 11:20	WG1458684
trans-1,4-Dichloro-2-butene	U	UJ J0	0.257	5.00	1	04/10/2020 11:20	WG1458684
2,2-Dichloropropane	U		0.0929	0.500	1	04/10/2020 11:20	WG1458684
Di-isopropyl ether	U		0.0924	0.500	1	04/10/2020 11:20	WG1458684
Ethylbenzene	U		0.158	0.500	1	04/10/2020 11:20	WG1458684
Hexachloro-1,3-butadiene	U		0.157	1.00	1	04/10/2020 11:20	WG1458684
2-Hexanone	U		0.757	5.00	1	04/10/2020 11:20	WG1458684
n-Hexane	U		0.305	5.00	1	04/10/2020 11:20	WG1458684
Iodomethane	U		0.377	10.0	1	04/10/2020 11:20	WG1458684
Isopropylbenzene	2.04		0.126	0.500	1	04/10/2020 11:20	WG1458684
p-Isopropyltoluene	U		0.138	0.500	1	04/10/2020 11:20	WG1458684
2-Butanone (MEK)	U		1.28	5.00	1	04/10/2020 11:20	WG1458684
Methylene Chloride	U		1.07	2.50	1	04/10/2020 11:20	WG1458684
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	04/10/2020 11:20	WG1458684
Methyl tert-butyl ether	U		0.102	0.500	1	04/10/2020 11:20	WG1458684
Naphthalene	U		0.174	2.50	1	04/10/2020 11:20	WG1458684
n-Propylbenzene	1.38		0.162	0.500	1	04/10/2020 11:20	WG1458684
Styrene	U		0.117	0.500	1	04/10/2020 11:20	WG1458684
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	04/10/2020 11:20	WG1458684
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	04/10/2020 11:20	WG1458684
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	04/10/2020 11:20	WG1458684
Tetrachloroethene	U		0.199	0.500	1	04/10/2020 11:20	WG1458684
Toluene	U		0.412	0.500	1	04/10/2020 11:20	WG1458684
1,2,3-Trichlorobenzene	U		0.164	0.500	1	04/10/2020 11:20	WG1458684
1,2,4-Trichlorobenzene	U		0.355	0.500	1	04/10/2020 11:20	WG1458684
1,1,1-Trichloroethane	U		0.0940	0.500	1	04/10/2020 11:20	WG1458684
1,1,2-Trichloroethane	U		0.186	0.500	1	04/10/2020 11:20	WG1458684
Trichloroethene	U		0.153	0.500	1	04/10/2020 11:20	WG1458684
Trichlorofluoromethane	U		0.130	2.50	1	04/10/2020 11:20	WG1458684
1,2,3-Trichloropropane	U		0.247	2.50	1	04/10/2020 11:20	WG1458684
1,2,4-Trimethylbenzene	U		0.123	0.500	1	04/10/2020 11:20	WG1458684
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	04/10/2020 11:20	WG1458684
1,3,5-Trimethylbenzene	U		0.124	0.500	1	04/10/2020 11:20	WG1458684
Vinyl acetate	U		0.645	5.00	1	04/10/2020 11:20	WG1458684
Vinyl chloride	U		0.118	0.500	1	04/10/2020 11:20	WG1458684
Xylenes, Total	U		0.316	1.50	1	04/10/2020 11:20	WG1458684
(S) Toluene-d8	*99.1*			*80.0-120*		*04/10/2020 11:20*	WG1458684
(S) 4-Bromofluorobenzene	*97.2*			*77.0-126*		*04/10/2020 11:20*	WG1458684
(S) 1,2-Dichloroethane-d4	*109*			*70.0-130*		*04/10/2020 11:20*	WG1458684

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Wet Chemistry by Method 2320 B-2011

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Alkalinity	708000		8450	20000	1	04/13/2020 20:56	WG1458503

Sample Narrative:

L1207108-04 WG1458503: Endpoint pH 4.5

Wet Chemistry by Method 9056A

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Chloride	17000		379	1000	1	04/09/2020 14:30	WG1458059
Nitrate	U		48.0	100	1	04/09/2020 14:30	WG1458059
Sulfate	U		594	5000	1	04/09/2020 14:30	WG1458059

Wet Chemistry by Method 9060A

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
TOC (Total Organic Carbon)	3900		102	1000	1	04/10/2020 20:10	WG1458780

Metals (ICPMS) by Method 6020B

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Iron	13700		48.9	100	1	04/10/2020 09:05	WG1458376
Manganese	348		1.32	5.00	1	04/10/2020 09:05	WG1458376

Volatile Organic Compounds (GC) by Method RSK175

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Methane	22900		2.87	6.78	10	04/11/2020 16:21	WG1459235
Ethane	7.44		0.296	1.29	1	04/11/2020 15:19	WG1458238
Ethene	28.4		0.422	1.27	1	04/11/2020 15:19	WG1458238

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

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Acetone	U		1.05	25.0	1	04/10/2020 11:40	WG1458684
Acrylonitrile	U		0.873	5.00	1	04/10/2020 11:40	WG1458684
Benzene	9.53		0.0896	0.500	1	04/10/2020 11:40	WG1458684
Bromobenzene	U		0.133	0.500	1	04/10/2020 11:40	WG1458684
Bromodichloromethane	U		0.0800	0.500	1	04/10/2020 11:40	WG1458684
Bromochloromethane	U		0.145	0.500	1	04/10/2020 11:40	WG1458684
Bromoform	U		0.186	0.500	1	04/10/2020 11:40	WG1458684
Bromomethane	U		0.157	2.50	1	04/10/2020 11:40	WG1458684
n-Butylbenzene	U		0.143	0.500	1	04/10/2020 11:40	WG1458684
sec-Butylbenzene	U		0.134	0.500	1	04/10/2020 11:40	WG1458684
tert-Butylbenzene	U		0.183	0.500	1	04/10/2020 11:40	WG1458684
Carbon disulfide	U		0.101	0.500	1	04/10/2020 11:40	WG1458684
Carbon tetrachloride	U		0.159	0.500	1	04/10/2020 11:40	WG1458684
Chlorobenzene	U		0.140	0.500	1	04/10/2020 11:40	WG1458684
Chlorodibromomethane	U		0.128	0.500	1	04/10/2020 11:40	WG1458684
Chloroethane	U		0.141	2.50	1	04/10/2020 11:40	WG1458684
Chloroform	U		0.0860	0.500	1	04/10/2020 11:40	WG1458684
Chloromethane	U		0.153	1.25	1	04/10/2020 11:40	WG1458684
2-Chlorotoluene	U		0.111	0.500	1	04/10/2020 11:40	WG1458684
4-Chlorotoluene	U		0.0972	0.500	1	04/10/2020 11:40	WG1458684

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	04/10/2020 11:40	WG1458684
1,2-Dibromoethane	U		0.193	0.500	1	04/10/2020 11:40	WG1458684
Dibromomethane	U		0.117	0.500	1	04/10/2020 11:40	WG1458684
1,2-Dichlorobenzene	U		0.101	0.500	1	04/10/2020 11:40	WG1458684
1,3-Dichlorobenzene	U		0.130	0.500	1	04/10/2020 11:40	WG1458684
1,4-Dichlorobenzene	U		0.121	0.500	1	04/10/2020 11:40	WG1458684
Dichlorodifluoromethane	U		0.127	2.50	1	04/10/2020 11:40	WG1458684
1,1-Dichloroethane	U		0.114	0.500	1	04/10/2020 11:40	WG1458684
1,2-Dichloroethane	U		0.108	0.500	1	04/10/2020 11:40	WG1458684
1,1-Dichloroethene	U		0.188	0.500	1	04/10/2020 11:40	WG1458684
cis-1,2-Dichloroethene	0.631		0.0933	0.500	1	04/10/2020 11:40	WG1458684
trans-1,2-Dichloroethene	U		0.152	0.500	1	04/10/2020 11:40	WG1458684
1,2-Dichloropropane	U		0.190	0.500	1	04/10/2020 11:40	WG1458684
1,1-Dichloropropene	U		0.128	0.500	1	04/10/2020 11:40	WG1458684
1,3-Dichloropropane	U		0.147	1.00	1	04/10/2020 11:40	WG1458684
cis-1,3-Dichloropropene	U		0.0976	0.500	1	04/10/2020 11:40	WG1458684
trans-1,3-Dichloropropene	U		0.222	0.500	1	04/10/2020 11:40	WG1458684
trans-1,4-Dichloro-2-butene	U	UJ J0	0.257	5.00	1	04/10/2020 11:40	WG1458684
2,2-Dichloropropane	U		0.0929	0.500	1	04/10/2020 11:40	WG1458684
Di-isopropyl ether	U		0.0924	0.500	1	04/10/2020 11:40	WG1458684
Ethylbenzene	U		0.158	0.500	1	04/10/2020 11:40	WG1458684
Hexachloro-1,3-butadiene	U		0.157	1.00	1	04/10/2020 11:40	WG1458684
2-Hexanone	U		0.757	5.00	1	04/10/2020 11:40	WG1458684
n-Hexane	U		0.305	5.00	1	04/10/2020 11:40	WG1458684
Iodomethane	U		0.377	10.0	1	04/10/2020 11:40	WG1458684
Isopropylbenzene	U		0.126	0.500	1	04/10/2020 11:40	WG1458684
p-Isopropyltoluene	U		0.138	0.500	1	04/10/2020 11:40	WG1458684
2-Butanone (MEK)	U		1.28	5.00	1	04/10/2020 11:40	WG1458684
Methylene Chloride	U		1.07	2.50	1	04/10/2020 11:40	WG1458684
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	04/10/2020 11:40	WG1458684
Methyl tert-butyl ether	U		0.102	0.500	1	04/10/2020 11:40	WG1458684
Naphthalene	U		0.174	2.50	1	04/10/2020 11:40	WG1458684
n-Propylbenzene	U		0.162	0.500	1	04/10/2020 11:40	WG1458684
Styrene	U		0.117	0.500	1	04/10/2020 11:40	WG1458684
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	04/10/2020 11:40	WG1458684
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	04/10/2020 11:40	WG1458684
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	04/10/2020 11:40	WG1458684
Tetrachloroethene	U		0.199	0.500	1	04/10/2020 11:40	WG1458684
Toluene	U		0.412	0.500	1	04/10/2020 11:40	WG1458684
1,2,3-Trichlorobenzene	U		0.164	0.500	1	04/10/2020 11:40	WG1458684
1,2,4-Trichlorobenzene	U		0.355	0.500	1	04/10/2020 11:40	WG1458684
1,1,1-Trichloroethane	U		0.0940	0.500	1	04/10/2020 11:40	WG1458684
1,1,2-Trichloroethane	U		0.186	0.500	1	04/10/2020 11:40	WG1458684
Trichloroethene	U		0.153	0.500	1	04/10/2020 11:40	WG1458684
Trichlorofluoromethane	U		0.130	2.50	1	04/10/2020 11:40	WG1458684
1,2,3-Trichloropropane	U		0.247	2.50	1	04/10/2020 11:40	WG1458684
1,2,4-Trimethylbenzene	U		0.123	0.500	1	04/10/2020 11:40	WG1458684
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	04/10/2020 11:40	WG1458684
1,3,5-Trimethylbenzene	U		0.124	0.500	1	04/10/2020 11:40	WG1458684
Vinyl acetate	U		0.645	5.00	1	04/10/2020 11:40	WG1458684
Vinyl chloride	11.1		0.118	0.500	1	04/10/2020 11:40	WG1458684
Xylenes, Total	U		0.316	1.50	1	04/10/2020 11:40	WG1458684
(S) Toluene-d8	*102*			*80.0-120*		*04/10/2020 11:40*	WG1458684
(S) 4-Bromofluorobenzene	*102*			*77.0-126*		*04/10/2020 11:40*	WG1458684
(S) 1,2-Dichloroethane-d4	*114*			*70.0-130*		*04/10/2020 11:40*	WG1458684

JC 4/29/2020

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

Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	197000		8450	20000	1	04/15/2020 14:01	WG1459157

Sample Narrative:

L1207508-01 WG1459157: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	7400		379	1000	1	04/10/2020 13:00	WG1458694
Nitrate	U		48.0	100	1	04/10/2020 13:00	WG1458694
Sulfate	2580	J	594	5000	1	04/10/2020 13:00	WG1458694

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	4280	~~B~~	102	1000	1	04/10/2020 21:38	WG1458781

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	257		48.9	100	1	04/13/2020 20:02	WG1458864
Manganese	289		1.32	5.00	1	04/13/2020 20:02	WG1458864

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	574		0.287	0.678	1	04/11/2020 16:35	WG1459235
Ethane	3.71		0.296	1.29	1	04/11/2020 16:35	WG1459235
Ethene	U		0.422	1.27	1	04/11/2020 16:35	WG1459235

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U		1.05	25.0	1	04/10/2020 22:43	WG1459035
Acrylonitrile	U		0.873	5.00	1	04/10/2020 22:43	WG1459035
Benzene	U		0.0896	0.500	1	04/10/2020 22:43	WG1459035
Bromobenzene	U		0.133	0.500	1	04/10/2020 22:43	WG1459035
Bromodichloromethane	U		0.0800	0.500	1	04/10/2020 22:43	WG1459035
Bromochloromethane	U		0.145	0.500	1	04/10/2020 22:43	WG1459035
Bromoform	U		0.186	0.500	1	04/10/2020 22:43	WG1459035
Bromomethane	U		0.157	2.50	1	04/10/2020 22:43	WG1459035
n-Butylbenzene	U		0.143	0.500	1	04/10/2020 22:43	WG1459035
sec-Butylbenzene	U		0.134	0.500	1	04/10/2020 22:43	WG1459035
tert-Butylbenzene	U		0.183	0.500	1	04/10/2020 22:43	WG1459035
Carbon disulfide	U		0.101	0.500	1	04/10/2020 22:43	WG1459035
Carbon tetrachloride	U		0.159	0.500	1	04/10/2020 22:43	WG1459035
Chlorobenzene	U		0.140	0.500	1	04/10/2020 22:43	WG1459035
Chlorodibromomethane	U		0.128	0.500	1	04/10/2020 22:43	WG1459035
Chloroethane	U		0.141	2.50	1	04/10/2020 22:43	WG1459035
Chloroform	U		0.0860	0.500	1	04/10/2020 22:43	WG1459035
Chloromethane	U		0.153	1.25	1	04/10/2020 22:43	WG1459035
2-Chlorotoluene	U		0.111	0.500	1	04/10/2020 22:43	WG1459035
4-Chlorotoluene	U		0.0972	0.500	1	04/10/2020 22:43	WG1459035

JC 4/29/2020

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	04/10/2020 22:43	WG1459035
1,2-Dibromoethane	U		0.193	0.500	1	04/10/2020 22:43	WG1459035
Dibromomethane	U		0.117	0.500	1	04/10/2020 22:43	WG1459035
1,2-Dichlorobenzene	U		0.101	0.500	1	04/10/2020 22:43	WG1459035
1,3-Dichlorobenzene	U		0.130	0.500	1	04/10/2020 22:43	WG1459035
1,4-Dichlorobenzene	U		0.121	0.500	1	04/10/2020 22:43	WG1459035
Dichlorodifluoromethane	U		0.127	2.50	1	04/10/2020 22:43	WG1459035
1,1-Dichloroethane	U		0.114	0.500	1	04/10/2020 22:43	WG1459035
1,2-Dichloroethane	U		0.108	0.500	1	04/10/2020 22:43	WG1459035
1,1-Dichloroethene	U		0.188	0.500	1	04/10/2020 22:43	WG1459035
cis-1,2-Dichloroethene	U		0.0933	0.500	1	04/10/2020 22:43	WG1459035
trans-1,2-Dichloroethene	U		0.152	0.500	1	04/10/2020 22:43	WG1459035
1,2-Dichloropropane	U		0.190	0.500	1	04/10/2020 22:43	WG1459035
1,1-Dichloropropene	U		0.128	0.500	1	04/10/2020 22:43	WG1459035
1,3-Dichloropropane	U		0.147	1.00	1	04/10/2020 22:43	WG1459035
cis-1,3-Dichloropropene	U		0.0976	0.500	1	04/10/2020 22:43	WG1459035
trans-1,3-Dichloropropene	U		0.222	0.500	1	04/10/2020 22:43	WG1459035
trans-1,4-Dichloro-2-butene	U UJ	J0	0.257	5.00	1	04/10/2020 22:43	WG1459035
2,2-Dichloropropane	U		0.0929	0.500	1	04/10/2020 22:43	WG1459035
Di-isopropyl ether	U		0.0924	0.500	1	04/10/2020 22:43	WG1459035
Ethylbenzene	U		0.158	0.500	1	04/10/2020 22:43	WG1459035
Hexachloro-1,3-butadiene	U		0.157	1.00	1	04/10/2020 22:43	WG1459035
2-Hexanone	U		0.757	5.00	1	04/10/2020 22:43	WG1459035
n-Hexane	U		0.305	5.00	1	04/10/2020 22:43	WG1459035
Iodomethane	U		0.377	10.0	1	04/10/2020 22:43	WG1459035
Isopropylbenzene	U		0.126	0.500	1	04/10/2020 22:43	WG1459035
p-Isopropyltoluene	U		0.138	0.500	1	04/10/2020 22:43	WG1459035
2-Butanone (MEK)	U		1.28	5.00	1	04/10/2020 22:43	WG1459035
Methylene Chloride	U		1.07	2.50	1	04/10/2020 22:43	WG1459035
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	04/10/2020 22:43	WG1459035
Methyl tert-butyl ether	U		0.102	0.500	1	04/10/2020 22:43	WG1459035
Naphthalene	U		0.174	2.50	1	04/10/2020 22:43	WG1459035
n-Propylbenzene	U		0.162	0.500	1	04/10/2020 22:43	WG1459035
Styrene	U		0.117	0.500	1	04/10/2020 22:43	WG1459035
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	04/10/2020 22:43	WG1459035
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	04/10/2020 22:43	WG1459035
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	04/10/2020 22:43	WG1459035
Tetrachloroethene	U		0.199	0.500	1	04/10/2020 22:43	WG1459035
Toluene	U		0.412	0.500	1	04/10/2020 22:43	WG1459035
1,2,3-Trichlorobenzene	U		0.164	0.500	1	04/10/2020 22:43	WG1459035
1,2,4-Trichlorobenzene	U		0.355	0.500	1	04/10/2020 22:43	WG1459035
1,1,1-Trichloroethane	U		0.0940	0.500	1	04/10/2020 22:43	WG1459035
1,1,2-Trichloroethane	U		0.186	0.500	1	04/10/2020 22:43	WG1459035
Trichloroethene	U		0.153	0.500	1	04/10/2020 22:43	WG1459035
Trichlorofluoromethane	U		0.130	2.50	1	04/10/2020 22:43	WG1459035
1,2,3-Trichloropropane	U		0.247	2.50	1	04/10/2020 22:43	WG1459035
1,2,4-Trimethylbenzene	U		0.123	0.500	1	04/10/2020 22:43	WG1459035
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	04/10/2020 22:43	WG1459035
1,3,5-Trimethylbenzene	U		0.124	0.500	1	04/10/2020 22:43	WG1459035
Vinyl acetate	U		0.645	5.00	1	04/10/2020 22:43	WG1459035
Vinyl chloride	U		0.118	0.500	1	04/10/2020 22:43	WG1459035
Xylenes, Total	U		0.316	1.50	1	04/10/2020 22:43	WG1459035
(S) Toluene-d8	*102*			*80.0-120*		*04/10/2020 22:43*	WG1459035
(S) 4-Bromofluorobenzene	*101*			*77.0-126*		*04/10/2020 22:43*	WG1459035
(S) 1,2-Dichloroethane-d4	*103*			*70.0-130*		*04/10/2020 22:43*	WG1459035

JC 4/29/2020

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

Wet Chemistry by Method 2320 B-2011

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Alkalinity	256000		8450	20000	1	04/15/2020 14:20	WG1459157

Sample Narrative:

L1207508-02 WG1459157: Endpoint pH 4.5

Wet Chemistry by Method 9056A

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Chloride	21400		379	1000	1	04/10/2020 13:22	WG1458694
Nitrate	U		48.0	100	1	04/10/2020 13:22	WG1458694
Sulfate	1890	J	594	5000	1	04/10/2020 13:22	WG1458694

Wet Chemistry by Method 9060A

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
TOC (Total Organic Carbon)	3370	~~B~~	102	1000	1	04/10/2020 22:40	WG1458781

Metals (ICPMS) by Method 6020B

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Iron	9280		244	500	5	04/13/2020 20:52	WG1458864
Manganese	821		1.32	5.00	1	04/13/2020 20:05	WG1458864

Volatile Organic Compounds (GC) by Method RSK175

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Methane	12700		2.87	6.78	10	04/13/2020 11:26	WG1459689
Ethane	U		0.296	1.29	1	04/11/2020 16:37	WG1459235
Ethene	U		0.422	1.27	1	04/11/2020 16:37	WG1459235

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

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Acetone	U		1.05	25.0	1	04/10/2020 23:04	WG1459035
Acrylonitrile	U		0.873	5.00	1	04/10/2020 23:04	WG1459035
Benzene	U		0.0896	0.500	1	04/10/2020 23:04	WG1459035
Bromobenzene	U		0.133	0.500	1	04/10/2020 23:04	WG1459035
Bromodichloromethane	U		0.0800	0.500	1	04/10/2020 23:04	WG1459035
Bromochloromethane	U		0.145	0.500	1	04/10/2020 23:04	WG1459035
Bromoform	U		0.186	0.500	1	04/10/2020 23:04	WG1459035
Bromomethane	U		0.157	2.50	1	04/10/2020 23:04	WG1459035
n-Butylbenzene	U		0.143	0.500	1	04/10/2020 23:04	WG1459035
sec-Butylbenzene	U		0.134	0.500	1	04/10/2020 23:04	WG1459035
tert-Butylbenzene	U		0.183	0.500	1	04/10/2020 23:04	WG1459035
Carbon disulfide	U		0.101	0.500	1	04/10/2020 23:04	WG1459035
Carbon tetrachloride	U		0.159	0.500	1	04/10/2020 23:04	WG1459035
Chlorobenzene	U		0.140	0.500	1	04/10/2020 23:04	WG1459035
Chlorodibromomethane	U		0.128	0.500	1	04/10/2020 23:04	WG1459035
Chloroethane	U		0.141	2.50	1	04/10/2020 23:04	WG1459035
Chloroform	U		0.0860	0.500	1	04/10/2020 23:04	WG1459035
Chloromethane	U		0.153	1.25	1	04/10/2020 23:04	WG1459035
2-Chlorotoluene	U		0.111	0.500	1	04/10/2020 23:04	WG1459035
4-Chlorotoluene	U		0.0972	0.500	1	04/10/2020 23:04	WG1459035

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	04/10/2020 23:04	WG1459035
1,2-Dibromoethane	U		0.193	0.500	1	04/10/2020 23:04	WG1459035
Dibromomethane	U		0.117	0.500	1	04/10/2020 23:04	WG1459035
1,2-Dichlorobenzene	U		0.101	0.500	1	04/10/2020 23:04	WG1459035
1,3-Dichlorobenzene	U		0.130	0.500	1	04/10/2020 23:04	WG1459035
1,4-Dichlorobenzene	U		0.121	0.500	1	04/10/2020 23:04	WG1459035
Dichlorodifluoromethane	U		0.127	2.50	1	04/10/2020 23:04	WG1459035
1,1-Dichloroethane	U		0.114	0.500	1	04/10/2020 23:04	WG1459035
1,2-Dichloroethane	U		0.108	0.500	1	04/10/2020 23:04	WG1459035
1,1-Dichloroethene	U		0.188	0.500	1	04/10/2020 23:04	WG1459035
cis-1,2-Dichloroethene	U		0.0933	0.500	1	04/10/2020 23:04	WG1459035
trans-1,2-Dichloroethene	U		0.152	0.500	1	04/10/2020 23:04	WG1459035
1,2-Dichloropropane	U		0.190	0.500	1	04/10/2020 23:04	WG1459035
1,1-Dichloropropene	U		0.128	0.500	1	04/10/2020 23:04	WG1459035
1,3-Dichloropropane	U		0.147	1.00	1	04/10/2020 23:04	WG1459035
cis-1,3-Dichloropropene	U		0.0976	0.500	1	04/10/2020 23:04	WG1459035
trans-1,3-Dichloropropene	U		0.222	0.500	1	04/10/2020 23:04	WG1459035
trans-1,4-Dichloro-2-butene	U UJ	J0	0.257	5.00	1	04/10/2020 23:04	WG1459035
2,2-Dichloropropane	U		0.0929	0.500	1	04/10/2020 23:04	WG1459035
Di-isopropyl ether	U		0.0924	0.500	1	04/10/2020 23:04	WG1459035
Ethylbenzene	U		0.158	0.500	1	04/10/2020 23:04	WG1459035
Hexachloro-1,3-butadiene	U		0.157	1.00	1	04/10/2020 23:04	WG1459035
2-Hexanone	U		0.757	5.00	1	04/10/2020 23:04	WG1459035
n-Hexane	U		0.305	5.00	1	04/10/2020 23:04	WG1459035
Iodomethane	U		0.377	10.0	1	04/10/2020 23:04	WG1459035
Isopropylbenzene	U		0.126	0.500	1	04/10/2020 23:04	WG1459035
p-Isopropyltoluene	U		0.138	0.500	1	04/10/2020 23:04	WG1459035
2-Butanone (MEK)	U		1.28	5.00	1	04/10/2020 23:04	WG1459035
Methylene Chloride	U		1.07	2.50	1	04/10/2020 23:04	WG1459035
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	04/10/2020 23:04	WG1459035
Methyl tert-butyl ether	U		0.102	0.500	1	04/10/2020 23:04	WG1459035
Naphthalene	U		0.174	2.50	1	04/10/2020 23:04	WG1459035
n-Propylbenzene	U		0.162	0.500	1	04/10/2020 23:04	WG1459035
Styrene	U		0.117	0.500	1	04/10/2020 23:04	WG1459035
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	04/10/2020 23:04	WG1459035
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	04/10/2020 23:04	WG1459035
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	04/10/2020 23:04	WG1459035
Tetrachloroethene	U		0.199	0.500	1	04/10/2020 23:04	WG1459035
Toluene	U		0.412	0.500	1	04/10/2020 23:04	WG1459035
1,2,3-Trichlorobenzene	U		0.164	0.500	1	04/10/2020 23:04	WG1459035
1,2,4-Trichlorobenzene	U		0.355	0.500	1	04/10/2020 23:04	WG1459035
1,1,1-Trichloroethane	U		0.0940	0.500	1	04/10/2020 23:04	WG1459035
1,1,2-Trichloroethane	U		0.186	0.500	1	04/10/2020 23:04	WG1459035
Trichloroethene	U		0.153	0.500	1	04/10/2020 23:04	WG1459035
Trichlorofluoromethane	U		0.130	2.50	1	04/10/2020 23:04	WG1459035
1,2,3-Trichloropropane	U		0.247	2.50	1	04/10/2020 23:04	WG1459035
1,2,4-Trimethylbenzene	U		0.123	0.500	1	04/10/2020 23:04	WG1459035
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	04/10/2020 23:04	WG1459035
1,3,5-Trimethylbenzene	U		0.124	0.500	1	04/10/2020 23:04	WG1459035
Vinyl acetate	U		0.645	5.00	1	04/10/2020 23:04	WG1459035
Vinyl chloride	U		0.118	0.500	1	04/10/2020 23:04	WG1459035
Xylenes, Total	U		0.316	1.50	1	04/10/2020 23:04	WG1459035
(S) Toluene-d8	*103*			*80.0-120*		*04/10/2020 23:04*	WG1459035
(S) 4-Bromofluorobenzene	*103*			*77.0-126*		*04/10/2020 23:04*	WG1459035
(S) 1,2-Dichloroethane-d4	*110*			*70.0-130*		*04/10/2020 23:04*	WG1459035

JC 4/29/2020

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U		1.05	25.0	1	04/10/2020 23:24	WG1459035
Acrylonitrile	U		0.873	5.00	1	04/10/2020 23:24	WG1459035
Benzene	U		0.0896	0.500	1	04/10/2020 23:24	WG1459035
Bromobenzene	U		0.133	0.500	1	04/10/2020 23:24	WG1459035
Bromodichloromethane	U		0.0800	0.500	1	04/10/2020 23:24	WG1459035
Bromochloromethane	U		0.145	0.500	1	04/10/2020 23:24	WG1459035
Bromoform	U		0.186	0.500	1	04/10/2020 23:24	WG1459035
Bromomethane	U		0.157	2.50	1	04/10/2020 23:24	WG1459035
n-Butylbenzene	U		0.143	0.500	1	04/10/2020 23:24	WG1459035
sec-Butylbenzene	U		0.134	0.500	1	04/10/2020 23:24	WG1459035
tert-Butylbenzene	U		0.183	0.500	1	04/10/2020 23:24	WG1459035
Carbon disulfide	U		0.101	0.500	1	04/10/2020 23:24	WG1459035
Carbon tetrachloride	U		0.159	0.500	1	04/10/2020 23:24	WG1459035
Chlorobenzene	U		0.140	0.500	1	04/10/2020 23:24	WG1459035
Chlorodibromomethane	U		0.128	0.500	1	04/10/2020 23:24	WG1459035
Chloroethane	U		0.141	2.50	1	04/10/2020 23:24	WG1459035
Chloroform	U		0.0860	0.500	1	04/10/2020 23:24	WG1459035
Chloromethane	U		0.153	1.25	1	04/10/2020 23:24	WG1459035
2-Chlorotoluene	U		0.111	0.500	1	04/10/2020 23:24	WG1459035
4-Chlorotoluene	U		0.0972	0.500	1	04/10/2020 23:24	WG1459035
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	04/10/2020 23:24	WG1459035
1,2-Dibromoethane	U		0.193	0.500	1	04/10/2020 23:24	WG1459035
Dibromomethane	U		0.117	0.500	1	04/10/2020 23:24	WG1459035
1,2-Dichlorobenzene	U		0.101	0.500	1	04/10/2020 23:24	WG1459035
1,3-Dichlorobenzene	U		0.130	0.500	1	04/10/2020 23:24	WG1459035
1,4-Dichlorobenzene	U		0.121	0.500	1	04/10/2020 23:24	WG1459035
Dichlorodifluoromethane	U		0.127	2.50	1	04/10/2020 23:24	WG1459035
1,1-Dichloroethane	U		0.114	0.500	1	04/10/2020 23:24	WG1459035
1,2-Dichloroethane	U		0.108	0.500	1	04/10/2020 23:24	WG1459035
1,1-Dichloroethene	U		0.188	0.500	1	04/10/2020 23:24	WG1459035
cis-1,2-Dichloroethene	U		0.0933	0.500	1	04/10/2020 23:24	WG1459035
trans-1,2-Dichloroethene	U		0.152	0.500	1	04/10/2020 23:24	WG1459035
1,2-Dichloropropane	U		0.190	0.500	1	04/10/2020 23:24	WG1459035
1,1-Dichloropropene	U		0.128	0.500	1	04/10/2020 23:24	WG1459035
1,3-Dichloropropane	U		0.147	1.00	1	04/10/2020 23:24	WG1459035
cis-1,3-Dichloropropene	U		0.0976	0.500	1	04/10/2020 23:24	WG1459035
trans-1,3-Dichloropropene	U		0.222	0.500	1	04/10/2020 23:24	WG1459035
trans-1,4-Dichloro-2-butene	U UJ	J0	0.257	5.00	1	04/10/2020 23:24	WG1459035
2,2-Dichloropropane	U		0.0929	0.500	1	04/10/2020 23:24	WG1459035
Di-isopropyl ether	U		0.0924	0.500	1	04/10/2020 23:24	WG1459035
Ethylbenzene	U		0.158	0.500	1	04/10/2020 23:24	WG1459035
Hexachloro-1,3-butadiene	U		0.157	1.00	1	04/10/2020 23:24	WG1459035
2-Hexanone	U		0.757	5.00	1	04/10/2020 23:24	WG1459035
n-Hexane	U		0.305	5.00	1	04/10/2020 23:24	WG1459035
Iodomethane	U		0.377	10.0	1	04/10/2020 23:24	WG1459035
Isopropylbenzene	U		0.126	0.500	1	04/10/2020 23:24	WG1459035
p-Isopropyltoluene	U		0.138	0.500	1	04/10/2020 23:24	WG1459035
2-Butanone (MEK)	U		1.28	5.00	1	04/10/2020 23:24	WG1459035
Methylene Chloride	U		1.07	2.50	1	04/10/2020 23:24	WG1459035
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	04/10/2020 23:24	WG1459035
Methyl tert-butyl ether	U		0.102	0.500	1	04/10/2020 23:24	WG1459035
Naphthalene	U		0.174	2.50	1	04/10/2020 23:24	WG1459035
n-Propylbenzene	U		0.162	0.500	1	04/10/2020 23:24	WG1459035
Styrene	U		0.117	0.500	1	04/10/2020 23:24	WG1459035
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	04/10/2020 23:24	WG1459035
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	04/10/2020 23:24	WG1459035

JC 4/29/2020

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

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	04/10/2020 23:24	WG1459035
Tetrachloroethene	U		0.199	0.500	1	04/10/2020 23:24	WG1459035
Toluene	U		0.412	0.500	1	04/10/2020 23:24	WG1459035
1,2,3-Trichlorobenzene	U		0.164	0.500	1	04/10/2020 23:24	WG1459035
1,2,4-Trichlorobenzene	U		0.355	0.500	1	04/10/2020 23:24	WG1459035
1,1,1-Trichloroethane	U		0.0940	0.500	1	04/10/2020 23:24	WG1459035
1,1,2-Trichloroethane	U		0.186	0.500	1	04/10/2020 23:24	WG1459035
Trichloroethene	U		0.153	0.500	1	04/10/2020 23:24	WG1459035
Trichlorofluoromethane	U		0.130	2.50	1	04/10/2020 23:24	WG1459035
1,2,3-Trichloropropane	U		0.247	2.50	1	04/10/2020 23:24	WG1459035
1,2,4-Trimethylbenzene	U		0.123	0.500	1	04/10/2020 23:24	WG1459035
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	04/10/2020 23:24	WG1459035
1,3,5-Trimethylbenzene	U		0.124	0.500	1	04/10/2020 23:24	WG1459035
Vinyl acetate	U		0.645	5.00	1	04/10/2020 23:24	WG1459035
Vinyl chloride	U		0.118	0.500	1	04/10/2020 23:24	WG1459035
Xylenes, Total	U		0.316	1.50	1	04/10/2020 23:24	WG1459035
(S) Toluene-d8	*102*			*80.0-120*		*04/10/2020 23:24*	WG1459035
(S) 4-Bromofluorobenzene	*105*			*77.0-126*		*04/10/2020 23:24*	WG1459035
(S) 1,2-Dichloroethane-d4	*110*			*70.0-130*		*04/10/2020 23:24*	WG1459035

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

JC 4/29/2020

MEMORANDUM

TO: Project File **DATE:** May 20, 2020

FROM: Jessie Compeau

SUBJECT: Laboratory Data Validation Review

PROJECT: American Linen Data Validation

PROJECT #: 1413.001.02.501E

TASK: EIM Data Validation Level EPA2A for 2nd Quarter Monitoring – Groundwater Samples - Group 2

LAB: Pace Sample Delivery Groups (SDGs): L1211046, L1211489, L1211929, L1212335, and L1212802

Thirty-one (31) groundwater samples (including one field duplicate), one equipment blank, and four trip blanks were collected as part of the 2nd Quarterly Monitoring Round for 2020 for the ongoing Remedial Investigation (RI) sampling at the Former American Linen Supply Site, in Seattle, Washington in April of 2020. The samples were shipped and delivered to Pace Lab Sciences (Pace) of Mount Juliet, TN for laboratory analysis. Selected samples were analyzed for the following:

- Volatile organic compounds (VOCs) by United States Environmental Protection Agency (USEPA) Method 8260D;
- Total petroleum hydrocarbons as gasoline (TPH-Gx) by NWTPH-Gx per analytical method stipulated by Washington State Department of Ecology;
- VOCs (dissolved gases – methane, ethane, and ethene) by EPA SOP RSK 175;
- Alkalinity by Method 2320 B-2011;
- Anions (chloride, nitrate, and sulfate) by USEPA Method 9056A;
- Total Organic Carbon (TOC) by USEPA Method 9060A; and
- Metals (iron and manganese) by USEPA Method 6020B.

The RI sampling was conducted spring of 2020. Results are reported in multiple SDGs from Pace. Pace SDGs are reviewed in groups (up to 10 SDGs) for each data validation report. Group 2 analytical results are reported in SDGs L1211046, L1211489, L1211929, L1212335, and L1212802. The quality assurance review of the laboratory data associated with Group 2 is summarized below.

DATA QUALIFICATIONS

Guidelines established by USEPA for a limited data validation review of analytical data along with Pace control limit criteria were used to validate the data. The comments presented in this memorandum refer to the laboratory's performance in meeting the quality control criteria outlined in the USEPA Contract Laboratory Program National Functional Guidelines for

Superfund Organic Methods Data Review (USEPA, 2017) and USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Superfund Methods Data Review (USEPA, 2017). Following Guidelines, non-project-specific laboratory duplicates and matrix spike results were not evaluated as part of this data validation.

DATA VALIDATION

Completeness

All samples were collected and analyzed as requested with the following discussion:

- SDG 1211929 – Chain of custody was modified by Pace on April 24, 2020 to include a request for VOC analysis on the trip blank (TB-042320). No action is taken other than to note this.

Sample Collection and Preservation

Samples were collected in laboratory-supplied sample containers preserved as appropriate for the individual analyses conducted. The samples were packed on ice in coolers and delivered by courier to the analytical laboratory. The laboratory reported that the coolers were received at a cooler temperature less than the recommended temperature preservation of 6°C. Samples were received in good condition except for issues mentioned in the Completeness section. No data were qualified based upon the sample collection and preservation information.

Holding Times

USEPA Method 8260D:
All samples were analyzed for VOCs within the EPA recommended holding time of fourteen days for preserved waters from the date of collection. All holding time criteria are met.

NWTPH-Gx Method:
All samples were analyzed within the WA State recommended holding time of fourteen days for preserved waters from the date of sample collection. All holding time criteria are met.

Dissolved Gases (Methane, Ethane, and Ethene) by RSK 175:
All samples were analyzed within the WA State recommended holding time of fourteen days for preserved waters from the date of sample collection. All holding time criteria are met.

USEPA Method 6020B:
All samples were analyzed within the USEPA recommended holding time for iron and manganese of 180 days for preserved waters from the date of sample collection. All holding time criteria are met.

General Chemistry (Alkalinity, Chloride, Sulfate, Nitrate, and TOC):
All samples were analyzed within the USEPA recommended holding time for alkalinity (14 days), chloride (28 days), sulfate (28 days), and nitrate (48 hours), and TOC (28 days) for preserved waters from the date of sample collection. All holding time criteria are met.

Initial and Continuing Calibration

Calibration data for this project are not required for this deliverable however Pace's notes indicate the following:

- Multiple SDGs - *USEPA Method 8260D:* Continuing calibration verification (CCV) issues were noted by Pace for multiple compounds associated with analytical batches in each SDG. These compounds are qualified by the laboratory "J0" to indicate that percent difference CCV is outside of laboratory acceptance criteria. **Associated sample results with laboratory qualified (J0) results are estimated and qualified (J/UJ).**

Method Blank Results

USEPA Method 8260D:
Laboratory method blanks were included with the analytical batches per method requirement. The target analytes were not detected in the method blanks at or above the reporting detection limits (RDLs) with the following exceptions:

- SDG L1211929 - Analytical batch WG1466619: Low levels of naphthalene and 1,2,3-trichlorobenzene are detected in the method blank. No action is taken for naphthalene and 1,2,3-trichlorobenzene as these compounds are not detected in the associated samples.

- SDG L1212335 - Analytical batch WG1468990: Low levels of hexachloro-1,3-butadiene, naphthalene, and 1,2,4-trimethylbenzene is detected in the method blank. No action is taken as these compounds are not detected in the associated samples.

- SDG L1212802 - Analytical batch WG1468990: Low levels of hexachloro-1,3-butadiene, naphthalene, and 1,2,4-trimethylbenzene are detected in the method blank. No action is taken as these are not detected in the associated samples. Naphthalene is detected in the associated trip blank but no action is taken on this basis.

NWTPH-Gx Method:
Laboratory method blanks were included with the analytical batches per method requirement. The target analyte (gasoline) was not detected in the method blanks at or above the RDLs with one exception:

- SDG L1211929 – Analytical batch WG1466240: Low levels of gasoline were detected in the method and equipment blanks. The associated gasoline detection in sample MW120-042320 is above the RDL and no action is taken.

- SDG L1211929 – Analytical batch WG1466362: Low levels of gasoline were detected in the method and equipment blanks. The associated gasoline detection in sample MW127-042320 is slightly above the RDL and no action is taken.

- SDG L1212335 - Analytical batch WG1469249: A low level of gasoline was detected in the method blank. **The associated gasoline detections in samples MW-158A-042420 and MW-142-042420 are below the RDL and qualified (U) as not detected.**

- SDG L1212335 - Analytical batch WG1467703: A low level of gasoline was detected in the method blank. **The associated gasoline detection in sample MW-143-042420 is below the RDL and qualified (U) as not detected.**

Dissolved Gases (Methane, Ethane, and Ethene) by RSK 175:
Laboratory method blanks were included with the analytical batches per method requirement. The target analytes (dissolved gases) are not detected in the method blanks at or above the RDLs.

USEPA Method 6020B and General Chemistry (Alkalinity, Chloride, Sulfate, Nitrate, and TOC):
Laboratory method blanks were included with the analytical batches per method requirement. The target analytes were detected in the method blanks below the RDLs. Per Guidance, no action is taken for blank detections less than the RDL when associated sample detections are greater than the RDL. General chemistry and metal blank detections are shown below:

SDG	Batch	Method	Analyte	Method Blank Result	Qualifier	RDL	Units	Associated Result(s) Qualified
L1211046	WG1465355	9060A	TOC	162	J	1000	µg/L	NO
L1211929	WG1466185	9060A	TOC	222	J	1000	µg/L	NO
L1212335	WG1467393	9060A	TOC	173	J	1000	µg/L	NO
L1212802	WG1467994	9060A	TOC	394	J	1000	µg/L	NO

Target analytes were detected in method blanks at low levels with no impact to the associated samples.

Trip Blank Results

USEPA Method 8260D, NWTPH-Gx:
Three trip blanks were collected. The target analytes (dissolved gases) are not detected in the method blanks at or above the RDLs with the following exceptions:

- SDG L1211929: Low levels of gasoline, benzene, and total xylenes are detected in the trip blank (TB-042320). No action is required for benzene since it was not detected in the associated samples. **Total xylenes are non-detected in associated samples with one exception. Total xylenes were detected below the RDL in sample MW-928-042320 and are qualified as not detected (U) due to trip blank contamination.** Low levels of gasoline are also detected in the associated equipment and method blanks. Low levels of gasoline were detected in associated samples MW127-042320 and MW120-042320 but no action is taken because both detections are above the RDL.

- SDG L1212802: A low level of naphthalene was detected in the associated trip blank (TB-042720) and in the associated method blank. No action is necessary since naphthalene was not detected in the associated samples.

Field, Rinsate, or Equipment Blank Results

All Analytical Methods:
One equipment blank (EQ-042320 with SDG L1211929) is associated with all samples collected by bladder pump on April 23, 2020. Low levels of gasoline and TOC were detected in the equipment blank. No action is taken for the low level of TOC contamination since the amounts in the associated samples are greater than the RDL. Low levels of gasoline were detected in associated samples above the RDL. No action is taken since the gasoline detections above the RDL.

Field Duplicate Analyses

Field duplicate pairs were submitted and analyzed. Field duplicate sample pair is as follows:

- SDG L1211929: MW103-042320 is a field duplicate of MW-928-042320

Target analyte results are comparable and within a relative percent difference (RPD) of 30% (± 1x RDL for groundwater results <5X the RDL) for the field duplicate pair.

Laboratory Duplicate Analyses

USEPA Method 8260D:
Laboratory duplicate samples were not analyzed. Refer to laboratory control sample/sample duplicate (LCS/LCSD) or matrix spike/matrix spike duplicate (MS/MSD) results for precision data.

NWTPH-Gx Method:
Laboratory duplicate samples were not analyzed. Refer to field duplicate, LCS, or MS results for additional information.

Dissolved Gases (Methane, Ethane, and Ethene) by RSK 175:
Laboratory duplicate sample analyses were performed on client and non-client samples within the analytical batches. The primary/duplicate RPDs for dissolved gas analyses are within the laboratory control limit of 20%.

USEPA Method 6020B:
Laboratory duplicate samples were not analyzed. Refer to LCS/LCSD or MS/MSD results for precision data.

General Chemistry (Alkalinity, Chloride, Sulfate, Nitrate, and TOC):
Laboratory duplicate sample analyses were performed on client samples and/or on non-client samples. The primary/duplicate RPDs for general chemistry parameters are within the laboratory control RPD limits or ± 1x RDL for groundwater results <5X the RDL with the following discussion:

- SDG L1212802: A laboratory duplicate was performed on a non-client sample with a TOC RPD result exceeding laboratory QC criteria. No action is taken on this basis since the laboratory duplicate was performed on a non-client sample. Refer to matrix spike results for precision data.

Surrogate Recoveries

USEPA Method 8260D:
The surrogate recovery results for the samples, laboratory control samples, matrix spike samples, and the method blanks are within the laboratory surrogate control limits for all the analyses with the following exception:

- SDG L1211489: Trip blank surrogate recovery (1,2-dichloroethane-d4) associated with analytical batch WG1466101 (April 6, 2020) is recovered above QC criteria and laboratory qualified (J1). No action is taken on this basis since the associated sample is a trip blank and the high surrogate does not impact associated samples.

NWTPH-Gx Method:
The surrogate recovery results for the samples, laboratory control samples, matrix spike samples, and the method blanks are within the laboratory surrogate control limits for all analyses.

Laboratory Control Samples

USEPA Method 8260D:
Laboratory control sample/laboratory control sample duplicate (LCS/LCSD) or laboratory control sample (LCS) were analyzed by USEPA Method 8260D method. The LCS % Rs or LCS/LCSD % Rs and RPDs for the all target compounds are within the laboratory control criteria for waters with the following discussion:

- SDGs L1211046 and L1211489 - Analytical batch WG1466101: LCS/LCSD % recoveries for 2,2-dichloropropane and di-isopropyl ether recovery are above laboratory acceptance criteria and laboratory qualified (J4). No action is needed for these compounds as they are not detected in the associated samples.

- SDG L1212335 - Analytical batch WG1468990: LCS % recovery for hexachloro-1,3-butadiene recovery is below the laboratory acceptance criteria and laboratory qualified (J4). **Associated sample results for hexachloro-1,3-butadiene are estimated and qualified (UJ).**

- SDG L1212335 - Analytical batch WG1470366: LCS % recovery for n-hexane recovery is below the laboratory acceptance criteria and laboratory qualified (J4). **Associated sample MW-157-042420 result for n-hexane is estimated and qualified (UJ).**

NWTPH-Gx Method:
The LCS % Rs for the target compound (gasoline) are within the laboratory control criteria for waters. In many cases, no measure of precision is provided with the analytical batch. No action is taken other than to note this.

Dissolved Gases (Methane, Ethane, and Ethene) by RSK 175:

The LCS/LCSD % Rs and RPDs for the target compound (dissolved gases) are within the laboratory control criteria for waters.

USEPA Method 6020B:
The LCS/LCSD % Rs and RPDs for the target compound (iron and manganese) are within the laboratory control criteria for waters.
General Chemistry (Alkalinity, Chloride, Sulfate, Nitrate, and TOC):
The LCS % Rs for general chemistry parameters are within the laboratory control criteria for waters.

Matrix Spike/Matrix Spike Duplicates

USEPA Method 8260D:
Matrix spike/matrix spike duplicate (MS/MSD) analyses were not performed on client. Refer to LCS results. In some cases, no measure of precision was provided. No action was taken other than to note this.

NWTPH-Gx Method:
MS/MSD analyses were not performed. Refer to LCS results. No measure of precision was provided. In some cases, no measure of precision was provided. No action was taken other than to note this.

Dissolved Gases (Methane, Ethane, and Ethene) by RSK 175:
MS/MSD analyses were not performed. Refer to LCS results and field duplicate sample for accuracy and precision data.

USEPA Method 6020B:
MS/MSD analyses were performed on client and on non-client samples within the analytical batches. The MS/MSD % Rs and RPD were acceptable and within laboratory control limit criteria for water samples with the following discussion:

- SDG L1212335: Matrix spike analysis was performed on client sample MW-331-042420 and manganese spike results are laboratory qualified (V) to indicate that the sample concentration is greater than 4X the spike amount. Per guidance no action is necessary due to the elevated sample concentration. Refer to LCS/LCSD results for accuracy and precision data.

General Chemistry (Alkalinity, Chloride, Sulfate, Nitrate, and TOC):
MS or MS/MSD analyses were performed on client and/or non-client samples within the analytical batches. In cases where MS/MSD spike analyses are not performed refer to LCS/LCSD or laboratory duplicate data for accuracy and precision data. The MS/MSD % Rs and RPDs are acceptable and within laboratory control limit criteria for water samples with the following discussion:

- L1211046: Matrix spike analysis was performed on a non-client sample and chloride spike results are laboratory qualified (EV) to indicate that the sample concentration exceeds the linear calibration range and is greater than 4X the spike amount. No action is taken in this case since the spike was performed on a non-client sample. Refer to MS/MSD results for client sample MW-326-042120 for accuracy and precision data.

Other Quality Control Issues

No laboratory quality control issues were identified in the laboratory report with the following discussions:

- Multiple SDGs: Selected sample narratives for alkalinity results indicate that several sample containers had some headspace and exposure to air may have impacted the reported results. No action was taken other than to note this.
- Electronic data deliverables (EDDs) for these SDGs were provided by the laboratory and data validator qualifiers were entered. In some cases, different chemical synonyms are used between the EDD and the hardcopy however associated Chemical Abstracts Service (CAS) numbers are provided in the EDD to confirm chemical identifications.

Compound Identification and Quantitation Limits

Results of the analyses were reported based on laboratory RDLs for all compounds. RDLs for selected compounds are elevated due to method-required dilutions. No action is taken other than to note this.

Gasoline and gasoline range organics are analyzed for via Volatile Organic Compounds (GC) by Washington State Method NWTPHGx (using a gas chromatograph/flame ionization detector (GC/FID)) and Pace reported gasoline range organic-NWTPH results. Several chlorinated VOC compounds (including cis-1,2-dichloroethene, trans-1,2-dichloroethene, trichloroethene, and tetrachloroethene) elute within the gasoline range organics (GRO) retention time range as specified by Washington State (detections falling between the toluene and dodecane range).

Non-petroleum organics (e.g. chlorinated VOC compounds) eluting within the gasoline range contribute to the GRO result and GRO results are likely biased high (J+). PES requested that Pace evaluate chromatograms associated with positive sample detections to confirm the potential presence of gasoline. Per PES's request Pace reviewed selected sample chromatograms against the gasoline standard chromatograms and assigned "no discernible petroleum pattern" to GRO results associated with this Task. PES assigned an additional project level qualifier (Z) to GRO results when the chromatogram for the sample does not match a discernible gasoline standard pattern. No action is taken in these cases other than to note that this is likely due to report formatting error. Associated chromatograms and qualified samples for this Task are as follows:

Sample ID	Laboratory Identification	Gasoline Range Organic Result (µg/L)	DV Qualifier	Data Validation Comments	Pace Chromatogram Review Notes
MW127-042320	L1211929-03	121	Z, J+	Elevated chlorinated VOCs detected within the GRO elution range	No discernible petroleum pattern present.

MW120-042320	L1211929-05	481	Z, J+	Elevated chlorinated VOCs detected within the GRO elution range	No discernible petroleum pattern present.
MW-156-042420	L1212335-06	756	Z, J+	Elevated chlorinated VOCs detected within the GRO elution range	No discernible petroleum pattern present.
MW-157-042420	L1212335-07	770	Z, J+	Elevated chlorinated VOCs detected within the GRO elution range	No discernible petroleum pattern present.

Project level qualifiers have been included to the PES's project database (Epiphany) as (ZJ+). Washington State EIM valid values were reviewed. In this case no Washington State EIM valid value descriptor is ideal and the default estimated value (J) has been selected as the best match to qualify GRO (Z,J+) data.

Data Assessment

The laboratory data reported for this project were reviewed based on the criteria outlined in:

- USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (USEPA, 2017); and
- USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Superfund Methods Data Review (USEPA, 2017).

Data qualifiers are assigned and laboratory report pages with qualifiers are attached. All data, including qualified data, are judged to be acceptable for their intended use.

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

Wet Chemistry by Method 2320 B-2011

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Alkalinity	229000		8450	20000	1	04/23/2020 01:03	WG1464743

Sample Narrative:

L1211046-01 WG1464743: Endpoint pH 4.5

Wet Chemistry by Method 9056A

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Chloride	19800		379	1000	1	04/22/2020 17:32	WG1464588
Nitrate	3140		48.0	100	1	04/22/2020 17:32	WG1464588
Sulfate	84200		594	5000	1	04/22/2020 17:32	WG1464588

Wet Chemistry by Method 9060A

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
TOC (Total Organic Carbon)	2670		102	1000	1	04/23/2020 18:08	WG1465355

Metals (ICPMS) by Method 6020B

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Iron	163		48.9	100	1	04/24/2020 01:16	WG1464780
Manganese	310		6.60	25.0	5	04/24/2020 08:57	WG1464780

Volatile Organic Compounds (GC) by Method RSK175

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Methane	14.4		0.287	0.678	1	04/27/2020 11:36	WG1466697
Ethane	U		0.296	1.29	1	04/27/2020 11:36	WG1466697
Ethene	U		0.422	1.27	1	04/27/2020 11:36	WG1466697

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

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Acetone	U		11.3	25.0	1	04/26/2020 22:42	WG1466101
Acrylonitrile	U		0.671	5.00	1	04/26/2020 22:42	WG1466101
Benzene	U		0.0941	0.500	1	04/26/2020 22:42	WG1466101
Bromobenzene	U		0.118	0.500	1	04/26/2020 22:42	WG1466101
Bromodichloromethane	U		0.136	0.500	1	04/26/2020 22:42	WG1466101
Bromochloromethane	U		0.128	0.500	1	04/26/2020 22:42	WG1466101
Bromoform	U		0.129	0.500	1	04/26/2020 22:42	WG1466101
Bromomethane	U		0.605	2.50	1	04/26/2020 22:42	WG1466101
n-Butylbenzene	U		0.157	0.500	1	04/26/2020 22:42	WG1466101
sec-Butylbenzene	U		0.125	0.500	1	04/26/2020 22:42	WG1466101
tert-Butylbenzene	U		0.127	0.500	1	04/26/2020 22:42	WG1466101
Carbon disulfide	U		0.0962	0.500	1	04/26/2020 22:42	WG1466101
Carbon tetrachloride	U		0.128	0.500	1	04/26/2020 22:42	WG1466101
Chlorobenzene	U		0.117	0.500	1	04/26/2020 22:42	WG1466101
Chlorodibromomethane	U		0.140	0.500	1	04/26/2020 22:42	WG1466101
Chloroethane	U		0.192	2.50	1	04/26/2020 22:42	WG1466101
Chloroform	U		0.111	0.500	1	04/26/2020 22:42	WG1466101
Chloromethane	U		0.960	1.25	1	04/26/2020 22:42	WG1466101
2-Chlorotoluene	U		0.106	0.500	1	04/26/2020 22:42	WG1466101
4-Chlorotoluene	U		0.114	0.500	1	04/26/2020 22:42	WG1466101

JC 5/18/2020

MW-325-042120

Collected date/time: 04/21/20 09:50

SAMPLE RESULTS - 01

L1211046

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,2-Dibromo-3-Chloropropane	U		0.276	2.50	1	04/26/2020 22:42	WG1466101
1,2-Dibromoethane	U		0.126	0.500	1	04/26/2020 22:42	WG1466101
Dibromomethane	U		0.122	0.500	1	04/26/2020 22:42	WG1466101
1,2-Dichlorobenzene	U		0.107	0.500	1	04/26/2020 22:42	WG1466101
1,3-Dichlorobenzene	U		0.299	0.500	1	04/26/2020 22:42	WG1466101
1,4-Dichlorobenzene	U		0.120	0.500	1	04/26/2020 22:42	WG1466101
Dichlorodifluoromethane	U		0.374	2.50	1	04/26/2020 22:42	WG1466101
1,1-Dichloroethane	U		0.100	0.500	1	04/26/2020 22:42	WG1466101
1,2-Dichloroethane	U		0.0819	0.500	1	04/26/2020 22:42	WG1466101
1,1-Dichloroethene	U		0.188	0.500	1	04/26/2020 22:42	WG1466101
cis-1,2-Dichloroethene	0.696		0.126	0.500	1	04/26/2020 22:42	WG1466101
trans-1,2-Dichloroethene	U		0.149	0.500	1	04/26/2020 22:42	WG1466101
1,2-Dichloropropane	U		0.149	0.500	1	04/26/2020 22:42	WG1466101
1,1-Dichloropropene	U		0.142	0.500	1	04/26/2020 22:42	WG1466101
1,3-Dichloropropane	U		0.109	1.00	1	04/26/2020 22:42	WG1466101
cis-1,3-Dichloropropene	U		0.111	0.500	1	04/26/2020 22:42	WG1466101
trans-1,3-Dichloropropene	U		0.118	0.500	1	04/26/2020 22:42	WG1466101
trans-1,4-Dichloro-2-butene	U		0.467	5.00	1	04/26/2020 22:42	WG1466101
2,2-Dichloropropane	U	~~J4~~	0.161	0.500	1	04/26/2020 22:42	WG1466101
Di-isopropyl ether	U	~~J4~~	0.105	0.500	1	04/26/2020 22:42	WG1466101
Ethylbenzene	U		0.137	0.500	1	04/26/2020 22:42	WG1466101
Hexachloro-1,3-butadiene	U		0.337	1.00	1	04/26/2020 22:42	WG1466101
2-Hexanone	U		0.787	5.00	1	04/26/2020 22:42	WG1466101
n-Hexane	U		0.749	5.00	1	04/26/2020 22:42	WG1466101
Iodomethane	U		6.00	10.0	1	04/26/2020 22:42	WG1466101
Isopropylbenzene	U		0.105	0.500	1	04/26/2020 22:42	WG1466101
p-Isopropyltoluene	U		0.120	0.500	1	04/26/2020 22:42	WG1466101
2-Butanone (MEK)	U		1.19	5.00	1	04/26/2020 22:42	WG1466101
Methylene Chloride	U		0.430	2.50	1	04/26/2020 22:42	WG1466101
4-Methyl-2-pentanone (MIBK)	U		0.478	5.00	1	04/26/2020 22:42	WG1466101
Methyl tert-butyl ether	U		0.101	0.500	1	04/26/2020 22:42	WG1466101
Naphthalene	U		0.174	2.50	1	04/26/2020 22:42	WG1466101
n-Propylbenzene	U		0.0993	0.500	1	04/26/2020 22:42	WG1466101
Styrene	U		0.118	0.500	1	04/26/2020 22:42	WG1466101
1,1,1,2-Tetrachloroethane	U		0.147	0.500	1	04/26/2020 22:42	WG1466101
1,1,2,2-Tetrachloroethane	U		0.133	0.500	1	04/26/2020 22:42	WG1466101
1,1,2-Trichlorotrifluoroethane	U		0.180	0.500	1	04/26/2020 22:42	WG1466101
Tetrachloroethene	U		0.300	0.500	1	04/26/2020 22:42	WG1466101
Toluene	U		0.278	0.500	1	04/26/2020 22:42	WG1466101
1,2,3-Trichlorobenzene	U		0.164	0.500	1	04/26/2020 22:42	WG1466101
1,2,4-Trichlorobenzene	U		0.481	1.00	1	04/26/2020 22:42	WG1466101
1,1,1-Trichloroethane	U		0.149	0.500	1	04/26/2020 22:42	WG1466101
1,1,2-Trichloroethane	U		0.158	0.500	1	04/26/2020 22:42	WG1466101
Trichloroethene	U		0.190	0.500	1	04/26/2020 22:42	WG1466101
Trichlorofluoromethane	U		0.160	2.50	1	04/26/2020 22:42	WG1466101
1,2,3-Trichloropropane	U		0.237	2.50	1	04/26/2020 22:42	WG1466101
1,2,4-Trimethylbenzene	U		0.322	0.500	1	04/26/2020 22:42	WG1466101
1,2,3-Trimethylbenzene	U		0.104	0.500	1	04/26/2020 22:42	WG1466101
1,3,5-Trimethylbenzene	U		0.104	0.500	1	04/26/2020 22:42	WG1466101
Vinyl acetate	U		0.692	5.00	1	04/26/2020 22:42	WG1466101
Vinyl chloride	U		0.234	0.500	1	04/26/2020 22:42	WG1466101
Xylenes, Total	U		0.174	1.50	1	04/26/2020 22:42	WG1466101
(S) Toluene-d8	*105*			*80.0-120*		*04/26/2020 22:42*	WG1466101
(S) 4-Bromofluorobenzene	*96.8*			*77.0-126*		*04/26/2020 22:42*	WG1466101
(S) 1,2-Dichloroethane-d4	*128*			*70.0-130*		*04/26/2020 22:42*	WG1466101

JC 5/18/2020

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

Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	242000		8450	20000	1	04/23/2020 01:11	WG1464743

Sample Narrative:

L1211046-02 WG1464743: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	20400		379	1000	1	04/22/2020 18:07	WG1464588
Nitrate	U		48.0	100	1	04/22/2020 18:07	WG1464588
Sulfate	50800		594	5000	1	04/22/2020 18:07	WG1464588

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	1070	~~B~~	102	1000	1	04/23/2020 18:23	WG1465355

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	4020		244	500	5	04/24/2020 09:01	WG1464780
Manganese	485		6.60	25.0	5	04/24/2020 09:01	WG1464780

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	16.5		0.287	0.678	1	04/27/2020 11:39	WG1466697
Ethane	U		0.296	1.29	1	04/27/2020 11:39	WG1466697
Ethene	U		0.422	1.27	1	04/27/2020 11:39	WG1466697

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U		11.3	25.0	1	04/26/2020 23:02	WG1466101
Acrylonitrile	U		0.671	5.00	1	04/26/2020 23:02	WG1466101
Benzene	0.108	J	0.0941	0.500	1	04/26/2020 23:02	WG1466101
Bromobenzene	U		0.118	0.500	1	04/26/2020 23:02	WG1466101
Bromodichloromethane	U		0.136	0.500	1	04/26/2020 23:02	WG1466101
Bromochloromethane	U		0.128	0.500	1	04/26/2020 23:02	WG1466101
Bromoform	U		0.129	0.500	1	04/26/2020 23:02	WG1466101
Bromomethane	U		0.605	2.50	1	04/26/2020 23:02	WG1466101
n-Butylbenzene	U		0.157	0.500	1	04/26/2020 23:02	WG1466101
sec-Butylbenzene	U		0.125	0.500	1	04/26/2020 23:02	WG1466101
tert-Butylbenzene	U		0.127	0.500	1	04/26/2020 23:02	WG1466101
Carbon disulfide	U		0.0962	0.500	1	04/26/2020 23:02	WG1466101
Carbon tetrachloride	U		0.128	0.500	1	04/26/2020 23:02	WG1466101
Chlorobenzene	U		0.117	0.500	1	04/26/2020 23:02	WG1466101
Chlorodibromomethane	U		0.140	0.500	1	04/26/2020 23:02	WG1466101
Chloroethane	U		0.192	2.50	1	04/26/2020 23:02	WG1466101
Chloroform	U		0.111	0.500	1	04/26/2020 23:02	WG1466101
Chloromethane	U		0.960	1.25	1	04/26/2020 23:02	WG1466101
2-Chlorotoluene	U		0.106	0.500	1	04/26/2020 23:02	WG1466101
4-Chlorotoluene	U		0.114	0.500	1	04/26/2020 23:02	WG1466101

JC 5/18/2020

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,2-Dibromo-3-Chloropropane	U		0.276	2.50	1	04/26/2020 23:02	WG1466101
1,2-Dibromoethane	U		0.126	0.500	1	04/26/2020 23:02	WG1466101
Dibromomethane	U		0.122	0.500	1	04/26/2020 23:02	WG1466101
1,2-Dichlorobenzene	U		0.107	0.500	1	04/26/2020 23:02	WG1466101
1,3-Dichlorobenzene	U		0.299	0.500	1	04/26/2020 23:02	WG1466101
1,4-Dichlorobenzene	U		0.120	0.500	1	04/26/2020 23:02	WG1466101
Dichlorodifluoromethane	U		0.374	2.50	1	04/26/2020 23:02	WG1466101
1,1-Dichloroethane	U		0.100	0.500	1	04/26/2020 23:02	WG1466101
1,2-Dichloroethane	U		0.0819	0.500	1	04/26/2020 23:02	WG1466101
1,1-Dichloroethene	U		0.188	0.500	1	04/26/2020 23:02	WG1466101
cis-1,2-Dichloroethene	0.971		0.126	0.500	1	04/26/2020 23:02	WG1466101
trans-1,2-Dichloroethene	U		0.149	0.500	1	04/26/2020 23:02	WG1466101
1,2-Dichloropropane	U		0.149	0.500	1	04/26/2020 23:02	WG1466101
1,1-Dichloropropene	U		0.142	0.500	1	04/26/2020 23:02	WG1466101
1,3-Dichloropropane	U		0.109	1.00	1	04/26/2020 23:02	WG1466101
cis-1,3-Dichloropropene	U		0.111	0.500	1	04/26/2020 23:02	WG1466101
trans-1,3-Dichloropropene	U		0.118	0.500	1	04/26/2020 23:02	WG1466101
trans-1,4-Dichloro-2-butene	U		0.467	5.00	1	04/26/2020 23:02	WG1466101
2,2-Dichloropropane	U	~~J4~~	0.161	0.500	1	04/26/2020 23:02	WG1466101
Di-isopropyl ether	U	~~J4~~	0.105	0.500	1	04/26/2020 23:02	WG1466101
Ethylbenzene	U		0.137	0.500	1	04/26/2020 23:02	WG1466101
Hexachloro-1,3-butadiene	U		0.337	1.00	1	04/26/2020 23:02	WG1466101
2-Hexanone	U		0.787	5.00	1	04/26/2020 23:02	WG1466101
n-Hexane	U		0.749	5.00	1	04/26/2020 23:02	WG1466101
Iodomethane	U		6.00	10.0	1	04/26/2020 23:02	WG1466101
Isopropylbenzene	U		0.105	0.500	1	04/26/2020 23:02	WG1466101
p-Isopropyltoluene	U		0.120	0.500	1	04/26/2020 23:02	WG1466101
2-Butanone (MEK)	U		1.19	5.00	1	04/26/2020 23:02	WG1466101
Methylene Chloride	U		0.430	2.50	1	04/26/2020 23:02	WG1466101
4-Methyl-2-pentanone (MIBK)	U		0.478	5.00	1	04/26/2020 23:02	WG1466101
Methyl tert-butyl ether	U		0.101	0.500	1	04/26/2020 23:02	WG1466101
Naphthalene	U		0.174	2.50	1	04/26/2020 23:02	WG1466101
n-Propylbenzene	U		0.0993	0.500	1	04/26/2020 23:02	WG1466101
Styrene	U		0.118	0.500	1	04/26/2020 23:02	WG1466101
1,1,1,2-Tetrachloroethane	U		0.147	0.500	1	04/26/2020 23:02	WG1466101
1,1,2,2-Tetrachloroethane	U		0.133	0.500	1	04/26/2020 23:02	WG1466101
1,1,2-Trichlorotrifluoroethane	U		0.180	0.500	1	04/26/2020 23:02	WG1466101
Tetrachloroethene	U		0.300	0.500	1	04/26/2020 23:02	WG1466101
Toluene	U		0.278	0.500	1	04/26/2020 23:02	WG1466101
1,2,3-Trichlorobenzene	U		0.164	0.500	1	04/26/2020 23:02	WG1466101
1,2,4-Trichlorobenzene	U		0.481	1.00	1	04/26/2020 23:02	WG1466101
1,1,1-Trichloroethane	U		0.149	0.500	1	04/26/2020 23:02	WG1466101
1,1,2-Trichloroethane	U		0.158	0.500	1	04/26/2020 23:02	WG1466101
Trichloroethene	U		0.190	0.500	1	04/26/2020 23:02	WG1466101
Trichlorofluoromethane	U		0.160	2.50	1	04/26/2020 23:02	WG1466101
1,2,3-Trichloropropane	U		0.237	2.50	1	04/26/2020 23:02	WG1466101
1,2,4-Trimethylbenzene	U		0.322	0.500	1	04/26/2020 23:02	WG1466101
1,2,3-Trimethylbenzene	U		0.104	0.500	1	04/26/2020 23:02	WG1466101
1,3,5-Trimethylbenzene	U		0.104	0.500	1	04/26/2020 23:02	WG1466101
Vinyl acetate	U		0.692	5.00	1	04/26/2020 23:02	WG1466101
Vinyl chloride	0.515 J	J0	0.234	0.500	1	04/26/2020 23:02	WG1466101
Xylenes, Total	U		0.174	1.50	1	04/26/2020 23:02	WG1466101
(S) Toluene-d8	*101*			*80.0-120*		*04/26/2020 23:02*	WG1466101
(S) 4-Bromofluorobenzene	*94.8*			*77.0-126*		*04/26/2020 23:02*	WG1466101
(S) 1,2-Dichloroethane-d4	*128*			*70.0-130*		*04/26/2020 23:02*	WG1466101

JC 5/18/2020

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

Wet Chemistry by Method 2320 B-2011

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Alkalinity	325000		8450	20000	1	04/23/2020 01:19	WG1464743

Sample Narrative:

L1211046-03 WG1464743: Endpoint pH 4.5

Wet Chemistry by Method 9056A

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Chloride	16400		379	1000	1	04/22/2020 19:01	WG1464588
Nitrate	U		48.0	100	1	04/22/2020 19:01	WG1464588
Sulfate	58200		594	5000	1	04/22/2020 19:01	WG1464588

Wet Chemistry by Method 9060A

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
TOC (Total Organic Carbon)	1760		102	1000	1	04/23/2020 19:53	WG1465355

Metals (ICPMS) by Method 6020B

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Iron	3540		244	500	5	04/24/2020 09:04	WG1464780
Manganese	318		6.60	25.0	5	04/24/2020 09:04	WG1464780

Volatile Organic Compounds (GC) by Method RSK175

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Methane	350		0.287	0.678	1	04/27/2020 11:41	WG1466697
Ethane	U		0.296	1.29	1	04/27/2020 11:41	WG1466697
Ethene	U		0.422	1.27	1	04/27/2020 11:41	WG1466697

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

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Acetone	U		11.3	25.0	1	04/26/2020 23:22	WG1466101
Acrylonitrile	U		0.671	5.00	1	04/26/2020 23:22	WG1466101
Benzene	U		0.0941	0.500	1	04/26/2020 23:22	WG1466101
Bromobenzene	U		0.118	0.500	1	04/26/2020 23:22	WG1466101
Bromodichloromethane	U		0.136	0.500	1	04/26/2020 23:22	WG1466101
Bromochloromethane	U		0.128	0.500	1	04/26/2020 23:22	WG1466101
Bromoform	U		0.129	0.500	1	04/26/2020 23:22	WG1466101
Bromomethane	U		0.605	2.50	1	04/26/2020 23:22	WG1466101
n-Butylbenzene	U		0.157	0.500	1	04/26/2020 23:22	WG1466101
sec-Butylbenzene	U		0.125	0.500	1	04/26/2020 23:22	WG1466101
tert-Butylbenzene	U		0.127	0.500	1	04/26/2020 23:22	WG1466101
Carbon disulfide	0.642		0.0962	0.500	1	04/26/2020 23:22	WG1466101
Carbon tetrachloride	U		0.128	0.500	1	04/26/2020 23:22	WG1466101
Chlorobenzene	U		0.117	0.500	1	04/26/2020 23:22	WG1466101
Chlorodibromomethane	U		0.140	0.500	1	04/26/2020 23:22	WG1466101
Chloroethane	U		0.192	2.50	1	04/26/2020 23:22	WG1466101
Chloroform	U		0.111	0.500	1	04/26/2020 23:22	WG1466101
Chloromethane	U		0.960	1.25	1	04/26/2020 23:22	WG1466101
2-Chlorotoluene	U		0.106	0.500	1	04/26/2020 23:22	WG1466101
4-Chlorotoluene	U		0.114	0.500	1	04/26/2020 23:22	WG1466101

JC 5/18/2020

MW-316-042120
Collected date/time: 04/21/20 14:45

SAMPLE RESULTS - 03

L1211046

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

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,2-Dibromo-3-Chloropropane	U		0.276	2.50	1	04/26/2020 23:22	WG1466101
1,2-Dibromoethane	U		0.126	0.500	1	04/26/2020 23:22	WG1466101
Dibromomethane	U		0.122	0.500	1	04/26/2020 23:22	WG1466101
1,2-Dichlorobenzene	U		0.107	0.500	1	04/26/2020 23:22	WG1466101
1,3-Dichlorobenzene	U		0.299	0.500	1	04/26/2020 23:22	WG1466101
1,4-Dichlorobenzene	U		0.120	0.500	1	04/26/2020 23:22	WG1466101
Dichlorodifluoromethane	U		0.374	2.50	1	04/26/2020 23:22	WG1466101
1,1-Dichloroethane	U		0.100	0.500	1	04/26/2020 23:22	WG1466101
1,2-Dichloroethane	U		0.0819	0.500	1	04/26/2020 23:22	WG1466101
1,1-Dichloroethene	U		0.188	0.500	1	04/26/2020 23:22	WG1466101
cis-1,2-Dichloroethene	U		0.126	0.500	1	04/26/2020 23:22	WG1466101
trans-1,2-Dichloroethene	U		0.149	0.500	1	04/26/2020 23:22	WG1466101
1,2-Dichloropropane	U		0.149	0.500	1	04/26/2020 23:22	WG1466101
1,1-Dichloropropene	U		0.142	0.500	1	04/26/2020 23:22	WG1466101
1,3-Dichloropropane	U		0.109	1.00	1	04/26/2020 23:22	WG1466101
cis-1,3-Dichloropropene	U		0.111	0.500	1	04/26/2020 23:22	WG1466101
trans-1,3-Dichloropropene	U		0.118	0.500	1	04/26/2020 23:22	WG1466101
trans-1,4-Dichloro-2-butene	U		0.467	5.00	1	04/26/2020 23:22	WG1466101
2,2-Dichloropropane	U	~~J4~~	0.161	0.500	1	04/26/2020 23:22	WG1466101
Di-isopropyl ether	U	~~J4~~	0.105	0.500	1	04/26/2020 23:22	WG1466101
Ethylbenzene	U		0.137	0.500	1	04/26/2020 23:22	WG1466101
Hexachloro-1,3-butadiene	U		0.337	1.00	1	04/26/2020 23:22	WG1466101
2-Hexanone	U		0.787	5.00	1	04/26/2020 23:22	WG1466101
n-Hexane	U		0.749	5.00	1	04/26/2020 23:22	WG1466101
Iodomethane	U		6.00	10.0	1	04/26/2020 23:22	WG1466101
Isopropylbenzene	U		0.105	0.500	1	04/26/2020 23:22	WG1466101
p-Isopropyltoluene	U		0.120	0.500	1	04/26/2020 23:22	WG1466101
2-Butanone (MEK)	U		1.19	5.00	1	04/26/2020 23:22	WG1466101
Methylene Chloride	U		0.430	2.50	1	04/26/2020 23:22	WG1466101
4-Methyl-2-pentanone (MIBK)	U		0.478	5.00	1	04/26/2020 23:22	WG1466101
Methyl tert-butyl ether	U		0.101	0.500	1	04/26/2020 23:22	WG1466101
Naphthalene	U		0.174	2.50	1	04/26/2020 23:22	WG1466101
n-Propylbenzene	U		0.0993	0.500	1	04/26/2020 23:22	WG1466101
Styrene	U		0.118	0.500	1	04/26/2020 23:22	WG1466101
1,1,1,2-Tetrachloroethane	U		0.147	0.500	1	04/26/2020 23:22	WG1466101
1,1,2,2-Tetrachloroethane	U		0.133	0.500	1	04/26/2020 23:22	WG1466101
1,1,2-Trichlorotrifluoroethane	U		0.180	0.500	1	04/26/2020 23:22	WG1466101
Tetrachloroethene	U		0.300	0.500	1	04/26/2020 23:22	WG1466101
Toluene	U		0.278	0.500	1	04/26/2020 23:22	WG1466101
1,2,3-Trichlorobenzene	U		0.164	0.500	1	04/26/2020 23:22	WG1466101
1,2,4-Trichlorobenzene	U		0.481	1.00	1	04/26/2020 23:22	WG1466101
1,1,1-Trichloroethane	U		0.149	0.500	1	04/26/2020 23:22	WG1466101
1,1,2-Trichloroethane	U		0.158	0.500	1	04/26/2020 23:22	WG1466101
Trichloroethene	U		0.190	0.500	1	04/26/2020 23:22	WG1466101
Trichlorofluoromethane	U		0.160	2.50	1	04/26/2020 23:22	WG1466101
1,2,3-Trichloropropane	U		0.237	2.50	1	04/26/2020 23:22	WG1466101
1,2,4-Trimethylbenzene	U		0.322	0.500	1	04/26/2020 23:22	WG1466101
1,2,3-Trimethylbenzene	U		0.104	0.500	1	04/26/2020 23:22	WG1466101
1,3,5-Trimethylbenzene	U		0.104	0.500	1	04/26/2020 23:22	WG1466101
Vinyl acetate	U		0.692	5.00	1	04/26/2020 23:22	WG1466101
Vinyl chloride	U		0.234	0.500	1	04/26/2020 23:22	WG1466101
Xylenes, Total	U		0.174	1.50	1	04/26/2020 23:22	WG1466101
(S) Toluene-d8	*101*			*80.0-120*		*04/26/2020 23:22*	WG1466101
(S) 4-Bromofluorobenzene	*98.6*			*77.0-126*		*04/26/2020 23:22*	WG1466101
(S) 1,2-Dichloroethane-d4	*129*			*70.0-130*		*04/26/2020 23:22*	WG1466101

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Wet Chemistry by Method 2320 B-2011

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Alkalinity	616000		8450	20000	1	04/24/2020 11:17	WG1465432

Sample Narrative:

L1211489-01 WG1465432: Endpoint pH 4.5

Wet Chemistry by Method 9056A

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Chloride	5030		379	1000	1	04/23/2020 17:02	WG1464967
Nitrate	U		48.0	100	1	04/23/2020 17:02	WG1464967
Sulfate	3410	J	594	5000	1	04/23/2020 17:02	WG1464967

Wet Chemistry by Method 9060A

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
TOC (Total Organic Carbon)	10300		102	1000	1	04/24/2020 18:52	WG1465869

Metals (ICPMS) by Method 6020B

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Iron	12200		489	1000	10	04/27/2020 19:47	WG1465384
Manganese	3750		1.32	5.00	1	04/27/2020 17:58	WG1465384

Volatile Organic Compounds (GC) by Method RSK175

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Methane	3800		0.287	0.678	1	04/27/2020 13:35	WG1466698
Ethane	21.2		0.296	1.29	1	04/27/2020 13:35	WG1466698
Ethene	U		0.422	1.27	1	04/27/2020 13:35	WG1466698

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

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Acetone	U		11.3	25.0	1	04/27/2020 13:05	WG1466847
Acrylonitrile	U		0.671	5.00	1	04/27/2020 13:05	WG1466847
Benzene	U		0.0941	0.500	1	04/27/2020 13:05	WG1466847
Bromobenzene	U		0.118	0.500	1	04/27/2020 13:05	WG1466847
Bromodichloromethane	U		0.136	0.500	1	04/27/2020 13:05	WG1466847
Bromochloromethane	U		0.128	0.500	1	04/27/2020 13:05	WG1466847
Bromoform	U		0.129	0.500	1	04/27/2020 13:05	WG1466847
Bromomethane	U		0.605	2.50	1	04/27/2020 13:05	WG1466847
n-Butylbenzene	U		0.157	0.500	1	04/27/2020 13:05	WG1466847
sec-Butylbenzene	U		0.125	0.500	1	04/27/2020 13:05	WG1466847
tert-Butylbenzene	U		0.127	0.500	1	04/27/2020 13:05	WG1466847
Carbon disulfide	U		0.0962	0.500	1	04/27/2020 13:05	WG1466847
Carbon tetrachloride	U		0.128	0.500	1	04/27/2020 13:05	WG1466847
Chlorobenzene	U		0.117	0.500	1	04/27/2020 13:05	WG1466847
Chlorodibromomethane	U		0.140	0.500	1	04/27/2020 13:05	WG1466847
Chloroethane	U		0.192	2.50	1	04/27/2020 13:05	WG1466847
Chloroform	U		0.111	0.500	1	04/27/2020 13:05	WG1466847
Chloromethane	U		0.960	1.25	1	04/27/2020 13:05	WG1466847
2-Chlorotoluene	U		0.106	0.500	1	04/27/2020 13:05	WG1466847
4-Chlorotoluene	U		0.114	0.500	1	04/27/2020 13:05	WG1466847

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,2-Dibromo-3-Chloropropane	U		0.276	2.50	1	04/27/2020 13:05	WG1466847
1,2-Dibromoethane	U		0.126	0.500	1	04/27/2020 13:05	WG1466847
Dibromomethane	U		0.122	0.500	1	04/27/2020 13:05	WG1466847
1,2-Dichlorobenzene	U		0.107	0.500	1	04/27/2020 13:05	WG1466847
1,3-Dichlorobenzene	U		0.299	0.500	1	04/27/2020 13:05	WG1466847
1,4-Dichlorobenzene	U		0.120	0.500	1	04/27/2020 13:05	WG1466847
Dichlorodifluoromethane	U		0.374	2.50	1	04/27/2020 13:05	WG1466847
1,1-Dichloroethane	U		0.100	0.500	1	04/27/2020 13:05	WG1466847
1,2-Dichloroethane	U		0.0819	0.500	1	04/27/2020 13:05	WG1466847
1,1-Dichloroethene	U		0.188	0.500	1	04/27/2020 13:05	WG1466847
cis-1,2-Dichloroethene	46.8		0.126	0.500	1	04/27/2020 13:05	WG1466847
trans-1,2-Dichloroethene	0.229	J	0.149	0.500	1	04/27/2020 13:05	WG1466847
1,2-Dichloropropane	U		0.149	0.500	1	04/27/2020 13:05	WG1466847
1,1-Dichloropropene	U		0.142	0.500	1	04/27/2020 13:05	WG1466847
1,3-Dichloropropane	U		0.109	1.00	1	04/27/2020 13:05	WG1466847
cis-1,3-Dichloropropene	U		0.111	0.500	1	04/27/2020 13:05	WG1466847
trans-1,3-Dichloropropene	U		0.118	0.500	1	04/27/2020 13:05	WG1466847
trans-1,4-Dichloro-2-butene	U		0.467	5.00	1	04/27/2020 13:05	WG1466847
2,2-Dichloropropane	U		0.161	0.500	1	04/27/2020 13:05	WG1466847
Di-isopropyl ether	U		0.105	0.500	1	04/27/2020 13:05	WG1466847
Ethylbenzene	U		0.137	0.500	1	04/27/2020 13:05	WG1466847
Hexachloro-1,3-butadiene	U		0.337	1.00	1	04/27/2020 13:05	WG1466847
2-Hexanone	U		0.787	5.00	1	04/27/2020 13:05	WG1466847
n-Hexane	U		0.749	5.00	1	04/27/2020 13:05	WG1466847
Iodomethane	U		6.00	10.0	1	04/27/2020 13:05	WG1466847
Isopropylbenzene	U		0.105	0.500	1	04/27/2020 13:05	WG1466847
p-Isopropyltoluene	U		0.120	0.500	1	04/27/2020 13:05	WG1466847
2-Butanone (MEK)	U		1.19	5.00	1	04/27/2020 13:05	WG1466847
Methylene Chloride	U		0.430	2.50	1	04/27/2020 13:05	WG1466847
4-Methyl-2-pentanone (MIBK)	U		0.478	5.00	1	04/27/2020 13:05	WG1466847
Methyl tert-butyl ether	U		0.101	0.500	1	04/27/2020 13:05	WG1466847
Naphthalene	U		0.174	2.50	1	04/27/2020 13:05	WG1466847
n-Propylbenzene	U		0.0993	0.500	1	04/27/2020 13:05	WG1466847
Styrene	U		0.118	0.500	1	04/27/2020 13:05	WG1466847
1,1,1,2-Tetrachloroethane	U		0.147	0.500	1	04/27/2020 13:05	WG1466847
1,1,2,2-Tetrachloroethane	U		0.133	0.500	1	04/27/2020 13:05	WG1466847
1,1,2-Trichlorotrifluoroethane	U		0.180	0.500	1	04/27/2020 13:05	WG1466847
Tetrachloroethene	U		0.300	0.500	1	04/27/2020 13:05	WG1466847
Toluene	U		0.278	0.500	1	04/27/2020 13:05	WG1466847
1,2,3-Trichlorobenzene	U		0.164	0.500	1	04/27/2020 13:05	WG1466847
1,2,4-Trichlorobenzene	U		0.481	1.00	1	04/27/2020 13:05	WG1466847
1,1,1-Trichloroethane	U		0.149	0.500	1	04/27/2020 13:05	WG1466847
1,1,2-Trichloroethane	U		0.158	0.500	1	04/27/2020 13:05	WG1466847
Trichloroethene	U		0.190	0.500	1	04/27/2020 13:05	WG1466847
Trichlorofluoromethane	U		0.160	2.50	1	04/27/2020 13:05	WG1466847
1,2,3-Trichloropropane	U		0.237	2.50	1	04/27/2020 13:05	WG1466847
1,2,4-Trimethylbenzene	U		0.322	0.500	1	04/27/2020 13:05	WG1466847
1,2,3-Trimethylbenzene	U		0.104	0.500	1	04/27/2020 13:05	WG1466847
1,3,5-Trimethylbenzene	U		0.104	0.500	1	04/27/2020 13:05	WG1466847
Vinyl acetate	U		0.692	5.00	1	04/27/2020 13:05	WG1466847
Vinyl chloride	15.2		0.234	0.500	1	04/27/2020 13:05	WG1466847
Xylenes, Total	U		0.174	1.50	1	04/27/2020 13:05	WG1466847
(S) Toluene-d8	*106*			*80.0-120*		*04/27/2020 13:05*	WG1466847
(S) 4-Bromofluorobenzene	*100*			*77.0-126*		*04/27/2020 13:05*	WG1466847
(S) 1,2-Dichloroethane-d4	*106*			*70.0-130*		*04/27/2020 13:05*	WG1466847

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

Wet Chemistry by Method 2320 B-2011

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Alkalinity	378000		8450	20000	1	04/24/2020 11:34	WG1465432

Sample Narrative:

L1211489-02 WG1465432: Endpoint pH 4.5

Wet Chemistry by Method 9056A

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Chloride	35100		379	1000	1	04/23/2020 18:32	WG1464967
Nitrate	U		48.0	100	1	04/23/2020 18:32	WG1464967
Sulfate	190000		5940	50000	10	04/23/2020 18:49	WG1464967

Wet Chemistry by Method 9060A

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
TOC (Total Organic Carbon)	7120		102	1000	1	04/24/2020 20:20	WG1465869

Metals (ICPMS) by Method 6020B

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Iron	12100		489	1000	10	04/27/2020 20:28	WG1465384
Manganese	1020		1.32	5.00	1	04/27/2020 18:01	WG1465384

Volatile Organic Compounds (GC) by Method RSK175

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Methane	2750		0.287	0.678	1	04/27/2020 13:41	WG1466698
Ethane	35.2		0.296	1.29	1	04/27/2020 13:41	WG1466698
Ethene	154		0.422	1.27	1	04/27/2020 13:41	WG1466698

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

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Acetone	U		113	250	10	04/27/2020 19:01	WG1466847
Acrylonitrile	U		6.71	50.0	10	04/27/2020 19:01	WG1466847
Benzene	U		0.941	5.00	10	04/27/2020 19:01	WG1466847
Bromobenzene	U		1.18	5.00	10	04/27/2020 19:01	WG1466847
Bromodichloromethane	U		1.36	5.00	10	04/27/2020 19:01	WG1466847
Bromochloromethane	U		1.28	5.00	10	04/27/2020 19:01	WG1466847
Bromoform	U		1.29	5.00	10	04/27/2020 19:01	WG1466847
Bromomethane	U		6.05	25.0	10	04/27/2020 19:01	WG1466847
n-Butylbenzene	U		1.57	5.00	10	04/27/2020 19:01	WG1466847
sec-Butylbenzene	U		1.25	5.00	10	04/27/2020 19:01	WG1466847
tert-Butylbenzene	U		1.27	5.00	10	04/27/2020 19:01	WG1466847
Carbon disulfide	U		0.962	5.00	10	04/27/2020 19:01	WG1466847
Carbon tetrachloride	U		1.28	5.00	10	04/27/2020 19:01	WG1466847
Chlorobenzene	U		1.17	5.00	10	04/27/2020 19:01	WG1466847
Chlorodibromomethane	U		1.40	5.00	10	04/27/2020 19:01	WG1466847
Chloroethane	U		1.92	25.0	10	04/27/2020 19:01	WG1466847
Chloroform	U		1.11	5.00	10	04/27/2020 19:01	WG1466847
Chloromethane	U		9.60	12.5	10	04/27/2020 19:01	WG1466847
2-Chlorotoluene	U		1.06	5.00	10	04/27/2020 19:01	WG1466847
4-Chlorotoluene	U		1.14	5.00	10	04/27/2020 19:01	WG1466847

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,2-Dibromo-3-Chloropropane	U		2.76	25.0	10	04/27/2020 19:01	WG1466847
1,2-Dibromoethane	U		1.26	5.00	10	04/27/2020 19:01	WG1466847
Dibromomethane	U		1.22	5.00	10	04/27/2020 19:01	WG1466847
1,2-Dichlorobenzene	U		1.07	5.00	10	04/27/2020 19:01	WG1466847
1,3-Dichlorobenzene	U		2.99	5.00	10	04/27/2020 19:01	WG1466847
1,4-Dichlorobenzene	U		1.20	5.00	10	04/27/2020 19:01	WG1466847
Dichlorodifluoromethane	U		3.74	25.0	10	04/27/2020 19:01	WG1466847
1,1-Dichloroethane	U		1.00	5.00	10	04/27/2020 19:01	WG1466847
1,2-Dichloroethane	U		0.819	5.00	10	04/27/2020 19:01	WG1466847
1,1-Dichloroethene	4.90	J	1.88	5.00	10	04/27/2020 19:01	WG1466847
cis-1,2-Dichloroethene	3190		12.6	50.0	100	04/29/2020 01:46	WG1467682
trans-1,2-Dichloroethene	14.8		1.49	5.00	10	04/27/2020 19:01	WG1466847
1,2-Dichloropropane	U		1.49	5.00	10	04/27/2020 19:01	WG1466847
1,1-Dichloropropene	U		1.42	5.00	10	04/27/2020 19:01	WG1466847
1,3-Dichloropropane	U		1.09	10.0	10	04/27/2020 19:01	WG1466847
cis-1,3-Dichloropropene	U		1.11	5.00	10	04/27/2020 19:01	WG1466847
trans-1,3-Dichloropropene	U		1.18	5.00	10	04/27/2020 19:01	WG1466847
trans-1,4-Dichloro-2-butene	U		4.67	50.0	10	04/27/2020 19:01	WG1466847
2,2-Dichloropropane	U		1.61	5.00	10	04/27/2020 19:01	WG1466847
Di-isopropyl ether	U		1.05	5.00	10	04/27/2020 19:01	WG1466847
Ethylbenzene	U		1.37	5.00	10	04/27/2020 19:01	WG1466847
Hexachloro-1,3-butadiene	U		3.37	10.0	10	04/27/2020 19:01	WG1466847
2-Hexanone	U		7.87	50.0	10	04/27/2020 19:01	WG1466847
n-Hexane	U		7.49	50.0	10	04/27/2020 19:01	WG1466847
Iodomethane	U		60.0	100	10	04/27/2020 19:01	WG1466847
Isopropylbenzene	U		1.05	5.00	10	04/27/2020 19:01	WG1466847
p-Isopropyltoluene	U		1.20	5.00	10	04/27/2020 19:01	WG1466847
2-Butanone (MEK)	U		11.9	50.0	10	04/27/2020 19:01	WG1466847
Methylene Chloride	U		4.30	25.0	10	04/27/2020 19:01	WG1466847
4-Methyl-2-pentanone (MIBK)	U		4.78	50.0	10	04/27/2020 19:01	WG1466847
Methyl tert-butyl ether	U		1.01	5.00	10	04/27/2020 19:01	WG1466847
Naphthalene	3.69	J	1.74	25.0	10	04/27/2020 19:01	WG1466847
n-Propylbenzene	U		0.993	5.00	10	04/27/2020 19:01	WG1466847
Styrene	U		1.18	5.00	10	04/27/2020 19:01	WG1466847
1,1,1,2-Tetrachloroethane	U		1.47	5.00	10	04/27/2020 19:01	WG1466847
1,1,2,2-Tetrachloroethane	U		1.33	5.00	10	04/27/2020 19:01	WG1466847
1,1,2-Trichlorotrifluoroethane	U		1.80	5.00	10	04/27/2020 19:01	WG1466847
Tetrachloroethene	U		3.00	5.00	10	04/27/2020 19:01	WG1466847
Toluene	U		2.78	5.00	10	04/27/2020 19:01	WG1466847
1,2,3-Trichlorobenzene	U		1.64	5.00	10	04/27/2020 19:01	WG1466847
1,2,4-Trichlorobenzene	U		4.81	10.0	10	04/27/2020 19:01	WG1466847
1,1,1-Trichloroethane	U		1.49	5.00	10	04/27/2020 19:01	WG1466847
1,1,2-Trichloroethane	U		1.58	5.00	10	04/27/2020 19:01	WG1466847
Trichloroethene	229		1.90	5.00	10	04/27/2020 19:01	WG1466847
Trichlorofluoromethane	U		1.60	25.0	10	04/27/2020 19:01	WG1466847
1,2,3-Trichloropropane	U		2.37	25.0	10	04/27/2020 19:01	WG1466847
1,2,4-Trimethylbenzene	U		3.22	5.00	10	04/27/2020 19:01	WG1466847
1,2,3-Trimethylbenzene	U		1.04	5.00	10	04/27/2020 19:01	WG1466847
1,3,5-Trimethylbenzene	U		1.04	5.00	10	04/27/2020 19:01	WG1466847
Vinyl acetate	U		6.92	50.0	10	04/27/2020 19:01	WG1466847
Vinyl chloride	410		2.34	5.00	10	04/27/2020 19:01	WG1466847
Xylenes, Total	U		1.74	15.0	10	04/27/2020 19:01	WG1466847
(S) Toluene-d8	*107*			*80.0-120*		*04/27/2020 19:01*	WG1466847
(S) Toluene-d8	*105*			*80.0-120*		*04/29/2020 01:46*	WG1467682
(S) 4-Bromofluorobenzene	*99.2*			*77.0-126*		*04/27/2020 19:01*	WG1466847
(S) 4-Bromofluorobenzene	*92.7*			*77.0-126*		*04/29/2020 01:46*	WG1467682

JC 5/18/2020

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
(S) 1,2-Dichloroethane-d4	*104*			*70.0-130*		*04/27/2020 19:01*	WG1466847
(S) 1,2-Dichloroethane-d4	*106*			*70.0-130*		*04/29/2020 01:46*	WG1467682

JC 5/18/2020

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

Wet Chemistry by Method 2320 B-2011

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Alkalinity	1010000		8450	20000	1	04/24/2020 11:42	WG1465432

Sample Narrative:

L1211489-03 WG1465432: Endpoint pH 4.5

Wet Chemistry by Method 9056A

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Chloride	7270		379	1000	1	04/24/2020 00:12	WG1464967
Nitrate	U		48.0	100	1	04/24/2020 00:12	WG1464967
Sulfate	4230	J	594	5000	1	04/24/2020 00:12	WG1464967

Wet Chemistry by Method 9060A

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
TOC (Total Organic Carbon)	10900		102	1000	1	04/24/2020 20:34	WG1465869

Metals (ICPMS) by Method 6020B

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Iron	7430		244	500	5	04/27/2020 19:59	WG1465384
Manganese	1460		1.32	5.00	1	04/27/2020 18:13	WG1465384

Volatile Organic Compounds (GC) by Method RSK175

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Methane	618		0.287	0.678	1	04/27/2020 13:44	WG1466698
Ethane	U		0.296	1.29	1	04/27/2020 13:44	WG1466698
Ethene	U		0.422	1.27	1	04/27/2020 13:44	WG1466698

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

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Acetone	U		11.3	25.0	1	04/27/2020 13:54	WG1466847
Acrylonitrile	U		0.671	5.00	1	04/27/2020 13:54	WG1466847
Benzene	U		0.0941	0.500	1	04/27/2020 13:54	WG1466847
Bromobenzene	U		0.118	0.500	1	04/27/2020 13:54	WG1466847
Bromodichloromethane	U		0.136	0.500	1	04/27/2020 13:54	WG1466847
Bromochloromethane	U		0.128	0.500	1	04/27/2020 13:54	WG1466847
Bromoform	U		0.129	0.500	1	04/27/2020 13:54	WG1466847
Bromomethane	U		0.605	2.50	1	04/27/2020 13:54	WG1466847
n-Butylbenzene	U		0.157	0.500	1	04/27/2020 13:54	WG1466847
sec-Butylbenzene	U		0.125	0.500	1	04/27/2020 13:54	WG1466847
tert-Butylbenzene	U		0.127	0.500	1	04/27/2020 13:54	WG1466847
Carbon disulfide	U		0.0962	0.500	1	04/27/2020 13:54	WG1466847
Carbon tetrachloride	U		0.128	0.500	1	04/27/2020 13:54	WG1466847
Chlorobenzene	U		0.117	0.500	1	04/27/2020 13:54	WG1466847
Chlorodibromomethane	U		0.140	0.500	1	04/27/2020 13:54	WG1466847
Chloroethane	U		0.192	2.50	1	04/27/2020 13:54	WG1466847
Chloroform	U		0.111	0.500	1	04/27/2020 13:54	WG1466847
Chloromethane	U		0.960	1.25	1	04/27/2020 13:54	WG1466847
2-Chlorotoluene	U		0.106	0.500	1	04/27/2020 13:54	WG1466847
4-Chlorotoluene	U		0.114	0.500	1	04/27/2020 13:54	WG1466847

JC
5/18/2020

MW-312-042220

Collected date/time: 04/22/20 12:30

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

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,2-Dibromo-3-Chloropropane	U		0.276	2.50	1	04/27/2020 13:54	WG1466847
1,2-Dibromoethane	U		0.126	0.500	1	04/27/2020 13:54	WG1466847
Dibromomethane	U		0.122	0.500	1	04/27/2020 13:54	WG1466847
1,2-Dichlorobenzene	U		0.107	0.500	1	04/27/2020 13:54	WG1466847
1,3-Dichlorobenzene	U		0.299	0.500	1	04/27/2020 13:54	WG1466847
1,4-Dichlorobenzene	U		0.120	0.500	1	04/27/2020 13:54	WG1466847
Dichlorodifluoromethane	U		0.374	2.50	1	04/27/2020 13:54	WG1466847
1,1-Dichloroethane	U		0.100	0.500	1	04/27/2020 13:54	WG1466847
1,2-Dichloroethane	U		0.0819	0.500	1	04/27/2020 13:54	WG1466847
1,1-Dichloroethene	U		0.188	0.500	1	04/27/2020 13:54	WG1466847
cis-1,2-Dichloroethene	U		0.126	0.500	1	04/27/2020 13:54	WG1466847
trans-1,2-Dichloroethene	U		0.149	0.500	1	04/27/2020 13:54	WG1466847
1,2-Dichloropropane	U		0.149	0.500	1	04/27/2020 13:54	WG1466847
1,1-Dichloropropene	U		0.142	0.500	1	04/27/2020 13:54	WG1466847
1,3-Dichloropropane	U		0.109	1.00	1	04/27/2020 13:54	WG1466847
cis-1,3-Dichloropropene	U		0.111	0.500	1	04/27/2020 13:54	WG1466847
trans-1,3-Dichloropropene	U		0.118	0.500	1	04/27/2020 13:54	WG1466847
trans-1,4-Dichloro-2-butene	U		0.467	5.00	1	04/27/2020 13:54	WG1466847
2,2-Dichloropropane	U		0.161	0.500	1	04/27/2020 13:54	WG1466847
Di-isopropyl ether	U		0.105	0.500	1	04/27/2020 13:54	WG1466847
Ethylbenzene	U		0.137	0.500	1	04/27/2020 13:54	WG1466847
Hexachloro-1,3-butadiene	U		0.337	1.00	1	04/27/2020 13:54	WG1466847
2-Hexanone	U		0.787	5.00	1	04/27/2020 13:54	WG1466847
n-Hexane	U		0.749	5.00	1	04/27/2020 13:54	WG1466847
Iodomethane	U		6.00	10.0	1	04/27/2020 13:54	WG1466847
Isopropylbenzene	U		0.105	0.500	1	04/27/2020 13:54	WG1466847
p-Isopropyltoluene	U		0.120	0.500	1	04/27/2020 13:54	WG1466847
2-Butanone (MEK)	U		1.19	5.00	1	04/27/2020 13:54	WG1466847
Methylene Chloride	U		0.430	2.50	1	04/27/2020 13:54	WG1466847
4-Methyl-2-pentanone (MIBK)	U		0.478	5.00	1	04/27/2020 13:54	WG1466847
Methyl tert-butyl ether	U		0.101	0.500	1	04/27/2020 13:54	WG1466847
Naphthalene	U		0.174	2.50	1	04/27/2020 13:54	WG1466847
n-Propylbenzene	U		0.0993	0.500	1	04/27/2020 13:54	WG1466847
Styrene	U		0.118	0.500	1	04/27/2020 13:54	WG1466847
1,1,1,2-Tetrachloroethane	U		0.147	0.500	1	04/27/2020 13:54	WG1466847
1,1,2,2-Tetrachloroethane	U		0.133	0.500	1	04/27/2020 13:54	WG1466847
1,1,2-Trichlorotrifluoroethane	U		0.180	0.500	1	04/27/2020 13:54	WG1466847
Tetrachloroethene	U		0.300	0.500	1	04/27/2020 13:54	WG1466847
Toluene	U		0.278	0.500	1	04/27/2020 13:54	WG1466847
1,2,3-Trichlorobenzene	U		0.164	0.500	1	04/27/2020 13:54	WG1466847
1,2,4-Trichlorobenzene	U		0.481	1.00	1	04/27/2020 13:54	WG1466847
1,1,1-Trichloroethane	U		0.149	0.500	1	04/27/2020 13:54	WG1466847
1,1,2-Trichloroethane	U		0.158	0.500	1	04/27/2020 13:54	WG1466847
Trichloroethene	U		0.190	0.500	1	04/27/2020 13:54	WG1466847
Trichlorofluoromethane	U		0.160	2.50	1	04/27/2020 13:54	WG1466847
1,2,3-Trichloropropane	U		0.237	2.50	1	04/27/2020 13:54	WG1466847
1,2,4-Trimethylbenzene	U		0.322	0.500	1	04/27/2020 13:54	WG1466847
1,2,3-Trimethylbenzene	U		0.104	0.500	1	04/27/2020 13:54	WG1466847
1,3,5-Trimethylbenzene	U		0.104	0.500	1	04/27/2020 13:54	WG1466847
Vinyl acetate	U		0.692	5.00	1	04/27/2020 13:54	WG1466847
Vinyl chloride	U		0.234	0.500	1	04/27/2020 13:54	WG1466847
Xylenes, Total	U		0.174	1.50	1	04/27/2020 13:54	WG1466847
(S) Toluene-d8	*107*			*80.0-120*		*04/27/2020 13:54*	WG1466847
(S) 4-Bromofluorobenzene	*106*			*77.0-126*		*04/27/2020 13:54*	WG1466847
(S) 1,2-Dichloroethane-d4	*110*			*70.0-130*		*04/27/2020 13:54*	WG1466847

JC 5/18/2020

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

Wet Chemistry by Method 2320 B-2011

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Alkalinity	472000		8450	20000	1	04/24/2020 11:52	WG1465432

Sample Narrative:

L1211489-04 WG1465432: Endpoint pH 4.5

Wet Chemistry by Method 9056A

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Chloride	19800		379	1000	1	04/24/2020 00:48	WG1464967
Nitrate	U		48.0	100	1	04/24/2020 00:48	WG1464967
Sulfate	88900		594	5000	1	04/24/2020 00:48	WG1464967

Wet Chemistry by Method 9060A

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
TOC (Total Organic Carbon)	5810		102	1000	1	04/24/2020 20:48	WG1465869

Metals (ICPMS) by Method 6020B

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Iron	2550		244	500	5	04/27/2020 20:02	WG1465384
Manganese	3290		1.32	5.00	1	04/27/2020 18:16	WG1465384

Volatile Organic Compounds (GC) by Method RSK175

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Methane	2660		0.287	0.678	1	04/27/2020 14:08	WG1466698
Ethane	U		0.296	1.29	1	04/27/2020 14:08	WG1466698
Ethene	U		0.422	1.27	1	04/27/2020 14:08	WG1466698

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

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Acetone	U		56.5	125	5	04/27/2020 19:21	WG1466847
Acrylonitrile	U		3.36	25.0	5	04/27/2020 19:21	WG1466847
Benzene	0.487	J	0.471	2.50	5	04/27/2020 19:21	WG1466847
Bromobenzene	U		0.590	2.50	5	04/27/2020 19:21	WG1466847
Bromodichloromethane	U		0.680	2.50	5	04/27/2020 19:21	WG1466847
Bromochloromethane	U		0.640	2.50	5	04/27/2020 19:21	WG1466847
Bromoform	U		0.645	2.50	5	04/27/2020 19:21	WG1466847
Bromomethane	U		3.03	12.5	5	04/27/2020 19:21	WG1466847
n-Butylbenzene	U		0.785	2.50	5	04/27/2020 19:21	WG1466847
sec-Butylbenzene	U		0.625	2.50	5	04/27/2020 19:21	WG1466847
tert-Butylbenzene	U		0.635	2.50	5	04/27/2020 19:21	WG1466847
Carbon disulfide	U		0.481	2.50	5	04/27/2020 19:21	WG1466847
Carbon tetrachloride	U		0.640	2.50	5	04/27/2020 19:21	WG1466847
Chlorobenzene	U		0.585	2.50	5	04/27/2020 19:21	WG1466847
Chlorodibromomethane	U		0.700	2.50	5	04/27/2020 19:21	WG1466847
Chloroethane	U		0.960	12.5	5	04/27/2020 19:21	WG1466847
Chloroform	U		0.555	2.50	5	04/27/2020 19:21	WG1466847
Chloromethane	U		4.80	6.25	5	04/27/2020 19:21	WG1466847
2-Chlorotoluene	U		0.530	2.50	5	04/27/2020 19:21	WG1466847
4-Chlorotoluene	U		0.570	2.50	5	04/27/2020 19:21	WG1466847

JC 5/18/2020

MW110-042220

Collected date/time: 04/22/20 12:55

SAMPLE RESULTS - 04

L1211489

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,2-Dibromo-3-Chloropropane	U		1.38	12.5	5	04/27/2020 19:21	WG1466847
1,2-Dibromoethane	U		0.630	2.50	5	04/27/2020 19:21	WG1466847
Dibromomethane	U		0.610	2.50	5	04/27/2020 19:21	WG1466847
1,2-Dichlorobenzene	U		0.535	2.50	5	04/27/2020 19:21	WG1466847
1,3-Dichlorobenzene	U		1.49	2.50	5	04/27/2020 19:21	WG1466847
1,4-Dichlorobenzene	U		0.600	2.50	5	04/27/2020 19:21	WG1466847
Dichlorodifluoromethane	U		1.87	12.5	5	04/27/2020 19:21	WG1466847
1,1-Dichloroethane	U		0.500	2.50	5	04/27/2020 19:21	WG1466847
1,2-Dichloroethane	U		0.409	2.50	5	04/27/2020 19:21	WG1466847
1,1-Dichloroethene	5.46		0.940	2.50	5	04/27/2020 19:21	WG1466847
cis-1,2-Dichloroethene	683		0.630	2.50	5	04/27/2020 19:21	WG1466847
trans-1,2-Dichloroethene	4.25		0.745	2.50	5	04/27/2020 19:21	WG1466847
1,2-Dichloropropane	U		0.745	2.50	5	04/27/2020 19:21	WG1466847
1,1-Dichloropropene	U		0.710	2.50	5	04/27/2020 19:21	WG1466847
1,3-Dichloropropane	U		0.545	5.00	5	04/27/2020 19:21	WG1466847
cis-1,3-Dichloropropene	U		0.555	2.50	5	04/27/2020 19:21	WG1466847
trans-1,3-Dichloropropene	U		0.590	2.50	5	04/27/2020 19:21	WG1466847
trans-1,4-Dichloro-2-butene	U		2.34	25.0	5	04/27/2020 19:21	WG1466847
2,2-Dichloropropane	U		0.805	2.50	5	04/27/2020 19:21	WG1466847
Di-isopropyl ether	U		0.525	2.50	5	04/27/2020 19:21	WG1466847
Ethylbenzene	U		0.685	2.50	5	04/27/2020 19:21	WG1466847
Hexachloro-1,3-butadiene	U		1.69	5.00	5	04/27/2020 19:21	WG1466847
2-Hexanone	U		3.94	25.0	5	04/27/2020 19:21	WG1466847
n-Hexane	U		3.74	25.0	5	04/27/2020 19:21	WG1466847
Iodomethane	U		30.0	50.0	5	04/27/2020 19:21	WG1466847
Isopropylbenzene	U		0.525	2.50	5	04/27/2020 19:21	WG1466847
p-Isopropyltoluene	U		0.600	2.50	5	04/27/2020 19:21	WG1466847
2-Butanone (MEK)	U		5.95	25.0	5	04/27/2020 19:21	WG1466847
Methylene Chloride	U		2.15	12.5	5	04/27/2020 19:21	WG1466847
4-Methyl-2-pentanone (MIBK)	U		2.39	25.0	5	04/27/2020 19:21	WG1466847
Methyl tert-butyl ether	U		0.505	2.50	5	04/27/2020 19:21	WG1466847
Naphthalene	U		0.870	12.5	5	04/27/2020 19:21	WG1466847
n-Propylbenzene	U		0.497	2.50	5	04/27/2020 19:21	WG1466847
Styrene	U		0.590	2.50	5	04/27/2020 19:21	WG1466847
1,1,1,2-Tetrachloroethane	U		0.735	2.50	5	04/27/2020 19:21	WG1466847
1,1,2,2-Tetrachloroethane	U		0.665	2.50	5	04/27/2020 19:21	WG1466847
1,1,2-Trichlorotrifluoroethane	U		0.900	2.50	5	04/27/2020 19:21	WG1466847
Tetrachloroethene	946		1.50	2.50	5	04/27/2020 19:21	WG1466847
Toluene	U		1.39	2.50	5	04/27/2020 19:21	WG1466847
1,2,3-Trichlorobenzene	U		0.820	2.50	5	04/27/2020 19:21	WG1466847
1,2,4-Trichlorobenzene	U		2.41	5.00	5	04/27/2020 19:21	WG1466847
1,1,1-Trichloroethane	U		0.745	2.50	5	04/27/2020 19:21	WG1466847
1,1,2-Trichloroethane	U		0.790	2.50	5	04/27/2020 19:21	WG1466847
Trichloroethene	384		0.950	2.50	5	04/27/2020 19:21	WG1466847
Trichlorofluoromethane	U		0.800	12.5	5	04/27/2020 19:21	WG1466847
1,2,3-Trichloropropane	U		1.19	12.5	5	04/27/2020 19:21	WG1466847
1,2,4-Trimethylbenzene	U		1.61	2.50	5	04/27/2020 19:21	WG1466847
1,2,3-Trimethylbenzene	U		0.520	2.50	5	04/27/2020 19:21	WG1466847
1,3,5-Trimethylbenzene	U		0.520	2.50	5	04/27/2020 19:21	WG1466847
Vinyl acetate	U		3.46	25.0	5	04/27/2020 19:21	WG1466847
Vinyl chloride	5.06		1.17	2.50	5	04/27/2020 19:21	WG1466847
Xylenes, Total	U		0.870	7.50	5	04/27/2020 19:21	WG1466847
(S) Toluene-d8	*109*			*80.0-120*		*04/27/2020 19:21*	WG1466847
(S) 4-Bromofluorobenzene	*96.4*			*77.0-126*		*04/27/2020 19:21*	WG1466847
(S) 1,2-Dichloroethane-d4	*101*			*70.0-130*		*04/27/2020 19:21*	WG1466847

JC 5/18/2020

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

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

Wet Chemistry by Method 2320 B-2011

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Alkalinity	744000		8450	20000	1	04/24/2020 12:01	WG1465432

Sample Narrative:

L1211489-05 WG1465432: Endpoint pH 4.5

Wet Chemistry by Method 9056A

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Chloride	16000		379	1000	1	04/24/2020 01:24	WG1464967
Nitrate	U		48.0	100	1	04/24/2020 01:24	WG1464967
Sulfate	2060	J	594	5000	1	04/24/2020 01:24	WG1464967

Wet Chemistry by Method 9060A

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
TOC (Total Organic Carbon)	10800		102	1000	1	04/24/2020 21:34	WG1465869

Metals (ICPMS) by Method 6020B

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Iron	16700		489	1000	10	04/27/2020 20:06	WG1465384
Manganese	1940		1.32	5.00	1	04/27/2020 18:19	WG1465384

Volatile Organic Compounds (GC) by Method RSK175

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Methane	10500		2.87	6.78	10	04/28/2020 11:12	WG1467166
Ethane	27.3		0.296	1.29	1	04/27/2020 14:10	WG1466698
Ethene	U		0.422	1.27	1	04/27/2020 14:10	WG1466698

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

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Acetone	U		282	625	25	04/27/2020 19:42	WG1466847
Acrylonitrile	U		16.8	125	25	04/27/2020 19:42	WG1466847
Benzene	25.6		2.35	12.5	25	04/27/2020 19:42	WG1466847
Bromobenzene	U		2.95	12.5	25	04/27/2020 19:42	WG1466847
Bromodichloromethane	U		3.40	12.5	25	04/27/2020 19:42	WG1466847
Bromochloromethane	U		3.20	12.5	25	04/27/2020 19:42	WG1466847
Bromoform	U		3.22	12.5	25	04/27/2020 19:42	WG1466847
Bromomethane	U		15.1	62.5	25	04/27/2020 19:42	WG1466847
n-Butylbenzene	U		3.93	12.5	25	04/27/2020 19:42	WG1466847
sec-Butylbenzene	U		3.13	12.5	25	04/27/2020 19:42	WG1466847
tert-Butylbenzene	U		3.18	12.5	25	04/27/2020 19:42	WG1466847
Carbon disulfide	U		2.41	12.5	25	04/27/2020 19:42	WG1466847
Carbon tetrachloride	U		3.20	12.5	25	04/27/2020 19:42	WG1466847
Chlorobenzene	U		2.93	12.5	25	04/27/2020 19:42	WG1466847
Chlorodibromomethane	U		3.50	12.5	25	04/27/2020 19:42	WG1466847
Chloroethane	U		4.80	62.5	25	04/27/2020 19:42	WG1466847
Chloroform	U		2.78	12.5	25	04/27/2020 19:42	WG1466847
Chloromethane	U		24.0	31.3	25	04/27/2020 19:42	WG1466847
2-Chlorotoluene	U		2.65	12.5	25	04/27/2020 19:42	WG1466847
4-Chlorotoluene	U		2.85	12.5	25	04/27/2020 19:42	WG1466847

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,2-Dibromo-3-Chloropropane	U		6.90	62.5	25	04/27/2020 19:42	WG1466847
1,2-Dibromoethane	U		3.15	12.5	25	04/27/2020 19:42	WG1466847
Dibromomethane	U		3.05	12.5	25	04/27/2020 19:42	WG1466847
1,2-Dichlorobenzene	U		2.68	12.5	25	04/27/2020 19:42	WG1466847
1,3-Dichlorobenzene	U		7.48	12.5	25	04/27/2020 19:42	WG1466847
1,4-Dichlorobenzene	U		3.00	12.5	25	04/27/2020 19:42	WG1466847
Dichlorodifluoromethane	U		9.35	62.5	25	04/27/2020 19:42	WG1466847
1,1-Dichloroethane	U		2.50	12.5	25	04/27/2020 19:42	WG1466847
1,2-Dichloroethane	U		2.05	12.5	25	04/27/2020 19:42	WG1466847
1,1-Dichloroethene	U		4.70	12.5	25	04/27/2020 19:42	WG1466847
cis-1,2-Dichloroethene	178		3.15	12.5	25	04/27/2020 19:42	WG1466847
trans-1,2-Dichloroethene	U		3.73	12.5	25	04/27/2020 19:42	WG1466847
1,2-Dichloropropane	U		3.73	12.5	25	04/27/2020 19:42	WG1466847
1,1-Dichloropropene	U		3.55	12.5	25	04/27/2020 19:42	WG1466847
1,3-Dichloropropane	U		2.73	25.0	25	04/27/2020 19:42	WG1466847
cis-1,3-Dichloropropene	U		2.78	12.5	25	04/27/2020 19:42	WG1466847
trans-1,3-Dichloropropene	U		2.95	12.5	25	04/27/2020 19:42	WG1466847
trans-1,4-Dichloro-2-butene	U		11.7	125	25	04/27/2020 19:42	WG1466847
2,2-Dichloropropane	U		4.03	12.5	25	04/27/2020 19:42	WG1466847
Di-isopropyl ether	U		2.63	12.5	25	04/27/2020 19:42	WG1466847
Ethylbenzene	U		3.43	12.5	25	04/27/2020 19:42	WG1466847
Hexachloro-1,3-butadiene	U		8.43	25.0	25	04/27/2020 19:42	WG1466847
2-Hexanone	U		19.7	125	25	04/27/2020 19:42	WG1466847
n-Hexane	U		18.7	125	25	04/27/2020 19:42	WG1466847
Iodomethane	U		150	250	25	04/27/2020 19:42	WG1466847
Isopropylbenzene	U		2.63	12.5	25	04/27/2020 19:42	WG1466847
p-Isopropyltoluene	U		3.00	12.5	25	04/27/2020 19:42	WG1466847
2-Butanone (MEK)	U		29.8	125	25	04/27/2020 19:42	WG1466847
Methylene Chloride	U		10.7	62.5	25	04/27/2020 19:42	WG1466847
4-Methyl-2-pentanone (MIBK)	U		12.0	125	25	04/27/2020 19:42	WG1466847
Methyl tert-butyl ether	U		2.53	12.5	25	04/27/2020 19:42	WG1466847
Naphthalene	U		4.35	62.5	25	04/27/2020 19:42	WG1466847
n-Propylbenzene	U		2.48	12.5	25	04/27/2020 19:42	WG1466847
Styrene	U		2.95	12.5	25	04/27/2020 19:42	WG1466847
1,1,1,2-Tetrachloroethane	U		3.68	12.5	25	04/27/2020 19:42	WG1466847
1,1,2,2-Tetrachloroethane	U		3.33	12.5	25	04/27/2020 19:42	WG1466847
1,1,2-Trichlorotrifluoroethane	U		4.50	12.5	25	04/27/2020 19:42	WG1466847
Tetrachloroethene	53.1		7.50	12.5	25	04/27/2020 19:42	WG1466847
Toluene	U		6.95	12.5	25	04/27/2020 19:42	WG1466847
1,2,3-Trichlorobenzene	U		4.10	12.5	25	04/27/2020 19:42	WG1466847
1,2,4-Trichlorobenzene	U		12.0	25.0	25	04/27/2020 19:42	WG1466847
1,1,1-Trichloroethane	U		3.73	12.5	25	04/27/2020 19:42	WG1466847
1,1,2-Trichloroethane	U		3.95	12.5	25	04/27/2020 19:42	WG1466847
Trichloroethene	96.3		4.75	12.5	25	04/27/2020 19:42	WG1466847
Trichlorofluoromethane	U		4.00	62.5	25	04/27/2020 19:42	WG1466847
1,2,3-Trichloropropane	U		5.93	62.5	25	04/27/2020 19:42	WG1466847
1,2,4-Trimethylbenzene	U		8.05	12.5	25	04/27/2020 19:42	WG1466847
1,2,3-Trimethylbenzene	U		2.60	12.5	25	04/27/2020 19:42	WG1466847
1,3,5-Trimethylbenzene	U		2.60	12.5	25	04/27/2020 19:42	WG1466847
Vinyl acetate	U		17.3	125	25	04/27/2020 19:42	WG1466847
Vinyl chloride	19.3		5.85	12.5	25	04/27/2020 19:42	WG1466847
Xylenes, Total	U		4.35	37.5	25	04/27/2020 19:42	WG1466847
(S) Toluene-d8	*110*			*80.0-120*		*04/27/2020 19:42*	WG1466847
(S) 4-Bromofluorobenzene	*107*			*77.0-126*		*04/27/2020 19:42*	WG1466847
(S) 1,2-Dichloroethane-d4	*108*			*70.0-130*		*04/27/2020 19:42*	WG1466847

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Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	258000		8450	20000	1	04/27/2020 18:55	WG1466001

Sample Narrative:

L1211929-01 WG1466001: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	17100		379	1000	1	04/24/2020 15:10	WG1465822
Nitrate	U		48.0	100	1	04/24/2020 15:10	WG1465822
Sulfate	13500		594	5000	1	04/24/2020 15:10	WG1465822

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	2440		102	1000	1	04/25/2020 18:38	WG1466185

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	11300		48.9	100	1	04/27/2020 00:24	WG1466428
Manganese	786		6.60	25.0	5	04/27/2020 13:32	WG1466428

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	314		0.287	0.678	1	04/28/2020 14:14	WG1467168
Ethane	12.3		0.296	1.29	1	04/28/2020 14:14	WG1467168
Ethene	U		0.422	1.27	1	04/28/2020 14:14	WG1467168

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U		11.3	25.0	1	04/26/2020 23:16	WG1466619
Acrylonitrile	U		0.671	5.00	1	04/26/2020 23:16	WG1466619
Benzene	U		0.0941	0.500	1	04/26/2020 23:16	WG1466619
Bromobenzene	U		0.118	0.500	1	04/26/2020 23:16	WG1466619
Bromodichloromethane	U		0.136	0.500	1	04/26/2020 23:16	WG1466619
Bromochloromethane	U		0.128	0.500	1	04/26/2020 23:16	WG1466619
Bromoform	U		0.129	0.500	1	04/26/2020 23:16	WG1466619
Bromomethane	U		0.605	2.50	1	04/26/2020 23:16	WG1466619
n-Butylbenzene	U		0.157	0.500	1	04/26/2020 23:16	WG1466619
sec-Butylbenzene	U		0.125	0.500	1	04/26/2020 23:16	WG1466619
tert-Butylbenzene	U		0.127	0.500	1	04/26/2020 23:16	WG1466619
Carbon disulfide	U		0.0962	0.500	1	04/26/2020 23:16	WG1466619
Carbon tetrachloride	U		0.128	0.500	1	04/26/2020 23:16	WG1466619
Chlorobenzene	U		0.117	0.500	1	04/26/2020 23:16	WG1466619
Chlorodibromomethane	U		0.140	0.500	1	04/26/2020 23:16	WG1466619
Chloroethane	U		0.192	2.50	1	04/26/2020 23:16	WG1466619
Chloroform	U		0.111	0.500	1	04/26/2020 23:16	WG1466619
Chloromethane	U		0.960	1.25	1	04/26/2020 23:16	WG1466619
2-Chlorotoluene	U		0.106	0.500	1	04/26/2020 23:16	WG1466619
4-Chlorotoluene	U		0.114	0.500	1	04/26/2020 23:16	WG1466619

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,2-Dibromo-3-Chloropropane	U		0.276	2.50	1	04/26/2020 23:16	WG1466619
1,2-Dibromoethane	U		0.126	0.500	1	04/26/2020 23:16	WG1466619
Dibromomethane	U		0.122	0.500	1	04/26/2020 23:16	WG1466619
1,2-Dichlorobenzene	U		0.107	0.500	1	04/26/2020 23:16	WG1466619
1,3-Dichlorobenzene	U		0.299	0.500	1	04/26/2020 23:16	WG1466619
1,4-Dichlorobenzene	U		0.120	0.500	1	04/26/2020 23:16	WG1466619
Dichlorodifluoromethane	U		0.374	2.50	1	04/26/2020 23:16	WG1466619
1,1-Dichloroethane	U		0.100	0.500	1	04/26/2020 23:16	WG1466619
1,2-Dichloroethane	U		0.0819	0.500	1	04/26/2020 23:16	WG1466619
1,1-Dichloroethene	0.291	J	0.188	0.500	1	04/26/2020 23:16	WG1466619
cis-1,2-Dichloroethene	12.9		0.126	0.500	1	04/26/2020 23:16	WG1466619
trans-1,2-Dichloroethene	U		0.149	0.500	1	04/26/2020 23:16	WG1466619
1,2-Dichloropropane	U		0.149	0.500	1	04/26/2020 23:16	WG1466619
1,1-Dichloropropene	U		0.142	0.500	1	04/26/2020 23:16	WG1466619
1,3-Dichloropropane	U		0.109	1.00	1	04/26/2020 23:16	WG1466619
cis-1,3-Dichloropropene	U		0.111	0.500	1	04/26/2020 23:16	WG1466619
trans-1,3-Dichloropropene	U		0.118	0.500	1	04/26/2020 23:16	WG1466619
trans-1,4-Dichloro-2-butene	U		0.467	5.00	1	04/26/2020 23:16	WG1466619
2,2-Dichloropropane	U		0.161	0.500	1	04/26/2020 23:16	WG1466619
Di-isopropyl ether	U		0.105	0.500	1	04/26/2020 23:16	WG1466619
Ethylbenzene	U		0.137	0.500	1	04/26/2020 23:16	WG1466619
Hexachloro-1,3-butadiene	U UJ	J0	0.337	1.00	1	04/26/2020 23:16	WG1466619
2-Hexanone	U		0.787	5.00	1	04/26/2020 23:16	WG1466619
n-Hexane	U		0.749	5.00	1	04/26/2020 23:16	WG1466619
Iodomethane	U		6.00	10.0	1	04/26/2020 23:16	WG1466619
Isopropylbenzene	U		0.105	0.500	1	04/26/2020 23:16	WG1466619
p-Isopropyltoluene	U		0.120	0.500	1	04/26/2020 23:16	WG1466619
2-Butanone (MEK)	U		1.19	5.00	1	04/26/2020 23:16	WG1466619
Methylene Chloride	U		0.430	2.50	1	04/26/2020 23:16	WG1466619
4-Methyl-2-pentanone (MIBK)	U		0.478	5.00	1	04/26/2020 23:16	WG1466619
Methyl tert-butyl ether	U		0.101	0.500	1	04/26/2020 23:16	WG1466619
Naphthalene	U		0.174	2.50	1	05/02/2020 13:29	WG1469464
n-Propylbenzene	U		0.0993	0.500	1	04/26/2020 23:16	WG1466619
Styrene	U		0.118	0.500	1	04/26/2020 23:16	WG1466619
1,1,1,2-Tetrachloroethane	U		0.147	0.500	1	04/26/2020 23:16	WG1466619
1,1,2,2-Tetrachloroethane	U		0.133	0.500	1	04/26/2020 23:16	WG1466619
1,1,2-Trichlorotrifluoroethane	U		0.180	0.500	1	04/26/2020 23:16	WG1466619
Tetrachloroethene	U		0.300	0.500	1	04/26/2020 23:16	WG1466619
Toluene	U		0.278	0.500	1	04/26/2020 23:16	WG1466619
1,2,3-Trichlorobenzene	U UJ	J0	0.164	0.500	1	04/26/2020 23:16	WG1466619
1,2,4-Trichlorobenzene	U UJ	J0	0.481	1.00	1	04/26/2020 23:16	WG1466619
1,1,1-Trichloroethane	U		0.149	0.500	1	04/26/2020 23:16	WG1466619
1,1,2-Trichloroethane	U		0.158	0.500	1	04/26/2020 23:16	WG1466619
Trichloroethene	0.244	J	0.190	0.500	1	04/26/2020 23:16	WG1466619
Trichlorofluoromethane	U		0.160	2.50	1	04/26/2020 23:16	WG1466619
1,2,3-Trichloropropane	U		0.237	2.50	1	04/26/2020 23:16	WG1466619
1,2,4-Trimethylbenzene	0.492	J	0.322	0.500	1	04/26/2020 23:16	WG1466619
1,2,3-Trimethylbenzene	0.272	J	0.104	0.500	1	04/26/2020 23:16	WG1466619
1,3,5-Trimethylbenzene	U		0.104	0.500	1	04/26/2020 23:16	WG1466619
Vinyl acetate	U		0.692	5.00	1	04/26/2020 23:16	WG1466619
Vinyl chloride	4.71		0.234	0.500	1	04/26/2020 23:16	WG1466619
Xylenes, Total	0.433 U	J	0.174	1.50	1	04/26/2020 23:16	WG1466619
(S) Toluene-d8	*108*			*80.0-120*		*04/26/2020 23:16*	WG1466619
(S) Toluene-d8	*106*			*80.0-120*		*05/02/2020 13:29*	WG1469464
(S) 4-Bromofluorobenzene	*107*			*77.0-126*		*04/26/2020 23:16*	WG1466619
(S) 4-Bromofluorobenzene	*104*			*77.0-126*		*05/02/2020 13:29*	WG1469464

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
(S) 1,2-Dichloroethane-d4	*108*			*70.0-130*		*04/26/2020 23:16*	WG1466619
(S) 1,2-Dichloroethane-d4	*109*			*70.0-130*		*05/02/2020 13:29*	WG1469464

JC 5/18/2020

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

Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	385000		8450	20000	1	04/27/2020 22:59	WG1466002

Sample Narrative:

L1211929-02 WG1466002: Endpoint pH 4.5 headspace

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	44100		379	1000	1	04/24/2020 15:35	WG1465822
Nitrate	U		48.0	100	1	04/24/2020 15:35	WG1465822
Sulfate	9650		594	5000	1	04/24/2020 15:35	WG1465822

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	7580		102	1000	1	04/25/2020 18:57	WG1466185

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	1990		48.9	100	1	04/27/2020 00:27	WG1466428
Manganese	745		6.60	25.0	5	04/27/2020 13:35	WG1466428

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	491		0.287	0.678	1	04/28/2020 14:17	WG1467168
Ethane	14.8		0.296	1.29	1	04/28/2020 14:17	WG1467168
Ethene	U		0.422	1.27	1	04/28/2020 14:17	WG1467168

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U		11.3	25.0	1	04/26/2020 23:37	WG1466619
Acrylonitrile	U		0.671	5.00	1	04/26/2020 23:37	WG1466619
Benzene	U		0.0941	0.500	1	04/26/2020 23:37	WG1466619
Bromobenzene	U		0.118	0.500	1	04/26/2020 23:37	WG1466619
Bromodichloromethane	U		0.136	0.500	1	04/26/2020 23:37	WG1466619
Bromochloromethane	U		0.128	0.500	1	04/26/2020 23:37	WG1466619
Bromoform	U		0.129	0.500	1	04/26/2020 23:37	WG1466619
Bromomethane	U		0.605	2.50	1	04/26/2020 23:37	WG1466619
n-Butylbenzene	U		0.157	0.500	1	04/26/2020 23:37	WG1466619
sec-Butylbenzene	U		0.125	0.500	1	04/26/2020 23:37	WG1466619
tert-Butylbenzene	U		0.127	0.500	1	04/26/2020 23:37	WG1466619
Carbon disulfide	1.15		0.0962	0.500	1	04/26/2020 23:37	WG1466619
Carbon tetrachloride	U		0.128	0.500	1	04/26/2020 23:37	WG1466619
Chlorobenzene	U		0.117	0.500	1	04/26/2020 23:37	WG1466619
Chlorodibromomethane	U		0.140	0.500	1	04/26/2020 23:37	WG1466619
Chloroethane	U		0.192	2.50	1	04/26/2020 23:37	WG1466619
Chloroform	U		0.111	0.500	1	04/26/2020 23:37	WG1466619
Chloromethane	U		0.960	1.25	1	04/26/2020 23:37	WG1466619
2-Chlorotoluene	U		0.106	0.500	1	04/26/2020 23:37	WG1466619
4-Chlorotoluene	U		0.114	0.500	1	04/26/2020 23:37	WG1466619

JC 5/18/2020

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

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,2-Dibromo-3-Chloropropane	U		0.276	2.50	1	04/26/2020 23:37	WG1466619
1,2-Dibromoethane	U		0.126	0.500	1	04/26/2020 23:37	WG1466619
Dibromomethane	U		0.122	0.500	1	04/26/2020 23:37	WG1466619
1,2-Dichlorobenzene	U		0.107	0.500	1	04/26/2020 23:37	WG1466619
1,3-Dichlorobenzene	U		0.299	0.500	1	04/26/2020 23:37	WG1466619
1,4-Dichlorobenzene	U		0.120	0.500	1	04/26/2020 23:37	WG1466619
Dichlorodifluoromethane	U		0.374	2.50	1	04/26/2020 23:37	WG1466619
1,1-Dichloroethane	U		0.100	0.500	1	04/26/2020 23:37	WG1466619
1,2-Dichloroethane	U		0.0819	0.500	1	04/26/2020 23:37	WG1466619
1,1-Dichloroethene	U		0.188	0.500	1	04/26/2020 23:37	WG1466619
cis-1,2-Dichloroethene	45.8		0.126	0.500	1	04/26/2020 23:37	WG1466619
trans-1,2-Dichloroethene	U		0.149	0.500	1	04/26/2020 23:37	WG1466619
1,2-Dichloropropane	U		0.149	0.500	1	04/26/2020 23:37	WG1466619
1,1-Dichloropropene	U		0.142	0.500	1	04/26/2020 23:37	WG1466619
1,3-Dichloropropane	U		0.109	1.00	1	04/26/2020 23:37	WG1466619
cis-1,3-Dichloropropene	U		0.111	0.500	1	04/26/2020 23:37	WG1466619
trans-1,3-Dichloropropene	U		0.118	0.500	1	04/26/2020 23:37	WG1466619
trans-1,4-Dichloro-2-butene	U		0.467	5.00	1	04/26/2020 23:37	WG1466619
2,2-Dichloropropane	U		0.161	0.500	1	04/26/2020 23:37	WG1466619
Di-isopropyl ether	U		0.105	0.500	1	04/26/2020 23:37	WG1466619
Ethylbenzene	U		0.137	0.500	1	04/26/2020 23:37	WG1466619
Hexachloro-1,3-butadiene	U UJ	J0	0.337	1.00	1	04/26/2020 23:37	WG1466619
2-Hexanone	U		0.787	5.00	1	04/26/2020 23:37	WG1466619
n-Hexane	U		0.749	5.00	1	04/26/2020 23:37	WG1466619
Iodomethane	U		6.00	10.0	1	04/26/2020 23:37	WG1466619
Isopropylbenzene	U		0.105	0.500	1	04/26/2020 23:37	WG1466619
p-Isopropyltoluene	U		0.120	0.500	1	04/26/2020 23:37	WG1466619
2-Butanone (MEK)	U		1.19	5.00	1	04/26/2020 23:37	WG1466619
Methylene Chloride	U		0.430	2.50	1	04/26/2020 23:37	WG1466619
4-Methyl-2-pentanone (MIBK)	U		0.478	5.00	1	04/26/2020 23:37	WG1466619
Methyl tert-butyl ether	U		0.101	0.500	1	04/26/2020 23:37	WG1466619
Naphthalene	U		0.174	2.50	1	05/02/2020 13:48	WG1469464
n-Propylbenzene	U		0.0993	0.500	1	04/26/2020 23:37	WG1466619
Styrene	U		0.118	0.500	1	04/26/2020 23:37	WG1466619
1,1,1,2-Tetrachloroethane	U		0.147	0.500	1	04/26/2020 23:37	WG1466619
1,1,2,2-Tetrachloroethane	U		0.133	0.500	1	04/26/2020 23:37	WG1466619
1,1,2-Trichlorotrifluoroethane	U		0.180	0.500	1	04/26/2020 23:37	WG1466619
Tetrachloroethene	U		0.300	0.500	1	04/26/2020 23:37	WG1466619
Toluene	U		0.278	0.500	1	04/26/2020 23:37	WG1466619
1,2,3-Trichlorobenzene	U UJ	J0	0.164	0.500	1	04/26/2020 23:37	WG1466619
1,2,4-Trichlorobenzene	U UJ	J0	0.481	1.00	1	04/26/2020 23:37	WG1466619
1,1,1-Trichloroethane	U		0.149	0.500	1	04/26/2020 23:37	WG1466619
1,1,2-Trichloroethane	U		0.158	0.500	1	04/26/2020 23:37	WG1466619
Trichloroethene	0.624		0.190	0.500	1	04/26/2020 23:37	WG1466619
Trichlorofluoromethane	U		0.160	2.50	1	04/26/2020 23:37	WG1466619
1,2,3-Trichloropropane	U		0.237	2.50	1	04/26/2020 23:37	WG1466619
1,2,4-Trimethylbenzene	U		0.322	0.500	1	04/26/2020 23:37	WG1466619
1,2,3-Trimethylbenzene	U		0.104	0.500	1	04/26/2020 23:37	WG1466619
1,3,5-Trimethylbenzene	U		0.104	0.500	1	04/26/2020 23:37	WG1466619
Vinyl acetate	U		0.692	5.00	1	04/26/2020 23:37	WG1466619
Vinyl chloride	10.9		0.234	0.500	1	04/26/2020 23:37	WG1466619
Xylenes, Total	U		0.174	1.50	1	04/26/2020 23:37	WG1466619
(S) Toluene-d8	*110*			*80.0-120*		*04/26/2020 23:37*	WG1466619
(S) Toluene-d8	*105*			*80.0-120*		*05/02/2020 13:48*	WG1469464
(S) 4-Bromofluorobenzene	*106*			*77.0-126*		*04/26/2020 23:37*	WG1466619
(S) 4-Bromofluorobenzene	*104*			*77.0-126*		*05/02/2020 13:48*	WG1469464

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
(S) 1,2-Dichloroethane-d4	*106*			*70.0-130*		*04/26/2020 23:37*	WG1466619
(S) 1,2-Dichloroethane-d4	*111*			*70.0-130*		*05/02/2020 13:48*	WG1469464

JC 5/18/2020

Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	142000		8450	20000	1	04/27/2020 23:18	WG1466002

Sample Narrative:

L1211929-03 WG1466002: Endpoint pH 4.5 headspace

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	24800		379	1000	1	04/24/2020 16:13	WG1465822
Nitrate	1270		48.0	100	1	04/24/2020 16:13	WG1465822
Sulfate	67100		594	5000	1	04/24/2020 16:13	WG1465822

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	1040	~~B~~	102	1000	1	04/25/2020 19:11	WG1466185

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	7260		48.9	100	1	04/27/2020 00:37	WG1466428
Manganese	203		1.32	5.00	1	04/27/2020 00:37	WG1466428

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	121 Z, J+	~~B~~	31.6	100	1	04/26/2020 11:32	WG1466362
(S) a,a,a-Trifluorotoluene(FID)	*105*			*78.0-120*		*04/26/2020 11:32*	WG1466362

Sample Narrative:

L1211929-03 WG1466362: No discernable petroleum pattern present.

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	U		0.287	0.678	1	04/28/2020 14:19	WG1467168
Ethane	U		0.296	1.29	1	04/28/2020 14:19	WG1467168
Ethene	U		0.422	1.27	1	04/28/2020 14:19	WG1467168

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U		11.3	25.0	1	04/26/2020 23:57	WG1466619
Acrylonitrile	U		0.671	5.00	1	04/26/2020 23:57	WG1466619
Benzene	U		0.0941	0.500	1	04/26/2020 23:57	WG1466619
Bromobenzene	U		0.118	0.500	1	04/26/2020 23:57	WG1466619
Bromodichloromethane	U		0.136	0.500	1	04/26/2020 23:57	WG1466619
Bromochloromethane	U		0.128	0.500	1	04/26/2020 23:57	WG1466619
Bromoform	U		0.129	0.500	1	04/26/2020 23:57	WG1466619
Bromomethane	U		0.605	2.50	1	04/26/2020 23:57	WG1466619
n-Butylbenzene	U		0.157	0.500	1	04/26/2020 23:57	WG1466619
sec-Butylbenzene	U		0.125	0.500	1	04/26/2020 23:57	WG1466619

JC 5/18/2020

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

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
tert-Butylbenzene	U		0.127	0.500	1	04/26/2020 23:57	WG1466619
Carbon disulfide	U		0.0962	0.500	1	04/26/2020 23:57	WG1466619
Carbon tetrachloride	U		0.128	0.500	1	04/26/2020 23:57	WG1466619
Chlorobenzene	U		0.117	0.500	1	04/26/2020 23:57	WG1466619
Chlorodibromomethane	U		0.140	0.500	1	04/26/2020 23:57	WG1466619
Chloroethane	U		0.192	2.50	1	04/26/2020 23:57	WG1466619
Chloroform	U		0.111	0.500	1	04/26/2020 23:57	WG1466619
Chloromethane	U		0.960	1.25	1	04/26/2020 23:57	WG1466619
2-Chlorotoluene	U		0.106	0.500	1	04/26/2020 23:57	WG1466619
4-Chlorotoluene	U		0.114	0.500	1	04/26/2020 23:57	WG1466619
1,2-Dibromo-3-Chloropropane	U		0.276	2.50	1	04/26/2020 23:57	WG1466619
1,2-Dibromoethane	U		0.126	0.500	1	04/26/2020 23:57	WG1466619
Dibromomethane	U		0.122	0.500	1	04/26/2020 23:57	WG1466619
1,2-Dichlorobenzene	U		0.107	0.500	1	04/26/2020 23:57	WG1466619
1,3-Dichlorobenzene	U		0.299	0.500	1	04/26/2020 23:57	WG1466619
1,4-Dichlorobenzene	U		0.120	0.500	1	04/26/2020 23:57	WG1466619
Dichlorodifluoromethane	U		0.374	2.50	1	04/26/2020 23:57	WG1466619
1,1-Dichloroethane	0.511		0.100	0.500	1	04/26/2020 23:57	WG1466619
1,2-Dichloroethane	U		0.0819	0.500	1	04/26/2020 23:57	WG1466619
1,1-Dichloroethene	U		0.188	0.500	1	04/26/2020 23:57	WG1466619
cis-1,2-Dichloroethene	0.861		0.126	0.500	1	04/26/2020 23:57	WG1466619
trans-1,2-Dichloroethene	U		0.149	0.500	1	04/26/2020 23:57	WG1466619
1,2-Dichloropropane	U		0.149	0.500	1	04/26/2020 23:57	WG1466619
1,1-Dichloropropene	U		0.142	0.500	1	04/26/2020 23:57	WG1466619
1,3-Dichloropropane	U		0.109	1.00	1	04/26/2020 23:57	WG1466619
cis-1,3-Dichloropropene	U		0.111	0.500	1	04/26/2020 23:57	WG1466619
trans-1,3-Dichloropropene	U		0.118	0.500	1	04/26/2020 23:57	WG1466619
trans-1,4-Dichloro-2-butene	U		0.467	5.00	1	04/26/2020 23:57	WG1466619
2,2-Dichloropropane	U		0.161	0.500	1	04/26/2020 23:57	WG1466619
Di-isopropyl ether	U		0.105	0.500	1	04/26/2020 23:57	WG1466619
Ethylbenzene	U		0.137	0.500	1	04/26/2020 23:57	WG1466619
Hexachloro-1,3-butadiene	U UJ	J0	0.337	1.00	1	04/26/2020 23:57	WG1466619
2-Hexanone	U		0.787	5.00	1	04/26/2020 23:57	WG1466619
n-Hexane	U		0.749	5.00	1	04/26/2020 23:57	WG1466619
Iodomethane	U		6.00	10.0	1	04/26/2020 23:57	WG1466619
Isopropylbenzene	U		0.105	0.500	1	04/26/2020 23:57	WG1466619
p-Isopropyltoluene	U		0.120	0.500	1	04/26/2020 23:57	WG1466619
2-Butanone (MEK)	U		1.19	5.00	1	04/26/2020 23:57	WG1466619
Methylene Chloride	U		0.430	2.50	1	04/26/2020 23:57	WG1466619
4-Methyl-2-pentanone (MIBK)	U		0.478	5.00	1	04/26/2020 23:57	WG1466619
Methyl tert-butyl ether	U		0.101	0.500	1	04/26/2020 23:57	WG1466619
Naphthalene	U		0.174	2.50	1	05/02/2020 14:07	WG1469464
n-Propylbenzene	U		0.0993	0.500	1	04/26/2020 23:57	WG1466619
Styrene	U		0.118	0.500	1	04/26/2020 23:57	WG1466619
1,1,1,2-Tetrachloroethane	U		0.147	0.500	1	04/26/2020 23:57	WG1466619
1,1,2,2-Tetrachloroethane	U		0.133	0.500	1	04/26/2020 23:57	WG1466619
1,1,2-Trichlorotrifluoroethane	0.446	J	0.180	0.500	1	04/26/2020 23:57	WG1466619
Tetrachloroethene	U		0.300	0.500	1	04/26/2020 23:57	WG1466619
Toluene	U		0.278	0.500	1	04/26/2020 23:57	WG1466619
1,2,3-Trichlorobenzene	U UJ	J0	0.164	0.500	1	04/26/2020 23:57	WG1466619
1,2,4-Trichlorobenzene	U UJ	J0	0.481	1.00	1	04/26/2020 23:57	WG1466619
1,1,1-Trichloroethane	U		0.149	0.500	1	04/26/2020 23:57	WG1466619
1,1,2-Trichloroethane	U		0.158	0.500	1	04/26/2020 23:57	WG1466619
Trichloroethene	U		0.190	0.500	1	04/26/2020 23:57	WG1466619
Trichlorofluoromethane	U		0.160	2.50	1	04/26/2020 23:57	WG1466619
1,2,3-Trichloropropane	U		0.237	2.50	1	04/26/2020 23:57	WG1466619

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,2,4-Trimethylbenzene	U		0.322	0.500	1	04/26/2020 23:57	WG1466619
1,2,3-Trimethylbenzene	U		0.104	0.500	1	04/26/2020 23:57	WG1466619
1,3,5-Trimethylbenzene	U		0.104	0.500	1	04/26/2020 23:57	WG1466619
Vinyl acetate	U		0.692	5.00	1	04/26/2020 23:57	WG1466619
Vinyl chloride	U		0.234	0.500	1	04/26/2020 23:57	WG1466619
Xylenes, Total	U		0.174	1.50	1	04/26/2020 23:57	WG1466619
(S) Toluene-d8	*110*			*80.0-120*		*04/26/2020 23:57*	WG1466619
(S) Toluene-d8	*107*			*80.0-120*		*05/02/2020 14:07*	WG1469464
(S) 4-Bromofluorobenzene	*105*			*77.0-126*		*04/26/2020 23:57*	WG1466619
(S) 4-Bromofluorobenzene	*103*			*77.0-126*		*05/02/2020 14:07*	WG1469464
(S) 1,2-Dichloroethane-d4	*109*			*70.0-130*		*04/26/2020 23:57*	WG1466619
(S) 1,2-Dichloroethane-d4	*110*			*70.0-130*		*05/02/2020 14:07*	WG1469464

JC 5/18/2020

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

Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	252000		8450	20000	1	04/27/2020 23:27	WG1466002

Sample Narrative:

L1211929-04 WG1466002: Endpoint pH 4.5 headspace

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	17200		379	1000	1	04/24/2020 16:26	WG1465822
Nitrate	U		48.0	100	1	04/24/2020 16:26	WG1465822
Sulfate	13300		594	5000	1	04/24/2020 16:26	WG1465822

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	2770		102	1000	1	04/25/2020 19:28	WG1466185

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	13500		48.9	100	1	04/27/2020 00:40	WG1466428
Manganese	814		6.60	25.0	5	04/27/2020 13:38	WG1466428

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	267		0.287	0.678	1	04/28/2020 14:25	WG1467168
Ethane	10.1		0.296	1.29	1	04/28/2020 14:25	WG1467168
Ethene	U		0.422	1.27	1	04/28/2020 14:25	WG1467168

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U		11.3	25.0	1	04/27/2020 00:17	WG1466619
Acrylonitrile	U		0.671	5.00	1	04/27/2020 00:17	WG1466619
Benzene	U		0.0941	0.500	1	04/27/2020 00:17	WG1466619
Bromobenzene	U		0.118	0.500	1	04/27/2020 00:17	WG1466619
Bromodichloromethane	U		0.136	0.500	1	04/27/2020 00:17	WG1466619
Bromochloromethane	U		0.128	0.500	1	04/27/2020 00:17	WG1466619
Bromoform	U		0.129	0.500	1	04/27/2020 00:17	WG1466619
Bromomethane	U		0.605	2.50	1	04/27/2020 00:17	WG1466619
n-Butylbenzene	U		0.157	0.500	1	04/27/2020 00:17	WG1466619
sec-Butylbenzene	U		0.125	0.500	1	04/27/2020 00:17	WG1466619
tert-Butylbenzene	U		0.127	0.500	1	04/27/2020 00:17	WG1466619
Carbon disulfide	U		0.0962	0.500	1	04/27/2020 00:17	WG1466619
Carbon tetrachloride	U		0.128	0.500	1	04/27/2020 00:17	WG1466619
Chlorobenzene	U		0.117	0.500	1	04/27/2020 00:17	WG1466619
Chlorodibromomethane	U		0.140	0.500	1	04/27/2020 00:17	WG1466619
Chloroethane	U		0.192	2.50	1	04/27/2020 00:17	WG1466619
Chloroform	U		0.111	0.500	1	04/27/2020 00:17	WG1466619
Chloromethane	U		0.960	1.25	1	04/27/2020 00:17	WG1466619
2-Chlorotoluene	U		0.106	0.500	1	04/27/2020 00:17	WG1466619
4-Chlorotoluene	U		0.114	0.500	1	04/27/2020 00:17	WG1466619

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,2-Dibromo-3-Chloropropane	U		0.276	2.50	1	04/27/2020 00:17	WG1466619
1,2-Dibromoethane	U		0.126	0.500	1	04/27/2020 00:17	WG1466619
Dibromomethane	U		0.122	0.500	1	04/27/2020 00:17	WG1466619
1,2-Dichlorobenzene	U		0.107	0.500	1	04/27/2020 00:17	WG1466619
1,3-Dichlorobenzene	U		0.299	0.500	1	04/27/2020 00:17	WG1466619
1,4-Dichlorobenzene	U		0.120	0.500	1	04/27/2020 00:17	WG1466619
Dichlorodifluoromethane	U		0.374	2.50	1	04/27/2020 00:17	WG1466619
1,1-Dichloroethane	U		0.100	0.500	1	04/27/2020 00:17	WG1466619
1,2-Dichloroethane	U		0.0819	0.500	1	04/27/2020 00:17	WG1466619
1,1-Dichloroethene	0.305	J	0.188	0.500	1	04/27/2020 00:17	WG1466619
cis-1,2-Dichloroethene	12.8		0.126	0.500	1	04/27/2020 00:17	WG1466619
trans-1,2-Dichloroethene	U		0.149	0.500	1	04/27/2020 00:17	WG1466619
1,2-Dichloropropane	U		0.149	0.500	1	04/27/2020 00:17	WG1466619
1,1-Dichloropropene	U		0.142	0.500	1	04/27/2020 00:17	WG1466619
1,3-Dichloropropane	U		0.109	1.00	1	04/27/2020 00:17	WG1466619
cis-1,3-Dichloropropene	U		0.111	0.500	1	04/27/2020 00:17	WG1466619
trans-1,3-Dichloropropene	U		0.118	0.500	1	04/27/2020 00:17	WG1466619
trans-1,4-Dichloro-2-butene	U		0.467	5.00	1	04/27/2020 00:17	WG1466619
2,2-Dichloropropane	U		0.161	0.500	1	04/27/2020 00:17	WG1466619
Di-isopropyl ether	U		0.105	0.500	1	04/27/2020 00:17	WG1466619
Ethylbenzene	U		0.137	0.500	1	04/27/2020 00:17	WG1466619
Hexachloro-1,3-butadiene	U	UJ J0	0.337	1.00	1	04/27/2020 00:17	WG1466619
2-Hexanone	U		0.787	5.00	1	04/27/2020 00:17	WG1466619
n-Hexane	U		0.749	5.00	1	04/27/2020 00:17	WG1466619
Iodomethane	U		6.00	10.0	1	04/27/2020 00:17	WG1466619
Isopropylbenzene	U		0.105	0.500	1	04/27/2020 00:17	WG1466619
p-Isopropyltoluene	U		0.120	0.500	1	04/27/2020 00:17	WG1466619
2-Butanone (MEK)	U		1.19	5.00	1	04/27/2020 00:17	WG1466619
Methylene Chloride	U		0.430	2.50	1	04/27/2020 00:17	WG1466619
4-Methyl-2-pentanone (MIBK)	U		0.478	5.00	1	04/27/2020 00:17	WG1466619
Methyl tert-butyl ether	U		0.101	0.500	1	04/27/2020 00:17	WG1466619
Naphthalene	U	UJ J0	0.174	2.50	1	04/27/2020 00:17	WG1466619
n-Propylbenzene	U		0.0993	0.500	1	04/27/2020 00:17	WG1466619
Styrene	U		0.118	0.500	1	04/27/2020 00:17	WG1466619
1,1,1,2-Tetrachloroethane	U		0.147	0.500	1	04/27/2020 00:17	WG1466619
1,1,2,2-Tetrachloroethane	U		0.133	0.500	1	04/27/2020 00:17	WG1466619
1,1,2-Trichlorotrifluoroethane	U		0.180	0.500	1	04/27/2020 00:17	WG1466619
Tetrachloroethene	U		0.300	0.500	1	04/27/2020 00:17	WG1466619
Toluene	U		0.278	0.500	1	04/27/2020 00:17	WG1466619
1,2,3-Trichlorobenzene	U	UJ J0	0.164	0.500	1	04/27/2020 00:17	WG1466619
1,2,4-Trichlorobenzene	U	UJ J0	0.481	1.00	1	04/27/2020 00:17	WG1466619
1,1,1-Trichloroethane	U		0.149	0.500	1	04/27/2020 00:17	WG1466619
1,1,2-Trichloroethane	U		0.158	0.500	1	04/27/2020 00:17	WG1466619
Trichloroethene	0.233	J	0.190	0.500	1	04/27/2020 00:17	WG1466619
Trichlorofluoromethane	U		0.160	2.50	1	04/27/2020 00:17	WG1466619
1,2,3-Trichloropropane	U		0.237	2.50	1	04/27/2020 00:17	WG1466619
1,2,4-Trimethylbenzene	U		0.322	0.500	1	04/27/2020 00:17	WG1466619
1,2,3-Trimethylbenzene	U		0.104	0.500	1	04/27/2020 00:17	WG1466619
1,3,5-Trimethylbenzene	U		0.104	0.500	1	04/27/2020 00:17	WG1466619
Vinyl acetate	U		0.692	5.00	1	04/27/2020 00:17	WG1466619
Vinyl chloride	4.80		0.234	0.500	1	04/27/2020 00:17	WG1466619
Xylenes, Total	U		0.174	1.50	1	04/27/2020 00:17	WG1466619
(S) Toluene-d8	*109*			*80.0-120*		*04/27/2020 00:17*	WG1466619
(S) 4-Bromofluorobenzene	*105*			*77.0-126*		*04/27/2020 00:17*	WG1466619
(S) 1,2-Dichloroethane-d4	*107*			*70.0-130*		*04/27/2020 00:17*	WG1466619

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

Wet Chemistry by Method 2320 B-2011

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Alkalinity	287000		8450	20000	1	04/27/2020 23:35	WG1466002

Sample Narrative:

L1211929-05 WG1466002: Endpoint pH 4.5 headspace

Wet Chemistry by Method 9056A

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Chloride	21300		379	1000	1	04/24/2020 16:39	WG1465822
Nitrate	U		48.0	100	1	04/24/2020 16:39	WG1465822
Sulfate	110000		2970	25000	5	04/24/2020 17:17	WG1465822

Wet Chemistry by Method 9060A

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
TOC (Total Organic Carbon)	3180		102	1000	1	04/25/2020 21:12	WG1466185

Metals (ICPMS) by Method 6020B

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Iron	2240		48.9	100	1	04/27/2020 00:44	WG1466428
Manganese	621		6.60	25.0	5	04/27/2020 13:42	WG1466428

Volatile Organic Compounds (GC) by Method NWTPHGX

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Gasoline Range Organics-NWTPH	481	Z, J+ ~~B~~	31.6	100	1	04/25/2020 14:48	WG1466240
(S) a,a,a-Trifluorotoluene(FID)	*104*			*78.0-120*		*04/25/2020 14:48*	WG1466240

Sample Narrative:

L1211929-05 WG1466240: No discernable petroleum pattern present.

Volatile Organic Compounds (GC) by Method RSK175

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Methane	34.8		0.287	0.678	1	04/28/2020 14:29	WG1467168
Ethane	U		0.296	1.29	1	04/28/2020 14:29	WG1467168
Ethene	U		0.422	1.27	1	04/28/2020 14:29	WG1467168

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

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Acetone	U		11.3	25.0	1	04/27/2020 00:38	WG1466619
Acrylonitrile	U		0.671	5.00	1	04/27/2020 00:38	WG1466619
Benzene	U		0.0941	0.500	1	04/27/2020 00:38	WG1466619
Bromobenzene	U		0.118	0.500	1	04/27/2020 00:38	WG1466619
Bromodichloromethane	U		0.136	0.500	1	04/27/2020 00:38	WG1466619
Bromochloromethane	U		0.128	0.500	1	04/27/2020 00:38	WG1466619
Bromoform	U		0.129	0.500	1	04/27/2020 00:38	WG1466619
Bromomethane	U		0.605	2.50	1	04/27/2020 00:38	WG1466619
n-Butylbenzene	U		0.157	0.500	1	04/27/2020 00:38	WG1466619
sec-Butylbenzene	U		0.125	0.500	1	04/27/2020 00:38	WG1466619

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
tert-Butylbenzene	U		0.127	0.500	1	04/27/2020 00:38	WG1466619
Carbon disulfide	U		0.0962	0.500	1	04/27/2020 00:38	WG1466619
Carbon tetrachloride	U		0.128	0.500	1	04/27/2020 00:38	WG1466619
Chlorobenzene	U		0.117	0.500	1	04/27/2020 00:38	WG1466619
Chlorodibromomethane	U		0.140	0.500	1	04/27/2020 00:38	WG1466619
Chloroethane	U		0.192	2.50	1	04/27/2020 00:38	WG1466619
Chloroform	U		0.111	0.500	1	04/27/2020 00:38	WG1466619
Chloromethane	U		0.960	1.25	1	04/27/2020 00:38	WG1466619
2-Chlorotoluene	U		0.106	0.500	1	04/27/2020 00:38	WG1466619
4-Chlorotoluene	U		0.114	0.500	1	04/27/2020 00:38	WG1466619
1,2-Dibromo-3-Chloropropane	U		0.276	2.50	1	04/27/2020 00:38	WG1466619
1,2-Dibromoethane	U		0.126	0.500	1	04/27/2020 00:38	WG1466619
Dibromomethane	U		0.122	0.500	1	04/27/2020 00:38	WG1466619
1,2-Dichlorobenzene	U		0.107	0.500	1	04/27/2020 00:38	WG1466619
1,3-Dichlorobenzene	U		0.299	0.500	1	04/27/2020 00:38	WG1466619
1,4-Dichlorobenzene	U		0.120	0.500	1	04/27/2020 00:38	WG1466619
Dichlorodifluoromethane	U		0.374	2.50	1	04/27/2020 00:38	WG1466619
1,1-Dichloroethane	1.47		0.100	0.500	1	04/27/2020 00:38	WG1466619
1,2-Dichloroethane	U		0.0819	0.500	1	04/27/2020 00:38	WG1466619
1,1-Dichloroethene	0.341	J	0.188	0.500	1	04/27/2020 00:38	WG1466619
cis-1,2-Dichloroethene	41.0		0.126	0.500	1	04/27/2020 00:38	WG1466619
trans-1,2-Dichloroethene	0.154	J	0.149	0.500	1	04/27/2020 00:38	WG1466619
1,2-Dichloropropane	1.07		0.149	0.500	1	04/27/2020 00:38	WG1466619
1,1-Dichloropropene	U		0.142	0.500	1	04/27/2020 00:38	WG1466619
1,3-Dichloropropane	U		0.109	1.00	1	04/27/2020 00:38	WG1466619
cis-1,3-Dichloropropene	U		0.111	0.500	1	04/27/2020 00:38	WG1466619
trans-1,3-Dichloropropene	U		0.118	0.500	1	04/27/2020 00:38	WG1466619
trans-1,4-Dichloro-2-butene	U		0.467	5.00	1	04/27/2020 00:38	WG1466619
2,2-Dichloropropane	U		0.161	0.500	1	04/27/2020 00:38	WG1466619
Di-isopropyl ether	U		0.105	0.500	1	04/27/2020 00:38	WG1466619
Ethylbenzene	U		0.137	0.500	1	04/27/2020 00:38	WG1466619
Hexachloro-1,3-butadiene	U	UJ J0	0.337	1.00	1	04/27/2020 00:38	WG1466619
2-Hexanone	U		0.787	5.00	1	04/27/2020 00:38	WG1466619
n-Hexane	U		0.749	5.00	1	04/27/2020 00:38	WG1466619
Iodomethane	U		6.00	10.0	1	04/27/2020 00:38	WG1466619
Isopropylbenzene	U		0.105	0.500	1	04/27/2020 00:38	WG1466619
p-Isopropyltoluene	U		0.120	0.500	1	04/27/2020 00:38	WG1466619
2-Butanone (MEK)	U		1.19	5.00	1	04/27/2020 00:38	WG1466619
Methylene Chloride	U		0.430	2.50	1	04/27/2020 00:38	WG1466619
4-Methyl-2-pentanone (MIBK)	U		0.478	5.00	1	04/27/2020 00:38	WG1466619
Methyl tert-butyl ether	U		0.101	0.500	1	04/27/2020 00:38	WG1466619
Naphthalene	U	UJ J0	0.174	2.50	1	04/27/2020 00:38	WG1466619
n-Propylbenzene	U		0.0993	0.500	1	04/27/2020 00:38	WG1466619
Styrene	U		0.118	0.500	1	04/27/2020 00:38	WG1466619
1,1,1,2-Tetrachloroethane	U		0.147	0.500	1	04/27/2020 00:38	WG1466619
1,1,2,2-Tetrachloroethane	U		0.133	0.500	1	04/27/2020 00:38	WG1466619
1,1,2-Trichlorotrifluoroethane	U		0.180	0.500	1	04/27/2020 00:38	WG1466619
Tetrachloroethene	39.7		0.300	0.500	1	04/27/2020 00:38	WG1466619
Toluene	U		0.278	0.500	1	04/27/2020 00:38	WG1466619
1,2,3-Trichlorobenzene	U	UJ J0	0.164	0.500	1	04/27/2020 00:38	WG1466619
1,2,4-Trichlorobenzene	U	UJ J0	0.481	1.00	1	04/27/2020 00:38	WG1466619
1,1,1-Trichloroethane	U		0.149	0.500	1	04/27/2020 00:38	WG1466619
1,1,2-Trichloroethane	U		0.158	0.500	1	04/27/2020 00:38	WG1466619
Trichloroethene	15.4		0.190	0.500	1	04/27/2020 00:38	WG1466619
Trichlorofluoromethane	U		0.160	2.50	1	04/27/2020 00:38	WG1466619
1,2,3-Trichloropropane	U		0.237	2.50	1	04/27/2020 00:38	WG1466619

JC 5/18/2020

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

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,2,4-Trimethylbenzene	U		0.322	0.500	1	04/27/2020 00:38	WG1466619
1,2,3-Trimethylbenzene	U		0.104	0.500	1	04/27/2020 00:38	WG1466619
1,3,5-Trimethylbenzene	U		0.104	0.500	1	04/27/2020 00:38	WG1466619
Vinyl acetate	U		0.692	5.00	1	04/27/2020 00:38	WG1466619
Vinyl chloride	2.92		0.234	0.500	1	04/27/2020 00:38	WG1466619
Xylenes, Total	U		0.174	1.50	1	04/27/2020 00:38	WG1466619
(S) Toluene-d8	*107*			*80.0-120*		*04/27/2020 00:38*	WG1466619
(S) 4-Bromofluorobenzene	*107*			*77.0-126*		*04/27/2020 00:38*	WG1466619
(S) 1,2-Dichloroethane-d4	*108*			*70.0-130*		*04/27/2020 00:38*	WG1466619

JC 5/18/2020

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

Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Alkalinity	259000		8450	20000	1	04/27/2020 23:52	WG1466002

Sample Narrative:

L1211929-07 WG1466002: Endpoint pH 4.5 headspace

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chloride	38300		379	1000	1	04/24/2020 17:43	WG1465822
Nitrate	U		48.0	100	1	04/24/2020 17:43	WG1465822
Sulfate	26500		594	5000	1	04/24/2020 17:43	WG1465822

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
TOC (Total Organic Carbon)	1880	~~B~~	102	1000	1	04/25/2020 22:29	WG1466185

Metals (ICPMS) by Method 6020B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Iron	22500		48.9	100	1	04/27/2020 00:47	WG1466428
Manganese	694		6.60	25.0	5	04/27/2020 13:54	WG1466428

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Methane	447		0.287	0.678	1	04/29/2020 11:29	WG1467817
Ethane	38.7		0.296	1.29	1	04/29/2020 11:29	WG1467817
Ethene	23.3		0.422	1.27	1	04/29/2020 11:29	WG1467817

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	U		11.3	25.0	1	04/27/2020 00:58	WG1466619
Acrylonitrile	U		0.671	5.00	1	04/27/2020 00:58	WG1466619
Benzene	U		0.0941	0.500	1	04/27/2020 00:58	WG1466619
Bromobenzene	U		0.118	0.500	1	04/27/2020 00:58	WG1466619
Bromodichloromethane	U		0.136	0.500	1	04/27/2020 00:58	WG1466619
Bromochloromethane	U		0.128	0.500	1	04/27/2020 00:58	WG1466619
Bromoform	U		0.129	0.500	1	04/27/2020 00:58	WG1466619
Bromomethane	U		0.605	2.50	1	04/27/2020 00:58	WG1466619
n-Butylbenzene	U		0.157	0.500	1	04/27/2020 00:58	WG1466619
sec-Butylbenzene	U		0.125	0.500	1	04/27/2020 00:58	WG1466619
tert-Butylbenzene	U		0.127	0.500	1	04/27/2020 00:58	WG1466619
Carbon disulfide	U		0.0962	0.500	1	04/27/2020 00:58	WG1466619
Carbon tetrachloride	U		0.128	0.500	1	04/27/2020 00:58	WG1466619
Chlorobenzene	U		0.117	0.500	1	04/27/2020 00:58	WG1466619
Chlorodibromomethane	U		0.140	0.500	1	04/27/2020 00:58	WG1466619
Chloroethane	U		0.192	2.50	1	04/27/2020 00:58	WG1466619
Chloroform	U		0.111	0.500	1	04/27/2020 00:58	WG1466619
Chloromethane	U		0.960	1.25	1	04/27/2020 00:58	WG1466619
2-Chlorotoluene	U		0.106	0.500	1	04/27/2020 00:58	WG1466619
4-Chlorotoluene	U		0.114	0.500	1	04/27/2020 00:58	WG1466619

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MW111-042320

Collected date/time: 04/23/20 14:20

SAMPLE RESULTS - 07

L1211929

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,2-Dibromo-3-Chloropropane	U		0.276	2.50	1	04/27/2020 00:58	WG1466619
1,2-Dibromoethane	U		0.126	0.500	1	04/27/2020 00:58	WG1466619
Dibromomethane	U		0.122	0.500	1	04/27/2020 00:58	WG1466619
1,2-Dichlorobenzene	U		0.107	0.500	1	04/27/2020 00:58	WG1466619
1,3-Dichlorobenzene	U		0.299	0.500	1	04/27/2020 00:58	WG1466619
1,4-Dichlorobenzene	U		0.120	0.500	1	04/27/2020 00:58	WG1466619
Dichlorodifluoromethane	U		0.374	2.50	1	04/27/2020 00:58	WG1466619
1,1-Dichloroethane	U		0.100	0.500	1	04/27/2020 00:58	WG1466619
1,2-Dichloroethane	U		0.0819	0.500	1	04/27/2020 00:58	WG1466619
1,1-Dichloroethene	U		0.188	0.500	1	04/27/2020 00:58	WG1466619
cis-1,2-Dichloroethene	24.3		0.126	0.500	1	04/27/2020 00:58	WG1466619
trans-1,2-Dichloroethene	U		0.149	0.500	1	04/27/2020 00:58	WG1466619
1,2-Dichloropropane	U		0.149	0.500	1	04/27/2020 00:58	WG1466619
1,1-Dichloropropene	U		0.142	0.500	1	04/27/2020 00:58	WG1466619
1,3-Dichloropropane	U		0.109	1.00	1	04/27/2020 00:58	WG1466619
cis-1,3-Dichloropropene	U		0.111	0.500	1	04/27/2020 00:58	WG1466619
trans-1,3-Dichloropropene	U		0.118	0.500	1	04/27/2020 00:58	WG1466619
trans-1,4-Dichloro-2-butene	U		0.467	5.00	1	04/27/2020 00:58	WG1466619
2,2-Dichloropropane	U		0.161	0.500	1	04/27/2020 00:58	WG1466619
Di-isopropyl ether	U		0.105	0.500	1	04/27/2020 00:58	WG1466619
Ethylbenzene	U		0.137	0.500	1	04/27/2020 00:58	WG1466619
Hexachloro-1,3-butadiene	U UJ	J0	0.337	1.00	1	04/27/2020 00:58	WG1466619
2-Hexanone	U		0.787	5.00	1	04/27/2020 00:58	WG1466619
n-Hexane	U		0.749	5.00	1	04/27/2020 00:58	WG1466619
Iodomethane	U		6.00	10.0	1	04/27/2020 00:58	WG1466619
Isopropylbenzene	U		0.105	0.500	1	04/27/2020 00:58	WG1466619
p-Isopropyltoluene	U		0.120	0.500	1	04/27/2020 00:58	WG1466619
2-Butanone (MEK)	U		1.19	5.00	1	04/27/2020 00:58	WG1466619
Methylene Chloride	U		0.430	2.50	1	04/27/2020 00:58	WG1466619
4-Methyl-2-pentanone (MIBK)	U		0.478	5.00	1	04/27/2020 00:58	WG1466619
Methyl tert-butyl ether	U		0.101	0.500	1	04/27/2020 00:58	WG1466619
Naphthalene	U UJ	J0	0.174	2.50	1	04/27/2020 00:58	WG1466619
n-Propylbenzene	U		0.0993	0.500	1	04/27/2020 00:58	WG1466619
Styrene	U		0.118	0.500	1	04/27/2020 00:58	WG1466619
1,1,1,2-Tetrachloroethane	U		0.147	0.500	1	04/27/2020 00:58	WG1466619
1,1,2,2-Tetrachloroethane	U		0.133	0.500	1	04/27/2020 00:58	WG1466619
1,1,2-Trichlorotrifluoroethane	U		0.180	0.500	1	04/27/2020 00:58	WG1466619
Tetrachloroethene	U		0.300	0.500	1	04/27/2020 00:58	WG1466619
Toluene	U		0.278	0.500	1	04/27/2020 00:58	WG1466619
1,2,3-Trichlorobenzene	U UJ	J0	0.164	0.500	1	04/27/2020 00:58	WG1466619
1,2,4-Trichlorobenzene	U UJ	J0	0.481	1.00	1	04/27/2020 00:58	WG1466619
1,1,1-Trichloroethane	U		0.149	0.500	1	04/27/2020 00:58	WG1466619
1,1,2-Trichloroethane	U		0.158	0.500	1	04/27/2020 00:58	WG1466619
Trichloroethene	U		0.190	0.500	1	04/27/2020 00:58	WG1466619
Trichlorofluoromethane	U		0.160	2.50	1	04/27/2020 00:58	WG1466619
1,2,3-Trichloropropane	U		0.237	2.50	1	04/27/2020 00:58	WG1466619
1,2,4-Trimethylbenzene	U		0.322	0.500	1	04/27/2020 00:58	WG1466619
1,2,3-Trimethylbenzene	U		0.104	0.500	1	04/27/2020 00:58	WG1466619
1,3,5-Trimethylbenzene	U		0.104	0.500	1	04/27/2020 00:58	WG1466619
Vinyl acetate	U		0.692	5.00	1	04/27/2020 00:58	WG1466619
Vinyl chloride	112		0.234	0.500	1	04/27/2020 00:58	WG1466619
Xylenes, Total	U		0.174	1.50	1	04/27/2020 00:58	WG1466619
(S) Toluene-d8	*107*			*80.0-120*		*04/27/2020 00:58*	WG1466619
(S) 4-Bromofluorobenzene	*108*			*77.0-126*		*04/27/2020 00:58*	WG1466619
(S) 1,2-Dichloroethane-d4	*106*			*70.0-130*		*04/27/2020 00:58*	WG1466619

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Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	320000		8450	20000	1	04/28/2020 00:00	WG1466002

Sample Narrative:

L1211929-08 WG1466002: Endpoint pH 4.5 headspace

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	25300		379	1000	1	04/24/2020 17:56	WG1465822
Nitrate	U		48.0	100	1	04/24/2020 17:56	WG1465822
Sulfate	24500		594	5000	1	04/24/2020 17:56	WG1465822

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	1710	~~B~~	102	1000	1	04/25/2020 22:45	WG1466185

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	2730		48.9	100	1	04/27/2020 00:50	WG1466428
Manganese	878		6.60	25.0	5	04/27/2020 13:58	WG1466428

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	69.8		0.287	0.678	1	04/29/2020 13:08	WG1467817
Ethane	U		0.296	1.29	1	04/29/2020 13:08	WG1467817
Ethene	U		0.422	1.27	1	04/29/2020 13:08	WG1467817

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U		11.3	25.0	1	05/02/2020 14:27	WG1469464
Acrylonitrile	U		0.671	5.00	1	05/02/2020 14:27	WG1469464
Benzene	U		0.0941	0.500	1	05/02/2020 14:27	WG1469464
Bromobenzene	U		0.118	0.500	1	05/02/2020 14:27	WG1469464
Bromodichloromethane	U		0.136	0.500	1	05/02/2020 14:27	WG1469464
Bromochloromethane	U		0.128	0.500	1	05/02/2020 14:27	WG1469464
Bromoform	U		0.129	0.500	1	05/02/2020 14:27	WG1469464
Bromomethane	U		0.605	2.50	1	05/02/2020 14:27	WG1469464
n-Butylbenzene	U		0.157	0.500	1	05/02/2020 14:27	WG1469464
sec-Butylbenzene	U		0.125	0.500	1	05/02/2020 14:27	WG1469464
tert-Butylbenzene	U		0.127	0.500	1	05/02/2020 14:27	WG1469464
Carbon disulfide	U		0.0962	0.500	1	05/02/2020 14:27	WG1469464
Carbon tetrachloride	U		0.128	0.500	1	05/02/2020 14:27	WG1469464
Chlorobenzene	U		0.117	0.500	1	05/02/2020 14:27	WG1469464
Chlorodibromomethane	U		0.140	0.500	1	05/02/2020 14:27	WG1469464
Chloroethane	U		0.192	2.50	1	05/02/2020 14:27	WG1469464
Chloroform	U		0.111	0.500	1	05/02/2020 14:27	WG1469464
Chloromethane	U		0.960	1.25	1	05/02/2020 14:27	WG1469464
2-Chlorotoluene	U		0.106	0.500	1	05/02/2020 14:27	WG1469464
4-Chlorotoluene	U		0.114	0.500	1	05/02/2020 14:27	WG1469464

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

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,2-Dibromo-3-Chloropropane	U		0.276	2.50	1	05/02/2020 14:27	WG1469464
1,2-Dibromoethane	U		0.126	0.500	1	05/02/2020 14:27	WG1469464
Dibromomethane	U		0.122	0.500	1	05/02/2020 14:27	WG1469464
1,2-Dichlorobenzene	U		0.107	0.500	1	05/02/2020 14:27	WG1469464
1,3-Dichlorobenzene	U		0.299	0.500	1	05/02/2020 14:27	WG1469464
1,4-Dichlorobenzene	U		0.120	0.500	1	05/02/2020 14:27	WG1469464
Dichlorodifluoromethane	U		0.374	2.50	1	05/02/2020 14:27	WG1469464
1,1-Dichloroethane	U		0.100	0.500	1	05/02/2020 14:27	WG1469464
1,2-Dichloroethane	U		0.0819	0.500	1	05/02/2020 14:27	WG1469464
1,1-Dichloroethene	U		0.188	0.500	1	05/02/2020 14:27	WG1469464
cis-1,2-Dichloroethene	5.11		0.126	0.500	1	05/02/2020 14:27	WG1469464
trans-1,2-Dichloroethene	U		0.149	0.500	1	05/02/2020 14:27	WG1469464
1,2-Dichloropropane	U		0.149	0.500	1	05/02/2020 14:27	WG1469464
1,1-Dichloropropene	U		0.142	0.500	1	05/02/2020 14:27	WG1469464
1,3-Dichloropropane	U		0.109	1.00	1	05/02/2020 14:27	WG1469464
cis-1,3-Dichloropropene	U		0.111	0.500	1	05/02/2020 14:27	WG1469464
trans-1,3-Dichloropropene	U		0.118	0.500	1	05/02/2020 14:27	WG1469464
trans-1,4-Dichloro-2-butene	U		0.467	5.00	1	05/02/2020 14:27	WG1469464
2,2-Dichloropropane	U		0.161	0.500	1	05/02/2020 14:27	WG1469464
Di-isopropyl ether	U		0.105	0.500	1	05/02/2020 14:27	WG1469464
Ethylbenzene	U		0.137	0.500	1	05/02/2020 14:27	WG1469464
Hexachloro-1,3-butadiene	U		0.337	1.00	1	05/02/2020 14:27	WG1469464
2-Hexanone	U		0.787	5.00	1	05/02/2020 14:27	WG1469464
n-Hexane	U		0.749	5.00	1	05/02/2020 14:27	WG1469464
Iodomethane	U		6.00	10.0	1	05/02/2020 14:27	WG1469464
Isopropylbenzene	U		0.105	0.500	1	05/02/2020 14:27	WG1469464
p-Isopropyltoluene	U		0.120	0.500	1	05/02/2020 14:27	WG1469464
2-Butanone (MEK)	U		1.19	5.00	1	05/02/2020 14:27	WG1469464
Methylene Chloride	U		0.430	2.50	1	05/02/2020 14:27	WG1469464
4-Methyl-2-pentanone (MIBK)	U		0.478	5.00	1	05/02/2020 14:27	WG1469464
Methyl tert-butyl ether	U		0.101	0.500	1	05/02/2020 14:27	WG1469464
Naphthalene	U		0.174	2.50	1	05/02/2020 14:27	WG1469464
n-Propylbenzene	U		0.0993	0.500	1	05/02/2020 14:27	WG1469464
Styrene	U		0.118	0.500	1	05/02/2020 14:27	WG1469464
1,1,1,2-Tetrachloroethane	U		0.147	0.500	1	05/02/2020 14:27	WG1469464
1,1,2,2-Tetrachloroethane	U		0.133	0.500	1	05/02/2020 14:27	WG1469464
1,1,2-Trichlorotrifluoroethane	U		0.180	0.500	1	05/02/2020 14:27	WG1469464
Tetrachloroethene	U		0.300	0.500	1	05/02/2020 14:27	WG1469464
Toluene	U		0.278	0.500	1	05/02/2020 14:27	WG1469464
1,2,3-Trichlorobenzene	U		0.164	0.500	1	05/02/2020 14:27	WG1469464
1,2,4-Trichlorobenzene	U		0.481	1.00	1	05/02/2020 14:27	WG1469464
1,1,1-Trichloroethane	U		0.149	0.500	1	05/02/2020 14:27	WG1469464
1,1,2-Trichloroethane	U		0.158	0.500	1	05/02/2020 14:27	WG1469464
Trichloroethene	U		0.190	0.500	1	05/02/2020 14:27	WG1469464
Trichlorofluoromethane	U		0.160	2.50	1	05/02/2020 14:27	WG1469464
1,2,3-Trichloropropane	U		0.237	2.50	1	05/02/2020 14:27	WG1469464
1,2,4-Trimethylbenzene	U		0.322	0.500	1	05/02/2020 14:27	WG1469464
1,2,3-Trimethylbenzene	U		0.104	0.500	1	05/02/2020 14:27	WG1469464
1,3,5-Trimethylbenzene	U		0.104	0.500	1	05/02/2020 14:27	WG1469464
Vinyl acetate	U		0.692	5.00	1	05/02/2020 14:27	WG1469464
Vinyl chloride	4.14		0.234	0.500	1	05/02/2020 14:27	WG1469464
Xylenes, Total	U		0.174	1.50	1	05/02/2020 14:27	WG1469464
(S) Toluene-d8	*107*			*80.0-120*		*05/02/2020 14:27*	WG1469464
(S) 4-Bromofluorobenzene	*102*			*77.0-126*		*05/02/2020 14:27*	WG1469464
(S) 1,2-Dichloroethane-d4	*110*			*70.0-130*		*05/02/2020 14:27*	WG1469464

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Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	333000		8450	20000	1	04/29/2020 22:32	WG1466892

Sample Narrative:

L1212335-01 WG1466892: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	23900		379	1000	1	04/25/2020 13:46	WG1466208
Nitrate	U		48.0	100	1	04/25/2020 13:46	WG1466208
Sulfate	13000		594	5000	1	04/25/2020 13:46	WG1466208

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	3140		102	1000	1	04/28/2020 14:29	WG1467393

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	6380		48.9	100	1	04/28/2020 15:15	WG1466908
Manganese	326		1.32	5.00	1	04/28/2020 15:15	WG1466908

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	38.0 U	~~B J~~	31.6	100	1	05/01/2020 12:36	WG1469249
(S) a,a,a-Trifluorotoluene(FID)	*97.6*			*78.0-120*		*05/01/2020 12:36*	WG1469249

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	88.4		0.287	0.678	1	04/29/2020 11:38	WG1467817
Ethane	U		0.296	1.29	1	04/29/2020 11:38	WG1467817
Ethene	9.01		0.422	1.27	1	04/29/2020 11:38	WG1467817

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U		11.3	25.0	1	05/01/2020 07:51	WG1468990
Acrylonitrile	U		0.671	5.00	1	05/01/2020 07:51	WG1468990
Benzene	U		0.0941	0.500	1	05/01/2020 07:51	WG1468990
Bromobenzene	U		0.118	0.500	1	05/01/2020 07:51	WG1468990
Bromodichloromethane	U		0.136	0.500	1	05/01/2020 07:51	WG1468990
Bromochloromethane	U		0.128	0.500	1	05/01/2020 07:51	WG1468990
Bromoform	U		0.129	0.500	1	05/01/2020 07:51	WG1468990
Bromomethane	U UJ	J0	0.605	2.50	1	05/01/2020 07:51	WG1468990
n-Butylbenzene	U		0.157	0.500	1	05/01/2020 07:51	WG1468990
sec-Butylbenzene	U		0.125	0.500	1	05/01/2020 07:51	WG1468990
tert-Butylbenzene	U		0.127	0.500	1	05/01/2020 07:51	WG1468990
Carbon disulfide	0.152	J	0.0962	0.500	1	05/01/2020 07:51	WG1468990
Carbon tetrachloride	U		0.128	0.500	1	05/01/2020 07:51	WG1468990

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chlorobenzene	U		0.117	0.500	1	05/01/2020 07:51	WG1468990
Chlorodibromomethane	U		0.140	0.500	1	05/01/2020 07:51	WG1468990
Chloroethane	U		0.192	2.50	1	05/01/2020 07:51	WG1468990
Chloroform	U		0.111	0.500	1	05/01/2020 07:51	WG1468990
Chloromethane	U		0.960	1.25	1	05/01/2020 07:51	WG1468990
2-Chlorotoluene	U		0.106	0.500	1	05/01/2020 07:51	WG1468990
4-Chlorotoluene	U		0.114	0.500	1	05/01/2020 07:51	WG1468990
1,2-Dibromo-3-Chloropropane	U	UJ J0	0.276	2.50	1	05/01/2020 07:51	WG1468990
1,2-Dibromoethane	U		0.126	0.500	1	05/01/2020 07:51	WG1468990
Dibromomethane	U		0.122	0.500	1	05/01/2020 07:51	WG1468990
1,2-Dichlorobenzene	U		0.107	0.500	1	05/01/2020 07:51	WG1468990
1,3-Dichlorobenzene	U		0.299	0.500	1	05/01/2020 07:51	WG1468990
1,4-Dichlorobenzene	U		0.120	0.500	1	05/01/2020 07:51	WG1468990
Dichlorodifluoromethane	U		0.374	2.50	1	05/01/2020 07:51	WG1468990
1,1-Dichloroethane	U		0.100	0.500	1	05/01/2020 07:51	WG1468990
1,2-Dichloroethane	U		0.0819	0.500	1	05/01/2020 07:51	WG1468990
1,1-Dichloroethene	U		0.188	0.500	1	05/01/2020 07:51	WG1468990
cis-1,2-Dichloroethene	1.15		0.126	0.500	1	05/01/2020 07:51	WG1468990
trans-1,2-Dichloroethene	U		0.149	0.500	1	05/01/2020 07:51	WG1468990
1,2-Dichloropropane	U		0.149	0.500	1	05/01/2020 07:51	WG1468990
1,1-Dichloropropene	U		0.142	0.500	1	05/01/2020 07:51	WG1468990
1,3-Dichloropropane	U		0.109	1.00	1	05/01/2020 07:51	WG1468990
cis-1,3-Dichloropropene	U		0.111	0.500	1	05/01/2020 07:51	WG1468990
trans-1,3-Dichloropropene	U		0.118	0.500	1	05/01/2020 07:51	WG1468990
trans-1,4-Dichloro-2-butene	U	UJ J0	0.467	5.00	1	05/01/2020 07:51	WG1468990
2,2-Dichloropropane	U		0.161	0.500	1	05/01/2020 07:51	WG1468990
Di-isopropyl ether	U		0.105	0.500	1	05/01/2020 07:51	WG1468990
Ethylbenzene	U		0.137	0.500	1	05/01/2020 07:51	WG1468990
Hexachloro-1,3-butadiene	U	UJ J0 J4	0.337	1.00	1	05/01/2020 07:51	WG1468990
2-Hexanone	U		0.787	5.00	1	05/01/2020 07:51	WG1468990
n-Hexane	U		0.749	5.00	1	05/01/2020 07:51	WG1468990
Iodomethane	U		6.00	10.0	1	05/01/2020 07:51	WG1468990
Isopropylbenzene	U		0.105	0.500	1	05/01/2020 07:51	WG1468990
p-Isopropyltoluene	U		0.120	0.500	1	05/01/2020 07:51	WG1468990
2-Butanone (MEK)	U		1.19	5.00	1	05/01/2020 07:51	WG1468990
Methylene Chloride	U		0.430	2.50	1	05/01/2020 07:51	WG1468990
4-Methyl-2-pentanone (MIBK)	U		0.478	5.00	1	05/01/2020 07:51	WG1468990
Methyl tert-butyl ether	U		0.101	0.500	1	05/01/2020 07:51	WG1468990
Naphthalene	U		0.174	2.50	1	05/01/2020 07:51	WG1468990
n-Propylbenzene	U		0.0993	0.500	1	05/01/2020 07:51	WG1468990
Styrene	U	UJ J0	0.118	0.500	1	05/01/2020 07:51	WG1468990
1,1,1,2-Tetrachloroethane	U		0.147	0.500	1	05/01/2020 07:51	WG1468990
1,1,2,2-Tetrachloroethane	U		0.133	0.500	1	05/01/2020 07:51	WG1468990
1,1,2-Trichlorotrifluoroethane	U		0.180	0.500	1	05/01/2020 07:51	WG1468990
Tetrachloroethene	U		0.300	0.500	1	05/01/2020 07:51	WG1468990
Toluene	U		0.278	0.500	1	05/01/2020 07:51	WG1468990
1,2,3-Trichlorobenzene	U		0.164	0.500	1	05/05/2020 00:51	WG1470366
1,2,4-Trichlorobenzene	U	UJ J0	0.481	1.00	1	05/01/2020 07:51	WG1468990
1,1,1-Trichloroethane	U		0.149	0.500	1	05/01/2020 07:51	WG1468990
1,1,2-Trichloroethane	U		0.158	0.500	1	05/01/2020 07:51	WG1468990
Trichloroethene	0.251	J	0.190	0.500	1	05/01/2020 07:51	WG1468990
Trichlorofluoromethane	U		0.160	2.50	1	05/01/2020 07:51	WG1468990
1,2,3-Trichloropropane	U		0.237	2.50	1	05/01/2020 07:51	WG1468990
1,2,4-Trimethylbenzene	U		0.322	0.500	1	05/01/2020 07:51	WG1468990
1,2,3-Trimethylbenzene	U		0.104	0.500	1	05/01/2020 07:51	WG1468990
1,3,5-Trimethylbenzene	U		0.104	0.500	1	05/01/2020 07:51	WG1468990

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

Analyte	Result ug/l		Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Vinyl acetate	U	UJ	J0	0.692	5.00	1	05/01/2020 07:51	WG1468990
Vinyl chloride	1.45			0.234	0.500	1	05/01/2020 07:51	WG1468990
Xylenes, Total	U			0.174	1.50	1	05/01/2020 07:51	WG1468990
(S) Toluene-d8	*102*				*80.0-120*		*05/01/2020 07:51*	WG1468990
(S) Toluene-d8	*107*				*80.0-120*		*05/05/2020 00:51*	WG1470366
(S) 4-Bromofluorobenzene	*95.3*				*77.0-126*		*05/01/2020 07:51*	WG1468990
(S) 4-Bromofluorobenzene	*102*				*77.0-126*		*05/05/2020 00:51*	WG1470366
(S) 1,2-Dichloroethane-d4	*115*				*70.0-130*		*05/01/2020 07:51*	WG1468990
(S) 1,2-Dichloroethane-d4	*85.6*				*70.0-130*		*05/05/2020 00:51*	WG1470366

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Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	850000		8450	20000	1	04/29/2020 22:42	WG1466892

Sample Narrative:

L1212335-02 WG1466892: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	17500		379	1000	1	04/25/2020 14:08	WG1466208
Nitrate	69.5	J	48.0	100	1	04/25/2020 14:08	WG1466208
Sulfate	22600		594	5000	1	04/25/2020 14:08	WG1466208

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	16100		102	1000	1	04/28/2020 14:46	WG1467393

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	5800		48.9	100	1	04/28/2020 15:18	WG1466908
Manganese	3520		1.32	5.00	1	04/28/2020 15:18	WG1466908

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	62.4 U	~~B J~~	31.6	100	1	05/01/2020 12:57	WG1469249
(S) a,a,a-Trifluorotoluene(FID)	*96.8*			*78.0-120*		*05/01/2020 12:57*	WG1469249

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	471		0.287	0.678	1	04/29/2020 11:41	WG1467817
Ethane	27.1		0.296	1.29	1	04/29/2020 11:41	WG1467817
Ethene	U		0.422	1.27	1	04/29/2020 11:41	WG1467817

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U		11.3	25.0	1	05/01/2020 08:11	WG1468990
Acrylonitrile	U		0.671	5.00	1	05/01/2020 08:11	WG1468990
Benzene	0.359	J	0.0941	0.500	1	05/01/2020 08:11	WG1468990
Bromobenzene	U		0.118	0.500	1	05/01/2020 08:11	WG1468990
Bromodichloromethane	U		0.136	0.500	1	05/01/2020 08:11	WG1468990
Bromochloromethane	U		0.128	0.500	1	05/01/2020 08:11	WG1468990
Bromoform	U		0.129	0.500	1	05/01/2020 08:11	WG1468990
Bromomethane	U UJ	J0	0.605	2.50	1	05/01/2020 08:11	WG1468990
n-Butylbenzene	U		0.157	0.500	1	05/01/2020 08:11	WG1468990
sec-Butylbenzene	U		0.125	0.500	1	05/01/2020 08:11	WG1468990
tert-Butylbenzene	U		0.127	0.500	1	05/01/2020 08:11	WG1468990
Carbon disulfide	U		0.0962	0.500	1	05/01/2020 08:11	WG1468990
Carbon tetrachloride	U		0.128	0.500	1	05/01/2020 08:11	WG1468990

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chlorobenzene	U		0.117	0.500	1	05/01/2020 08:11	WG1468990
Chlorodibromomethane	U		0.140	0.500	1	05/01/2020 08:11	WG1468990
Chloroethane	U		0.192	2.50	1	05/01/2020 08:11	WG1468990
Chloroform	U		0.111	0.500	1	05/01/2020 08:11	WG1468990
Chloromethane	U		0.960	1.25	1	05/01/2020 08:11	WG1468990
2-Chlorotoluene	U		0.106	0.500	1	05/01/2020 08:11	WG1468990
4-Chlorotoluene	U		0.114	0.500	1	05/01/2020 08:11	WG1468990
1,2-Dibromo-3-Chloropropane	U UJ	J0	0.276	2.50	1	05/01/2020 08:11	WG1468990
1,2-Dibromoethane	U		0.126	0.500	1	05/01/2020 08:11	WG1468990
Dibromomethane	U		0.122	0.500	1	05/01/2020 08:11	WG1468990
1,2-Dichlorobenzene	U		0.107	0.500	1	05/01/2020 08:11	WG1468990
1,3-Dichlorobenzene	U		0.299	0.500	1	05/01/2020 08:11	WG1468990
1,4-Dichlorobenzene	U		0.120	0.500	1	05/01/2020 08:11	WG1468990
Dichlorodifluoromethane	U		0.374	2.50	1	05/01/2020 08:11	WG1468990
1,1-Dichloroethane	U		0.100	0.500	1	05/01/2020 08:11	WG1468990
1,2-Dichloroethane	U		0.0819	0.500	1	05/01/2020 08:11	WG1468990
1,1-Dichloroethene	0.221	J	0.188	0.500	1	05/01/2020 08:11	WG1468990
cis-1,2-Dichloroethene	53.6		0.126	0.500	1	05/01/2020 08:11	WG1468990
trans-1,2-Dichloroethene	0.454	J	0.149	0.500	1	05/01/2020 08:11	WG1468990
1,2-Dichloropropane	U		0.149	0.500	1	05/01/2020 08:11	WG1468990
1,1-Dichloropropene	U		0.142	0.500	1	05/01/2020 08:11	WG1468990
1,3-Dichloropropane	U		0.109	1.00	1	05/01/2020 08:11	WG1468990
cis-1,3-Dichloropropene	U		0.111	0.500	1	05/01/2020 08:11	WG1468990
trans-1,3-Dichloropropene	U		0.118	0.500	1	05/01/2020 08:11	WG1468990
trans-1,4-Dichloro-2-butene	U UJ	J0	0.467	5.00	1	05/01/2020 08:11	WG1468990
2,2-Dichloropropane	U		0.161	0.500	1	05/01/2020 08:11	WG1468990
Di-isopropyl ether	U		0.105	0.500	1	05/01/2020 08:11	WG1468990
Ethylbenzene	U		0.137	0.500	1	05/01/2020 08:11	WG1468990
Hexachloro-1,3-butadiene	U UJ	J0 J4	0.337	1.00	1	05/01/2020 08:11	WG1468990
2-Hexanone	U		0.787	5.00	1	05/01/2020 08:11	WG1468990
n-Hexane	U		0.749	5.00	1	05/01/2020 08:11	WG1468990
Iodomethane	U		6.00	10.0	1	05/01/2020 08:11	WG1468990
Isopropylbenzene	U		0.105	0.500	1	05/01/2020 08:11	WG1468990
p-Isopropyltoluene	U		0.120	0.500	1	05/01/2020 08:11	WG1468990
2-Butanone (MEK)	U		1.19	5.00	1	05/01/2020 08:11	WG1468990
Methylene Chloride	U		0.430	2.50	1	05/01/2020 08:11	WG1468990
4-Methyl-2-pentanone (MIBK)	U		0.478	5.00	1	05/01/2020 08:11	WG1468990
Methyl tert-butyl ether	U		0.101	0.500	1	05/01/2020 08:11	WG1468990
Naphthalene	U		0.174	2.50	1	05/01/2020 08:11	WG1468990
n-Propylbenzene	U		0.0993	0.500	1	05/01/2020 08:11	WG1468990
Styrene	U UJ	J0	0.118	0.500	1	05/01/2020 08:11	WG1468990
1,1,1,2-Tetrachloroethane	U		0.147	0.500	1	05/01/2020 08:11	WG1468990
1,1,2,2-Tetrachloroethane	U		0.133	0.500	1	05/01/2020 08:11	WG1468990
1,1,2-Trichlorotrifluoroethane	U		0.180	0.500	1	05/01/2020 08:11	WG1468990
Tetrachloroethene	U		0.300	0.500	1	05/01/2020 08:11	WG1468990
Toluene	U		0.278	0.500	1	05/01/2020 08:11	WG1468990
1,2,3-Trichlorobenzene	U		0.164	0.500	1	05/05/2020 01:12	WG1470366
1,2,4-Trichlorobenzene	U UJ	J0	0.481	1.00	1	05/01/2020 08:11	WG1468990
1,1,1-Trichloroethane	U		0.149	0.500	1	05/01/2020 08:11	WG1468990
1,1,2-Trichloroethane	U		0.158	0.500	1	05/01/2020 08:11	WG1468990
Trichloroethene	0.206	J	0.190	0.500	1	05/01/2020 08:11	WG1468990
Trichlorofluoromethane	U		0.160	2.50	1	05/01/2020 08:11	WG1468990
1,2,3-Trichloropropane	U		0.237	2.50	1	05/01/2020 08:11	WG1468990
1,2,4-Trimethylbenzene	U		0.322	0.500	1	05/01/2020 08:11	WG1468990
1,2,3-Trimethylbenzene	U		0.104	0.500	1	05/01/2020 08:11	WG1468990
1,3,5-Trimethylbenzene	U		0.104	0.500	1	05/01/2020 08:11	WG1468990

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Vinyl acetate	U UJ	J0	0.692	5.00	1	05/01/2020 08:11	WG1468990
Vinyl chloride	9.14		0.234	0.500	1	05/01/2020 08:11	WG1468990
Xylenes, Total	U		0.174	1.50	1	05/01/2020 08:11	WG1468990
(S) Toluene-d8	*97.6*			*80.0-120*		*05/01/2020 08:11*	WG1468990
(S) Toluene-d8	*107*			*80.0-120*		*05/05/2020 01:12*	WG1470366
(S) 4-Bromofluorobenzene	*99.5*			*77.0-126*		*05/01/2020 08:11*	WG1468990
(S) 4-Bromofluorobenzene	*102*			*77.0-126*		*05/05/2020 01:12*	WG1470366
(S) 1,2-Dichloroethane-d4	*111*			*70.0-130*		*05/01/2020 08:11*	WG1468990
(S) 1,2-Dichloroethane-d4	*83.6*			*70.0-130*		*05/05/2020 01:12*	WG1470366

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

JC 5/18/2020

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

Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	292000		8450	20000	1	04/29/2020 22:51	WG1466892

Sample Narrative:

L1212335-03 WG1466892: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	34700		379	1000	1	04/25/2020 14:40	WG1466208
Nitrate	U		48.0	100	1	04/25/2020 14:40	WG1466208
Sulfate	243000		2970	25000	5	04/26/2020 13:11	WG1466208

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	3360		102	1000	1	04/28/2020 15:00	WG1467393

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	9660		48.9	100	1	04/28/2020 13:53	WG1466908
Manganese	809	~~V~~	1.32	5.00	1	04/28/2020 13:53	WG1466908

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	94.1		0.287	0.678	1	04/29/2020 11:44	WG1467817
Ethane	8.18		0.296	1.29	1	04/29/2020 11:44	WG1467817
Ethene	U		0.422	1.27	1	04/29/2020 11:44	WG1467817

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U		11.3	25.0	1	05/01/2020 08:32	WG1468990
Acrylonitrile	U		0.671	5.00	1	05/01/2020 08:32	WG1468990
Benzene	0.226	J	0.0941	0.500	1	05/01/2020 08:32	WG1468990
Bromobenzene	U		0.118	0.500	1	05/01/2020 08:32	WG1468990
Bromodichloromethane	U		0.136	0.500	1	05/01/2020 08:32	WG1468990
Bromochloromethane	U		0.128	0.500	1	05/01/2020 08:32	WG1468990
Bromoform	U		0.129	0.500	1	05/01/2020 08:32	WG1468990
Bromomethane	U UJ	J0	0.605	2.50	1	05/01/2020 08:32	WG1468990
n-Butylbenzene	U		0.157	0.500	1	05/01/2020 08:32	WG1468990
sec-Butylbenzene	U		0.125	0.500	1	05/01/2020 08:32	WG1468990
tert-Butylbenzene	U		0.127	0.500	1	05/01/2020 08:32	WG1468990
Carbon disulfide	U		0.0962	0.500	1	05/01/2020 08:32	WG1468990
Carbon tetrachloride	U		0.128	0.500	1	05/01/2020 08:32	WG1468990
Chlorobenzene	U		0.117	0.500	1	05/01/2020 08:32	WG1468990
Chlorodibromomethane	U		0.140	0.500	1	05/01/2020 08:32	WG1468990
Chloroethane	U		0.192	2.50	1	05/01/2020 08:32	WG1468990
Chloroform	U		0.111	0.500	1	05/01/2020 08:32	WG1468990
Chloromethane	U		0.960	1.25	1	05/01/2020 08:32	WG1468990
2-Chlorotoluene	U		0.106	0.500	1	05/01/2020 08:32	WG1468990
4-Chlorotoluene	U		0.114	0.500	1	05/01/2020 08:32	WG1468990

JC 5/18/2020

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

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,2-Dibromo-3-Chloropropane	U UJ	J0	0.276	2.50	1	05/01/2020 08:32	WG1468990
1,2-Dibromoethane	U		0.126	0.500	1	05/01/2020 08:32	WG1468990
Dibromomethane	U		0.122	0.500	1	05/01/2020 08:32	WG1468990
1,2-Dichlorobenzene	U		0.107	0.500	1	05/01/2020 08:32	WG1468990
1,3-Dichlorobenzene	U		0.299	0.500	1	05/01/2020 08:32	WG1468990
1,4-Dichlorobenzene	U		0.120	0.500	1	05/01/2020 08:32	WG1468990
Dichlorodifluoromethane	U		0.374	2.50	1	05/01/2020 08:32	WG1468990
1,1-Dichloroethane	0.953		0.100	0.500	1	05/01/2020 08:32	WG1468990
1,2-Dichloroethane	U		0.0819	0.500	1	05/01/2020 08:32	WG1468990
1,1-Dichloroethene	U		0.188	0.500	1	05/01/2020 08:32	WG1468990
cis-1,2-Dichloroethene	U		0.126	0.500	1	05/01/2020 08:32	WG1468990
trans-1,2-Dichloroethene	U		0.149	0.500	1	05/01/2020 08:32	WG1468990
1,2-Dichloropropane	U		0.149	0.500	1	05/01/2020 08:32	WG1468990
1,1-Dichloropropene	U		0.142	0.500	1	05/01/2020 08:32	WG1468990
1,3-Dichloropropane	U		0.109	1.00	1	05/01/2020 08:32	WG1468990
cis-1,3-Dichloropropene	U		0.111	0.500	1	05/01/2020 08:32	WG1468990
trans-1,3-Dichloropropene	U		0.118	0.500	1	05/01/2020 08:32	WG1468990
trans-1,4-Dichloro-2-butene	U UJ	J0	0.467	5.00	1	05/01/2020 08:32	WG1468990
2,2-Dichloropropane	U		0.161	0.500	1	05/01/2020 08:32	WG1468990
Di-isopropyl ether	U		0.105	0.500	1	05/01/2020 08:32	WG1468990
Ethylbenzene	0.257	J	0.137	0.500	1	05/01/2020 08:32	WG1468990
Hexachloro-1,3-butadiene	U UJ	J0 J4	0.337	1.00	1	05/01/2020 08:32	WG1468990
2-Hexanone	U		0.787	5.00	1	05/01/2020 08:32	WG1468990
n-Hexane	U		0.749	5.00	1	05/01/2020 08:32	WG1468990
Iodomethane	U		6.00	10.0	1	05/01/2020 08:32	WG1468990
Isopropylbenzene	0.604		0.105	0.500	1	05/01/2020 08:32	WG1468990
p-Isopropyltoluene	U		0.120	0.500	1	05/01/2020 08:32	WG1468990
2-Butanone (MEK)	U		1.19	5.00	1	05/01/2020 08:32	WG1468990
Methylene Chloride	U		0.430	2.50	1	05/01/2020 08:32	WG1468990
4-Methyl-2-pentanone (MIBK)	U		0.478	5.00	1	05/01/2020 08:32	WG1468990
Methyl tert-butyl ether	U		0.101	0.500	1	05/01/2020 08:32	WG1468990
Naphthalene	U		0.174	2.50	1	05/01/2020 08:32	WG1468990
n-Propylbenzene	1.64		0.0993	0.500	1	05/01/2020 08:32	WG1468990
Styrene	U UJ	J0	0.118	0.500	1	05/01/2020 08:32	WG1468990
1,1,1,2-Tetrachloroethane	U		0.147	0.500	1	05/01/2020 08:32	WG1468990
1,1,2,2-Tetrachloroethane	U		0.133	0.500	1	05/01/2020 08:32	WG1468990
1,1,2-Trichlorotrifluoroethane	U		0.180	0.500	1	05/01/2020 08:32	WG1468990
Tetrachloroethene	U		0.300	0.500	1	05/01/2020 08:32	WG1468990
Toluene	U		0.278	0.500	1	05/01/2020 08:32	WG1468990
1,2,3-Trichlorobenzene	U		0.164	0.500	1	05/05/2020 01:32	WG1470366
1,2,4-Trichlorobenzene	U UJ	J0	0.481	1.00	1	05/01/2020 08:32	WG1468990
1,1,1-Trichloroethane	U		0.149	0.500	1	05/01/2020 08:32	WG1468990
1,1,2-Trichloroethane	U		0.158	0.500	1	05/01/2020 08:32	WG1468990
Trichloroethene	U		0.190	0.500	1	05/01/2020 08:32	WG1468990
Trichlorofluoromethane	U		0.160	2.50	1	05/01/2020 08:32	WG1468990
1,2,3-Trichloropropane	U		0.237	2.50	1	05/01/2020 08:32	WG1468990
1,2,4-Trimethylbenzene	U		0.322	0.500	1	05/01/2020 08:32	WG1468990
1,2,3-Trimethylbenzene	U		0.104	0.500	1	05/01/2020 08:32	WG1468990
1,3,5-Trimethylbenzene	U		0.104	0.500	1	05/01/2020 08:32	WG1468990
Vinyl acetate	U UJ	J0	0.692	5.00	1	05/01/2020 08:32	WG1468990
Vinyl chloride	0.249	J	0.234	0.500	1	05/01/2020 08:32	WG1468990
Xylenes, Total	U		0.174	1.50	1	05/01/2020 08:32	WG1468990
(S) Toluene-d8	*101*			*80.0-120*		*05/01/2020 08:32*	WG1468990
(S) Toluene-d8	*108*			*80.0-120*		*05/05/2020 01:32*	WG1470366
(S) 4-Bromofluorobenzene	*97.1*			*77.0-126*		*05/01/2020 08:32*	WG1468990
(S) 4-Bromofluorobenzene	*101*			*77.0-126*		*05/05/2020 01:32*	WG1470366

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
(S) 1,2-Dichloroethane-d4	*114*			*70.0-130*		*05/01/2020 08:32*	WG1468990
(S) 1,2-Dichloroethane-d4	*85.9*			*70.0-130*		*05/05/2020 01:32*	WG1470366

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Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	251000		8450	20000	1	04/29/2020 22:59	WG1466892

Sample Narrative:

L1212335-04 WG1466892: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	9620		379	1000	1	04/25/2020 14:51	WG1466208
Nitrate	U		48.0	100	1	04/25/2020 14:51	WG1466208
Sulfate	37900		594	5000	1	04/25/2020 14:51	WG1466208

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	1250	~~B~~	102	1000	1	04/28/2020 15:16	WG1467393

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	2340		48.9	100	1	04/28/2020 15:22	WG1466908
Manganese	329		1.32	5.00	1	04/28/2020 15:22	WG1466908

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	57.8		0.287	0.678	1	04/29/2020 11:47	WG1467817
Ethane	U		0.296	1.29	1	04/29/2020 11:47	WG1467817
Ethene	U		0.422	1.27	1	04/29/2020 11:47	WG1467817

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U		11.3	25.0	1	05/01/2020 08:53	WG1468990
Acrylonitrile	U		0.671	5.00	1	05/01/2020 08:53	WG1468990
Benzene	U		0.0941	0.500	1	05/01/2020 08:53	WG1468990
Bromobenzene	U		0.118	0.500	1	05/01/2020 08:53	WG1468990
Bromodichloromethane	U		0.136	0.500	1	05/01/2020 08:53	WG1468990
Bromochloromethane	U		0.128	0.500	1	05/01/2020 08:53	WG1468990
Bromoform	U		0.129	0.500	1	05/01/2020 08:53	WG1468990
Bromomethane	U	UJ J0	0.605	2.50	1	05/01/2020 08:53	WG1468990
n-Butylbenzene	U		0.157	0.500	1	05/01/2020 08:53	WG1468990
sec-Butylbenzene	U		0.125	0.500	1	05/01/2020 08:53	WG1468990
tert-Butylbenzene	U		0.127	0.500	1	05/01/2020 08:53	WG1468990
Carbon disulfide	0.430	J	0.0962	0.500	1	05/01/2020 08:53	WG1468990
Carbon tetrachloride	U		0.128	0.500	1	05/01/2020 08:53	WG1468990
Chlorobenzene	U		0.117	0.500	1	05/01/2020 08:53	WG1468990
Chlorodibromomethane	U		0.140	0.500	1	05/01/2020 08:53	WG1468990
Chloroethane	U		0.192	2.50	1	05/01/2020 08:53	WG1468990
Chloroform	U		0.111	0.500	1	05/01/2020 08:53	WG1468990
Chloromethane	U		0.960	1.25	1	05/01/2020 08:53	WG1468990
2-Chlorotoluene	U		0.106	0.500	1	05/01/2020 08:53	WG1468990
4-Chlorotoluene	U		0.114	0.500	1	05/01/2020 08:53	WG1468990

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

Analyte	Result		Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l			ug/l	ug/l		date / time	
1,2-Dibromo-3-Chloropropane	U	UJ	J0	0.276	2.50	1	05/01/2020 08:53	WG1468990
1,2-Dibromoethane	U			0.126	0.500	1	05/01/2020 08:53	WG1468990
Dibromomethane	U			0.122	0.500	1	05/01/2020 08:53	WG1468990
1,2-Dichlorobenzene	U			0.107	0.500	1	05/01/2020 08:53	WG1468990
1,3-Dichlorobenzene	U			0.299	0.500	1	05/01/2020 08:53	WG1468990
1,4-Dichlorobenzene	U			0.120	0.500	1	05/01/2020 08:53	WG1468990
Dichlorodifluoromethane	U			0.374	2.50	1	05/01/2020 08:53	WG1468990
1,1-Dichloroethane	U			0.100	0.500	1	05/01/2020 08:53	WG1468990
1,2-Dichloroethane	U			0.0819	0.500	1	05/01/2020 08:53	WG1468990
1,1-Dichloroethene	U			0.188	0.500	1	05/01/2020 08:53	WG1468990
cis-1,2-Dichloroethene	U			0.126	0.500	1	05/01/2020 08:53	WG1468990
trans-1,2-Dichloroethene	U			0.149	0.500	1	05/01/2020 08:53	WG1468990
1,2-Dichloropropane	U			0.149	0.500	1	05/01/2020 08:53	WG1468990
1,1-Dichloropropene	U			0.142	0.500	1	05/01/2020 08:53	WG1468990
1,3-Dichloropropane	U			0.109	1.00	1	05/01/2020 08:53	WG1468990
cis-1,3-Dichloropropene	U			0.111	0.500	1	05/01/2020 08:53	WG1468990
trans-1,3-Dichloropropene	U			0.118	0.500	1	05/01/2020 08:53	WG1468990
trans-1,4-Dichloro-2-butene	U	UJ	J0	0.467	5.00	1	05/01/2020 08:53	WG1468990
2,2-Dichloropropane	U			0.161	0.500	1	05/01/2020 08:53	WG1468990
Di-isopropyl ether	U			0.105	0.500	1	05/01/2020 08:53	WG1468990
Ethylbenzene	U			0.137	0.500	1	05/01/2020 08:53	WG1468990
Hexachloro-1,3-butadiene	U	UJ	J0 J4	0.337	1.00	1	05/01/2020 08:53	WG1468990
2-Hexanone	U			0.787	5.00	1	05/01/2020 08:53	WG1468990
n-Hexane	U			0.749	5.00	1	05/01/2020 08:53	WG1468990
Iodomethane	U			6.00	10.0	1	05/01/2020 08:53	WG1468990
Isopropylbenzene	U			0.105	0.500	1	05/01/2020 08:53	WG1468990
p-Isopropyltoluene	U			0.120	0.500	1	05/01/2020 08:53	WG1468990
2-Butanone (MEK)	U			1.19	5.00	1	05/01/2020 08:53	WG1468990
Methylene Chloride	U			0.430	2.50	1	05/01/2020 08:53	WG1468990
4-Methyl-2-pentanone (MIBK)	U			0.478	5.00	1	05/01/2020 08:53	WG1468990
Methyl tert-butyl ether	U			0.101	0.500	1	05/01/2020 08:53	WG1468990
Naphthalene	U			0.174	2.50	1	05/01/2020 08:53	WG1468990
n-Propylbenzene	U			0.0993	0.500	1	05/01/2020 08:53	WG1468990
Styrene	U	UJ	J0	0.118	0.500	1	05/01/2020 08:53	WG1468990
1,1,1,2-Tetrachloroethane	U			0.147	0.500	1	05/01/2020 08:53	WG1468990
1,1,2,2-Tetrachloroethane	U			0.133	0.500	1	05/01/2020 08:53	WG1468990
1,1,2-Trichlorotrifluoroethane	U			0.180	0.500	1	05/01/2020 08:53	WG1468990
Tetrachloroethene	U			0.300	0.500	1	05/01/2020 08:53	WG1468990
Toluene	U			0.278	0.500	1	05/01/2020 08:53	WG1468990
1,2,3-Trichlorobenzene	U			0.164	0.500	1	05/05/2020 01:52	WG1470366
1,2,4-Trichlorobenzene	U	UJ	J0	0.481	1.00	1	05/01/2020 08:53	WG1468990
1,1,1-Trichloroethane	U			0.149	0.500	1	05/01/2020 08:53	WG1468990
1,1,2-Trichloroethane	U			0.158	0.500	1	05/01/2020 08:53	WG1468990
Trichloroethene	U			0.190	0.500	1	05/01/2020 08:53	WG1468990
Trichlorofluoromethane	U			0.160	2.50	1	05/01/2020 08:53	WG1468990
1,2,3-Trichloropropane	U			0.237	2.50	1	05/01/2020 08:53	WG1468990
1,2,4-Trimethylbenzene	U			0.322	0.500	1	05/01/2020 08:53	WG1468990
1,2,3-Trimethylbenzene	U			0.104	0.500	1	05/01/2020 08:53	WG1468990
1,3,5-Trimethylbenzene	U			0.104	0.500	1	05/01/2020 08:53	WG1468990
Vinyl acetate	U	UJ	J0	0.692	5.00	1	05/01/2020 08:53	WG1468990
Vinyl chloride	U			0.234	0.500	1	05/01/2020 08:53	WG1468990
Xylenes, Total	U			0.174	1.50	1	05/01/2020 08:53	WG1468990
(S) Toluene-d8	*101*				*80.0-120*		*05/01/2020 08:53*	WG1468990
(S) Toluene-d8	*107*				*80.0-120*		*05/05/2020 01:52*	WG1470366
(S) 4-Bromofluorobenzene	*93.8*				*77.0-126*		*05/01/2020 08:53*	WG1468990
(S) 4-Bromofluorobenzene	*99.6*				*77.0-126*		*05/05/2020 01:52*	WG1470366

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
(S) 1,2-Dichloroethane-d4	*115*			*70.0-130*		*05/01/2020 08:53*	WG1468990
(S) 1,2-Dichloroethane-d4	*84.3*			*70.0-130*		*05/05/2020 01:52*	WG1470366

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Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	409000		8450	20000	1	04/29/2020 23:08	WG1466892

Sample Narrative:

L1212335-05 WG1466892: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	56700		379	1000	1	04/25/2020 15:02	WG1466208
Nitrate	U		48.0	100	1	04/25/2020 15:02	WG1466208
Sulfate	1080	J	594	5000	1	04/25/2020 15:02	WG1466208

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	5570		102	1000	1	04/28/2020 15:31	WG1467393

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	2190		48.9	100	1	04/28/2020 15:25	WG1466908
Manganese	405		1.32	5.00	1	04/28/2020 15:25	WG1466908

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	88.2 U	~~B J~~	31.6	100	1	04/28/2020 22:43	WG1467703
(S) a,a,a-Trifluorotoluene(FID)	*106*			*78.0-120*		*04/28/2020 22:43*	WG1467703

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	3720		0.287	0.678	1	05/05/2020 11:30	WG1470547
Ethane	61.4		0.296	1.29	1	05/05/2020 11:30	WG1470547
Ethene	U		0.422	1.27	1	05/05/2020 11:30	WG1470547

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U		11.3	25.0	1	05/01/2020 09:13	WG1468990
Acrylonitrile	U		0.671	5.00	1	05/01/2020 09:13	WG1468990
Benzene	U		0.0941	0.500	1	05/01/2020 09:13	WG1468990
Bromobenzene	U		0.118	0.500	1	05/01/2020 09:13	WG1468990
Bromodichloromethane	U		0.136	0.500	1	05/01/2020 09:13	WG1468990
Bromochloromethane	U		0.128	0.500	1	05/01/2020 09:13	WG1468990
Bromoform	U		0.129	0.500	1	05/01/2020 09:13	WG1468990
Bromomethane	U UJ	J0	0.605	2.50	1	05/01/2020 09:13	WG1468990
n-Butylbenzene	U		0.157	0.500	1	05/01/2020 09:13	WG1468990
sec-Butylbenzene	U		0.125	0.500	1	05/01/2020 09:13	WG1468990
tert-Butylbenzene	U		0.127	0.500	1	05/01/2020 09:13	WG1468990
Carbon disulfide	U		0.0962	0.500	1	05/01/2020 09:13	WG1468990
Carbon tetrachloride	U		0.128	0.500	1	05/01/2020 09:13	WG1468990

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

Analyte	Result		Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l			ug/l	ug/l		date / time	
Chlorobenzene	U			0.117	0.500	1	05/01/2020 09:13	WG1468990
Chlorodibromomethane	U			0.140	0.500	1	05/01/2020 09:13	WG1468990
Chloroethane	U			0.192	2.50	1	05/01/2020 09:13	WG1468990
Chloroform	U			0.111	0.500	1	05/01/2020 09:13	WG1468990
Chloromethane	U			0.960	1.25	1	05/01/2020 09:13	WG1468990
2-Chlorotoluene	U			0.106	0.500	1	05/01/2020 09:13	WG1468990
4-Chlorotoluene	U			0.114	0.500	1	05/01/2020 09:13	WG1468990
1,2-Dibromo-3-Chloropropane	U	UJ	J0	0.276	2.50	1	05/01/2020 09:13	WG1468990
1,2-Dibromoethane	U			0.126	0.500	1	05/01/2020 09:13	WG1468990
Dibromomethane	U			0.122	0.500	1	05/01/2020 09:13	WG1468990
1,2-Dichlorobenzene	U			0.107	0.500	1	05/01/2020 09:13	WG1468990
1,3-Dichlorobenzene	U			0.299	0.500	1	05/01/2020 09:13	WG1468990
1,4-Dichlorobenzene	U			0.120	0.500	1	05/01/2020 09:13	WG1468990
Dichlorodifluoromethane	U			0.374	2.50	1	05/01/2020 09:13	WG1468990
1,1-Dichloroethane	U			0.100	0.500	1	05/01/2020 09:13	WG1468990
1,2-Dichloroethane	U			0.0819	0.500	1	05/01/2020 09:13	WG1468990
1,1-Dichloroethene	U			0.188	0.500	1	05/01/2020 09:13	WG1468990
cis-1,2-Dichloroethene	0.135		J	0.126	0.500	1	05/01/2020 09:13	WG1468990
trans-1,2-Dichloroethene	U			0.149	0.500	1	05/01/2020 09:13	WG1468990
1,2-Dichloropropane	U			0.149	0.500	1	05/01/2020 09:13	WG1468990
1,1-Dichloropropene	U			0.142	0.500	1	05/01/2020 09:13	WG1468990
1,3-Dichloropropane	U			0.109	1.00	1	05/01/2020 09:13	WG1468990
cis-1,3-Dichloropropene	U			0.111	0.500	1	05/01/2020 09:13	WG1468990
trans-1,3-Dichloropropene	U			0.118	0.500	1	05/01/2020 09:13	WG1468990
trans-1,4-Dichloro-2-butene	U	UJ	J0	0.467	5.00	1	05/01/2020 09:13	WG1468990
2,2-Dichloropropane	U			0.161	0.500	1	05/01/2020 09:13	WG1468990
Di-isopropyl ether	U			0.105	0.500	1	05/01/2020 09:13	WG1468990
Ethylbenzene	U			0.137	0.500	1	05/01/2020 09:13	WG1468990
Hexachloro-1,3-butadiene	U	UJ	J0 J4	0.337	1.00	1	05/01/2020 09:13	WG1468990
2-Hexanone	U			0.787	5.00	1	05/01/2020 09:13	WG1468990
n-Hexane	U			0.749	5.00	1	05/01/2020 09:13	WG1468990
Iodomethane	U			6.00	10.0	1	05/01/2020 09:13	WG1468990
Isopropylbenzene	U			0.105	0.500	1	05/01/2020 09:13	WG1468990
p-Isopropyltoluene	U			0.120	0.500	1	05/01/2020 09:13	WG1468990
2-Butanone (MEK)	U			1.19	5.00	1	05/01/2020 09:13	WG1468990
Methylene Chloride	U			0.430	2.50	1	05/01/2020 09:13	WG1468990
4-Methyl-2-pentanone (MIBK)	U			0.478	5.00	1	05/01/2020 09:13	WG1468990
Methyl tert-butyl ether	U			0.101	0.500	1	05/01/2020 09:13	WG1468990
Naphthalene	U			0.174	2.50	1	05/01/2020 09:13	WG1468990
n-Propylbenzene	U			0.0993	0.500	1	05/01/2020 09:13	WG1468990
Styrene	U	UJ	J0	0.118	0.500	1	05/01/2020 09:13	WG1468990
1,1,1,2-Tetrachloroethane	U			0.147	0.500	1	05/01/2020 09:13	WG1468990
1,1,2,2-Tetrachloroethane	U			0.133	0.500	1	05/01/2020 09:13	WG1468990
1,1,2-Trichlorotrifluoroethane	U			0.180	0.500	1	05/01/2020 09:13	WG1468990
Tetrachloroethene	U			0.300	0.500	1	05/01/2020 09:13	WG1468990
Toluene	U			0.278	0.500	1	05/01/2020 09:13	WG1468990
1,2,3-Trichlorobenzene	U			0.164	0.500	1	05/05/2020 02:13	WG1470366
1,2,4-Trichlorobenzene	U	UJ	J0	0.481	1.00	1	05/01/2020 09:13	WG1468990
1,1,1-Trichloroethane	U			0.149	0.500	1	05/01/2020 09:13	WG1468990
1,1,2-Trichloroethane	U			0.158	0.500	1	05/01/2020 09:13	WG1468990
Trichloroethene	U			0.190	0.500	1	05/01/2020 09:13	WG1468990
Trichlorofluoromethane	U			0.160	2.50	1	05/01/2020 09:13	WG1468990
1,2,3-Trichloropropane	U			0.237	2.50	1	05/01/2020 09:13	WG1468990
1,2,4-Trimethylbenzene	U			0.322	0.500	1	05/01/2020 09:13	WG1468990
1,2,3-Trimethylbenzene	U			0.104	0.500	1	05/01/2020 09:13	WG1468990
1,3,5-Trimethylbenzene	U			0.104	0.500	1	05/01/2020 09:13	WG1468990

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Vinyl acetate	U UJ	J0	0.692	5.00	1	05/01/2020 09:13	WG1468990
Vinyl chloride	U		0.234	0.500	1	05/01/2020 09:13	WG1468990
Xylenes, Total	U		0.174	1.50	1	05/01/2020 09:13	WG1468990
(S) Toluene-d8	*105*			*80.0-120*		*05/01/2020 09:13*	WG1468990
(S) Toluene-d8	*105*			*80.0-120*		*05/05/2020 02:13*	WG1470366
(S) 4-Bromofluorobenzene	*100*			*77.0-126*		*05/01/2020 09:13*	WG1468990
(S) 4-Bromofluorobenzene	*98.2*			*77.0-126*		*05/05/2020 02:13*	WG1470366
(S) 1,2-Dichloroethane-d4	*114*			*70.0-130*		*05/01/2020 09:13*	WG1468990
(S) 1,2-Dichloroethane-d4	*85.8*			*70.0-130*		*05/05/2020 02:13*	WG1470366

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Wet Chemistry by Method 2320 B-2011

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Alkalinity	498000		8450	20000	1	04/29/2020 23:17	WG1466892

Sample Narrative:

L1212335-06 WG1466892: Endpoint pH 4.5

Wet Chemistry by Method 9056A

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Chloride	39900		379	1000	1	04/25/2020 15:13	WG1466208
Nitrate	U		48.0	100	1	04/25/2020 15:13	WG1466208
Sulfate	47600		594	5000	1	04/25/2020 15:13	WG1466208

Wet Chemistry by Method 9060A

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
TOC (Total Organic Carbon)	16400		102	1000	1	04/28/2020 15:46	WG1467393

Metals (ICPMS) by Method 6020B

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Iron	13100		48.9	100	1	04/29/2020 21:21	WG1467590
Manganese	1860		1.32	5.00	1	04/29/2020 21:21	WG1467590

Volatile Organic Compounds (GC) by Method NWTPHGX

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Gasoline Range Organics-NWTPH	756	Z, J+ ~~B~~	31.6	100	1	04/28/2020 23:06	WG1467703
(S) a,a,a-Trifluorotoluene(FID)	*106*			*78.0-120*		*04/28/2020 23:06*	WG1467703

Sample Narrative:

L1212335-06 WG1467703: No discernable petroleum pattern present.

Volatile Organic Compounds (GC) by Method RSK175

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Methane	4700		0.287	0.678	1	04/29/2020 11:52	WG1467817
Ethane	62.9		0.296	1.29	1	04/29/2020 11:52	WG1467817
Ethene	109		0.422	1.27	1	04/29/2020 11:52	WG1467817

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

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Acetone	U		226	500	20	05/05/2020 08:31	WG1470366
Acrylonitrile	U	UJ J0	13.4	100	20	05/05/2020 08:31	WG1470366
Benzene	U		1.88	10.0	20	05/05/2020 08:31	WG1470366
Bromobenzene	U		2.36	10.0	20	05/05/2020 08:31	WG1470366
Bromodichloromethane	U		2.72	10.0	20	05/05/2020 08:31	WG1470366
Bromochloromethane	U		2.56	10.0	20	05/05/2020 08:31	WG1470366
Bromoform	U		2.58	10.0	20	05/05/2020 08:31	WG1470366
Bromomethane	U		12.1	50.0	20	05/05/2020 08:31	WG1470366
n-Butylbenzene	U		3.14	10.0	20	05/05/2020 08:31	WG1470366
sec-Butylbenzene	U		2.50	10.0	20	05/05/2020 08:31	WG1470366

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
tert-Butylbenzene	U		2.54	10.0	20	05/05/2020 08:31	WG1470366
Carbon disulfide	U	UJ J0	1.92	10.0	20	05/05/2020 08:31	WG1470366
Carbon tetrachloride	U		2.56	10.0	20	05/05/2020 08:31	WG1470366
Chlorobenzene	U		2.34	10.0	20	05/05/2020 08:31	WG1470366
Chlorodibromomethane	U		2.80	10.0	20	05/05/2020 08:31	WG1470366
Chloroethane	U		3.84	50.0	20	05/05/2020 08:31	WG1470366
Chloroform	U		2.22	10.0	20	05/05/2020 08:31	WG1470366
Chloromethane	U	UJ J0	19.2	25.0	20	05/05/2020 08:31	WG1470366
2-Chlorotoluene	U		2.12	10.0	20	05/05/2020 08:31	WG1470366
4-Chlorotoluene	U		2.28	10.0	20	05/05/2020 08:31	WG1470366
1,2-Dibromo-3-Chloropropane	U	UJ J0	5.52	50.0	20	05/05/2020 08:31	WG1470366
1,2-Dibromoethane	U		2.52	10.0	20	05/05/2020 08:31	WG1470366
Dibromomethane	U		2.44	10.0	20	05/05/2020 08:31	WG1470366
1,2-Dichlorobenzene	U		2.14	10.0	20	05/05/2020 08:31	WG1470366
1,3-Dichlorobenzene	U		5.98	10.0	20	05/05/2020 08:31	WG1470366
1,4-Dichlorobenzene	U		2.40	10.0	20	05/05/2020 08:31	WG1470366
Dichlorodifluoromethane	U		7.48	50.0	20	05/05/2020 08:31	WG1470366
1,1-Dichloroethane	U		2.00	10.0	20	05/05/2020 08:31	WG1470366
1,2-Dichloroethane	U	UJ J0	1.64	10.0	20	05/05/2020 08:31	WG1470366
1,1-Dichloroethene	U		3.76	10.0	20	05/05/2020 08:31	WG1470366
cis-1,2-Dichloroethene	1040		2.52	10.0	20	05/05/2020 08:31	WG1470366
trans-1,2-Dichloroethene	8.86	J	2.98	10.0	20	05/05/2020 08:31	WG1470366
1,2-Dichloropropane	U		2.98	10.0	20	05/05/2020 08:31	WG1470366
1,1-Dichloropropene	U		2.84	10.0	20	05/05/2020 08:31	WG1470366
1,3-Dichloropropane	U		2.18	20.0	20	05/05/2020 08:31	WG1470366
cis-1,3-Dichloropropene	U		2.22	10.0	20	05/05/2020 08:31	WG1470366
trans-1,3-Dichloropropene	U		2.36	10.0	20	05/05/2020 08:31	WG1470366
trans-1,4-Dichloro-2-butene	U	UJ J0	9.34	100	20	05/05/2020 08:31	WG1470366
2,2-Dichloropropane	U		3.22	10.0	20	05/05/2020 08:31	WG1470366
Di-isopropyl ether	U	UJ J0	2.10	10.0	20	05/05/2020 08:31	WG1470366
Ethylbenzene	U		2.74	10.0	20	05/05/2020 08:31	WG1470366
Hexachloro-1,3-butadiene	U	UJ J0	6.74	20.0	20	05/05/2020 08:31	WG1470366
2-Hexanone	U	UJ J0	15.7	100	20	05/05/2020 08:31	WG1470366
n-Hexane	U	UJ J0 J4	15.0	100	20	05/05/2020 08:31	WG1470366
Iodomethane	U		11.1	100	20	05/05/2020 08:31	WG1470366
Isopropylbenzene	U		2.10	10.0	20	05/05/2020 08:31	WG1470366
p-Isopropyltoluene	U		2.40	10.0	20	05/05/2020 08:31	WG1470366
2-Butanone (MEK)	U	UJ J0	23.8	100	20	05/05/2020 08:31	WG1470366
Methylene Chloride	U		8.60	50.0	20	05/05/2020 08:31	WG1470366
4-Methyl-2-pentanone (MIBK)	U	UJ J0	9.56	100	20	05/05/2020 08:31	WG1470366
Methyl tert-butyl ether	U		2.02	10.0	20	05/05/2020 08:31	WG1470366
Naphthalene	U		3.48	50.0	20	05/05/2020 08:31	WG1470366
n-Propylbenzene	U		1.99	10.0	20	05/05/2020 08:31	WG1470366
Styrene	U		2.36	10.0	20	05/05/2020 08:31	WG1470366
1,1,1,2-Tetrachloroethane	U		2.94	10.0	20	05/05/2020 08:31	WG1470366
1,1,2,2-Tetrachloroethane	U		2.66	10.0	20	05/05/2020 08:31	WG1470366
1,1,2-Trichlorotrifluoroethane	U	UJ J0	3.60	10.0	20	05/05/2020 08:31	WG1470366
Tetrachloroethene	U		6.00	10.0	20	05/05/2020 08:31	WG1470366
Toluene	U		5.56	10.0	20	05/05/2020 08:31	WG1470366
1,2,3-Trichlorobenzene	U		3.28	10.0	20	05/05/2020 08:31	WG1470366
1,2,4-Trichlorobenzene	U		9.62	20.0	20	05/05/2020 08:31	WG1470366
1,1,1-Trichloroethane	U		2.98	10.0	20	05/05/2020 08:31	WG1470366
1,1,2-Trichloroethane	U		3.16	10.0	20	05/05/2020 08:31	WG1470366
Trichloroethene	U		3.80	10.0	20	05/05/2020 08:31	WG1470366
Trichlorofluoromethane	U		3.20	50.0	20	05/05/2020 08:31	WG1470366
1,2,3-Trichloropropane	U		4.74	50.0	20	05/05/2020 08:31	WG1470366

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,2,4-Trimethylbenzene	U		6.44	10.0	20	05/05/2020 08:31	WG1470366
1,2,3-Trimethylbenzene	U		2.08	10.0	20	05/05/2020 08:31	WG1470366
1,3,5-Trimethylbenzene	U		2.08	10.0	20	05/05/2020 08:31	WG1470366
Vinyl acetate	U		13.8	100	20	05/05/2020 08:31	WG1470366
Vinyl chloride	980		4.68	10.0	20	05/05/2020 08:31	WG1470366
Xylenes, Total	U		3.48	30.0	20	05/05/2020 08:31	WG1470366
(S) Toluene-d8	*108*			*80.0-120*		*05/05/2020 08:31*	WG1470366
(S) 4-Bromofluorobenzene	*101*			*77.0-126*		*05/05/2020 08:31*	WG1470366
(S) 1,2-Dichloroethane-d4	*86.0*			*70.0-130*		*05/05/2020 08:31*	WG1470366

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Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	634000		8450	20000	1	04/29/2020 23:25	WG1466892

Sample Narrative:

L1212335-07 WG1466892: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	54800		379	1000	1	04/25/2020 15:24	WG1466208
Nitrate	U		48.0	100	1	04/25/2020 15:24	WG1466208
Sulfate	78000		594	5000	1	04/25/2020 15:24	WG1466208

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	12500		102	1000	1	04/28/2020 17:26	WG1467393

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	6410		48.9	100	1	04/29/2020 21:25	WG1467590
Manganese	2330		1.32	5.00	1	04/29/2020 21:25	WG1467590

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	770	Z, J+	31.6	100	1	05/01/2020 13:19	WG1469249
(S) a,a,a-Trifluorotoluene(FID)	*97.6*			*78.0-120*		*05/01/2020 13:19*	WG1469249

Sample Narrative:

L1212335-07 WG1469249: No discernable petroleum pattern present.

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	1580		0.287	0.678	1	04/29/2020 11:55	WG1467817
Ethane	153		0.296	1.29	1	04/29/2020 11:55	WG1467817
Ethene	U		0.422	1.27	1	04/29/2020 11:55	WG1467817

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U		565	1250	50	05/01/2020 13:20	WG1468990
Acrylonitrile	U		33.6	250	50	05/01/2020 13:20	WG1468990
Benzene	U		4.71	25.0	50	05/01/2020 13:20	WG1468990
Bromobenzene	U		5.90	25.0	50	05/01/2020 13:20	WG1468990
Bromodichloromethane	U		6.80	25.0	50	05/01/2020 13:20	WG1468990
Bromochloromethane	U		6.40	25.0	50	05/01/2020 13:20	WG1468990
Bromoform	U		6.45	25.0	50	05/01/2020 13:20	WG1468990
Bromomethane	U	UJ J0	30.3	125	50	05/01/2020 13:20	WG1468990
n-Butylbenzene	U		7.85	25.0	50	05/01/2020 13:20	WG1468990
sec-Butylbenzene	U		6.25	25.0	50	05/01/2020 13:20	WG1468990

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
tert-Butylbenzene	U		6.35	25.0	50	05/01/2020 13:20	WG1468990
Carbon disulfide	U		4.81	25.0	50	05/01/2020 13:20	WG1468990
Carbon tetrachloride	U		6.40	25.0	50	05/01/2020 13:20	WG1468990
Chlorobenzene	U		5.85	25.0	50	05/01/2020 13:20	WG1468990
Chlorodibromomethane	U		7.00	25.0	50	05/01/2020 13:20	WG1468990
Chloroethane	U		9.60	125	50	05/01/2020 13:20	WG1468990
Chloroform	U		5.55	25.0	50	05/01/2020 13:20	WG1468990
Chloromethane	U		48.0	62.5	50	05/01/2020 13:20	WG1468990
2-Chlorotoluene	U		5.30	25.0	50	05/01/2020 13:20	WG1468990
4-Chlorotoluene	U		5.70	25.0	50	05/01/2020 13:20	WG1468990
1,2-Dibromo-3-Chloropropane	U	UJ J0	13.8	125	50	05/01/2020 13:20	WG1468990
1,2-Dibromoethane	U		6.30	25.0	50	05/01/2020 13:20	WG1468990
Dibromomethane	U		6.10	25.0	50	05/01/2020 13:20	WG1468990
1,2-Dichlorobenzene	U		5.35	25.0	50	05/01/2020 13:20	WG1468990
1,3-Dichlorobenzene	U		14.9	25.0	50	05/01/2020 13:20	WG1468990
1,4-Dichlorobenzene	U		6.00	25.0	50	05/01/2020 13:20	WG1468990
Dichlorodifluoromethane	U		18.7	125	50	05/01/2020 13:20	WG1468990
1,1-Dichloroethane	U		5.00	25.0	50	05/01/2020 13:20	WG1468990
1,2-Dichloroethane	U		4.09	25.0	50	05/01/2020 13:20	WG1468990
1,1-Dichloroethene	U		9.40	25.0	50	05/01/2020 13:20	WG1468990
cis-1,2-Dichloroethene	1240		6.30	25.0	50	05/01/2020 13:20	WG1468990
trans-1,2-Dichloroethene	U		7.45	25.0	50	05/01/2020 13:20	WG1468990
1,2-Dichloropropane	U		7.45	25.0	50	05/01/2020 13:20	WG1468990
1,1-Dichloropropene	U		7.10	25.0	50	05/01/2020 13:20	WG1468990
1,3-Dichloropropane	U		5.45	50.0	50	05/01/2020 13:20	WG1468990
cis-1,3-Dichloropropene	U		5.55	25.0	50	05/01/2020 13:20	WG1468990
trans-1,3-Dichloropropene	U		5.90	25.0	50	05/01/2020 13:20	WG1468990
trans-1,4-Dichloro-2-butene	U	UJ J0	23.4	250	50	05/01/2020 13:20	WG1468990
2,2-Dichloropropane	U		8.05	25.0	50	05/01/2020 13:20	WG1468990
Di-isopropyl ether	U		5.25	25.0	50	05/01/2020 13:20	WG1468990
Ethylbenzene	U		6.85	25.0	50	05/01/2020 13:20	WG1468990
Hexachloro-1,3-butadiene	U	UJ J0 J4	16.9	50.0	50	05/01/2020 13:20	WG1468990
2-Hexanone	U		39.4	250	50	05/01/2020 13:20	WG1468990
n-Hexane	U		37.4	250	50	05/01/2020 13:20	WG1468990
Iodomethane	U		300	500	50	05/01/2020 13:20	WG1468990
Isopropylbenzene	U		5.25	25.0	50	05/01/2020 13:20	WG1468990
p-Isopropyltoluene	U		6.00	25.0	50	05/01/2020 13:20	WG1468990
2-Butanone (MEK)	U		59.5	250	50	05/01/2020 13:20	WG1468990
Methylene Chloride	U		21.5	125	50	05/01/2020 13:20	WG1468990
4-Methyl-2-pentanone (MIBK)	U		23.9	250	50	05/01/2020 13:20	WG1468990
Methyl tert-butyl ether	U		5.05	25.0	50	05/01/2020 13:20	WG1468990
Naphthalene	U		8.70	125	50	05/01/2020 13:20	WG1468990
n-Propylbenzene	U		4.97	25.0	50	05/01/2020 13:20	WG1468990
Styrene	U	UJ J0	5.90	25.0	50	05/01/2020 13:20	WG1468990
1,1,1,2-Tetrachloroethane	U		7.35	25.0	50	05/01/2020 13:20	WG1468990
1,1,2,2-Tetrachloroethane	U		6.65	25.0	50	05/01/2020 13:20	WG1468990
1,1,2-Trichlorotrifluoroethane	U		9.00	25.0	50	05/01/2020 13:20	WG1468990
Tetrachloroethene	347		15.0	25.0	50	05/01/2020 13:20	WG1468990
Toluene	U		13.9	25.0	50	05/01/2020 13:20	WG1468990
1,2,3-Trichlorobenzene	U		8.20	25.0	50	05/05/2020 08:51	WG1470366
1,2,4-Trichlorobenzene	U	UJ J0	24.1	50.0	50	05/01/2020 13:20	WG1468990
1,1,1-Trichloroethane	U		7.45	25.0	50	05/01/2020 13:20	WG1468990
1,1,2-Trichloroethane	U		7.90	25.0	50	05/01/2020 13:20	WG1468990
Trichloroethene	355		9.50	25.0	50	05/01/2020 13:20	WG1468990
Trichlorofluoromethane	U		8.00	125	50	05/01/2020 13:20	WG1468990
1,2,3-Trichloropropane	U		11.9	125	50	05/01/2020 13:20	WG1468990

JC 5/18/2020

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

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,2,4-Trimethylbenzene	U		16.1	25.0	50	05/01/2020 13:20	WG1468990
1,2,3-Trimethylbenzene	U		5.20	25.0	50	05/01/2020 13:20	WG1468990
1,3,5-Trimethylbenzene	U		5.20	25.0	50	05/01/2020 13:20	WG1468990
Vinyl acetate	U UJ	J0	34.6	250	50	05/01/2020 13:20	WG1468990
Vinyl chloride	104		11.7	25.0	50	05/01/2020 13:20	WG1468990
Xylenes, Total	U		8.70	75.0	50	05/01/2020 13:20	WG1468990
(S) Toluene-d8	*102*			*80.0-120*		*05/01/2020 13:20*	WG1468990
(S) Toluene-d8	*109*			*80.0-120*		*05/05/2020 08:51*	WG1470366
(S) 4-Bromofluorobenzene	*90.9*			*77.0-126*		*05/01/2020 13:20*	WG1468990
(S) 4-Bromofluorobenzene	*96.3*			*77.0-126*		*05/05/2020 08:51*	WG1470366
(S) 1,2-Dichloroethane-d4	*116*			*70.0-130*		*05/01/2020 13:20*	WG1468990
(S) 1,2-Dichloroethane-d4	*84.3*			*70.0-130*		*05/05/2020 08:51*	WG1470366

JC 5/18/2020

Wet Chemistry by Method 2320 B-2011

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Alkalinity	608000		8450	20000	1	04/29/2020 23:33	WG1466892

Sample Narrative:

L1212335-08 WG1466892: Endpoint pH 4.5

Wet Chemistry by Method 9056A

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Chloride	49900		379	1000	1	04/25/2020 16:07	WG1466208
Nitrate	U		48.0	100	1	04/25/2020 16:07	WG1466208
Sulfate	64400		594	5000	1	04/25/2020 16:07	WG1466208

Wet Chemistry by Method 9060A

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
TOC (Total Organic Carbon)	12000		102	1000	1	04/28/2020 17:42	WG1467393

Metals (ICPMS) by Method 6020B

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Iron	8480		48.9	100	1	04/29/2020 21:28	WG1467590
Manganese	1870		1.32	5.00	1	04/29/2020 21:28	WG1467590

Volatile Organic Compounds (GC) by Method RSK175

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Methane	5890		0.287	0.678	1	04/29/2020 13:01	WG1467817
Ethane	50.5		0.296	1.29	1	04/29/2020 13:01	WG1467817
Ethene	114		0.422	1.27	1	04/29/2020 13:01	WG1467817

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

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Acetone	U		565	1250	50	05/01/2020 13:41	WG1468990
Acrylonitrile	U		33.6	250	50	05/01/2020 13:41	WG1468990
Benzene	U		4.71	25.0	50	05/01/2020 13:41	WG1468990
Bromobenzene	U		5.90	25.0	50	05/01/2020 13:41	WG1468990
Bromodichloromethane	U		6.80	25.0	50	05/01/2020 13:41	WG1468990
Bromochloromethane	U		6.40	25.0	50	05/01/2020 13:41	WG1468990
Bromoform	U		6.45	25.0	50	05/01/2020 13:41	WG1468990
Bromomethane	U UJ	J0	30.3	125	50	05/01/2020 13:41	WG1468990
n-Butylbenzene	U		7.85	25.0	50	05/01/2020 13:41	WG1468990
sec-Butylbenzene	U		6.25	25.0	50	05/01/2020 13:41	WG1468990
tert-Butylbenzene	U		6.35	25.0	50	05/01/2020 13:41	WG1468990
Carbon disulfide	U		4.81	25.0	50	05/01/2020 13:41	WG1468990
Carbon tetrachloride	U		6.40	25.0	50	05/01/2020 13:41	WG1468990
Chlorobenzene	U		5.85	25.0	50	05/01/2020 13:41	WG1468990
Chlorodibromomethane	U		7.00	25.0	50	05/01/2020 13:41	WG1468990
Chloroethane	U		9.60	125	50	05/01/2020 13:41	WG1468990
Chloroform	U		5.55	25.0	50	05/01/2020 13:41	WG1468990
Chloromethane	U		48.0	62.5	50	05/01/2020 13:41	WG1468990
2-Chlorotoluene	U		5.30	25.0	50	05/01/2020 13:41	WG1468990
4-Chlorotoluene	U		5.70	25.0	50	05/01/2020 13:41	WG1468990

JC 5/18/2020

MW-324-042420
Collected date/time: 04/24/20 14:15

SAMPLE RESULTS - 08

L1212335

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch	
1,2-Dibromo-3-Chloropropane	U	UJ J0	13.8	125	50	05/01/2020 13:41	WG1468990	
1,2-Dibromoethane	U		6.30	25.0	50	05/01/2020 13:41	WG1468990	
Dibromomethane	U		6.10	25.0	50	05/01/2020 13:41	WG1468990	
1,2-Dichlorobenzene	U		5.35	25.0	50	05/01/2020 13:41	WG1468990	
1,3-Dichlorobenzene	U		14.9	25.0	50	05/01/2020 13:41	WG1468990	
1,4-Dichlorobenzene	U		6.00	25.0	50	05/01/2020 13:41	WG1468990	
Dichlorodifluoromethane	U		18.7	125	50	05/01/2020 13:41	WG1468990	
1,1-Dichloroethane	U		5.00	25.0	50	05/01/2020 13:41	WG1468990	
1,2-Dichloroethane	U		4.09	25.0	50	05/01/2020 13:41	WG1468990	
1,1-Dichloroethene	U		9.40	25.0	50	05/01/2020 13:41	WG1468990	
cis-1,2-Dichloroethene	8520		6.30	25.0	50	05/01/2020 13:41	WG1468990	
trans-1,2-Dichloroethene	16.8	J	7.45	25.0	50	05/01/2020 13:41	WG1468990	
1,2-Dichloropropane	U		7.45	25.0	50	05/01/2020 13:41	WG1468990	
1,1-Dichloropropene	U		7.10	25.0	50	05/01/2020 13:41	WG1468990	
1,3-Dichloropropane	U		5.45	50.0	50	05/01/2020 13:41	WG1468990	
cis-1,3-Dichloropropene	U		5.55	25.0	50	05/01/2020 13:41	WG1468990	
trans-1,3-Dichloropropene	U		5.90	25.0	50	05/01/2020 13:41	WG1468990	
trans-1,4-Dichloro-2-butene	U	UJ J0	23.4	250	50	05/01/2020 13:41	WG1468990	
2,2-Dichloropropane	U		8.05	25.0	50	05/01/2020 13:41	WG1468990	
Di-isopropyl ether	U		5.25	25.0	50	05/01/2020 13:41	WG1468990	
Ethylbenzene	U		6.85	25.0	50	05/01/2020 13:41	WG1468990	
Hexachloro-1,3-butadiene	U	UJ J0 J4	16.9	50.0	50	05/01/2020 13:41	WG1468990	
2-Hexanone	U		39.4	250	50	05/01/2020 13:41	WG1468990	
n-Hexane	U		37.4	250	50	05/01/2020 13:41	WG1468990	
Iodomethane	U		300	500	50	05/01/2020 13:41	WG1468990	
Isopropylbenzene	U		5.25	25.0	50	05/01/2020 13:41	WG1468990	
p-Isopropyltoluene	U		6.00	25.0	50	05/01/2020 13:41	WG1468990	
2-Butanone (MEK)	U		59.5	250	50	05/01/2020 13:41	WG1468990	
Methylene Chloride	U		21.5	125	50	05/01/2020 13:41	WG1468990	
4-Methyl-2-pentanone (MIBK)	U		23.9	250	50	05/01/2020 13:41	WG1468990	
Methyl tert-butyl ether	U		5.05	25.0	50	05/01/2020 13:41	WG1468990	
Naphthalene	U		8.70	125	50	05/01/2020 13:41	WG1468990	
n-Propylbenzene	U		4.97	25.0	50	05/01/2020 13:41	WG1468990	
Styrene	U	UJ J0	5.90	25.0	50	05/01/2020 13:41	WG1468990	
1,1,1,2-Tetrachloroethane	U		7.35	25.0	50	05/01/2020 13:41	WG1468990	
1,1,2,2-Tetrachloroethane	U		6.65	25.0	50	05/01/2020 13:41	WG1468990	
1,1,2-Trichlorotrifluoroethane	U		9.00	25.0	50	05/01/2020 13:41	WG1468990	
Tetrachloroethene	U		15.0	25.0	50	05/01/2020 13:41	WG1468990	
Toluene	U		13.9	25.0	50	05/01/2020 13:41	WG1468990	
1,2,3-Trichlorobenzene	U		8.20	25.0	50	05/05/2020 09:11	WG1470366	
1,2,4-Trichlorobenzene	U	UJ J0	24.1	50.0	50	05/01/2020 13:41	WG1468990	
1,1,1-Trichloroethane	U		7.45	25.0	50	05/01/2020 13:41	WG1468990	
1,1,2-Trichloroethane	U		7.90	25.0	50	05/01/2020 13:41	WG1468990	
Trichloroethene	U		9.50	25.0	50	05/01/2020 13:41	WG1468990	
Trichlorofluoromethane	U		8.00	125	50	05/01/2020 13:41	WG1468990	
1,2,3-Trichloropropane	U		11.9	125	50	05/01/2020 13:41	WG1468990	
1,2,4-Trimethylbenzene	U		16.1	25.0	50	05/01/2020 13:41	WG1468990	
1,2,3-Trimethylbenzene	U		5.20	25.0	50	05/01/2020 13:41	WG1468990	
1,3,5-Trimethylbenzene	U		5.20	25.0	50	05/01/2020 13:41	WG1468990	
Vinyl acetate	U	UJ J0	34.6	250	50	05/01/2020 13:41	WG1468990	
Vinyl chloride	362		11.7	25.0	50	05/01/2020 13:41	WG1468990	
Xylenes, Total	U		8.70	75.0	50	05/01/2020 13:41	WG1468990	
(S) Toluene-d8	*102*			*80.0-120*		*05/01/2020 13:41*	WG1468990	
(S) Toluene-d8	*109*			*80.0-120*		*05/05/2020 09:11*	WG1470366	
(S) 4-Bromofluorobenzene	*94.0*			*77.0-126*		*05/01/2020 13:41*	WG1468990	JC 5/18/2020
(S) 4-Bromofluorobenzene	*96.7*			*77.0-126*		*05/05/2020 09:11*	WG1470366	

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

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
(S) 1,2-Dichloroethane-d4	*111*			*70.0-130*		*05/01/2020 13:41*	WG1468990
(S) 1,2-Dichloroethane-d4	*83.9*			*70.0-130*		*05/05/2020 09:11*	WG1470366

JC 5/18/2020

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

Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	864000		8450	20000	1	04/29/2020 23:41	WG1466892

Sample Narrative:

L1212335-09 WG1466892: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	17800		379	1000	1	04/25/2020 16:29	WG1466208
Nitrate	U		48.0	100	1	04/25/2020 16:29	WG1466208
Sulfate	2480	J	594	5000	1	04/25/2020 16:29	WG1466208

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	6690		102	1000	1	04/28/2020 17:58	WG1467393

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	13800		48.9	100	1	04/29/2020 21:50	WG1467590
Manganese	840		1.32	5.00	1	04/29/2020 21:50	WG1467590

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	23300		2.87	6.78	10	04/30/2020 13:18	WG1468509
Ethane	U		0.296	1.29	1	04/29/2020 13:04	WG1467817
Ethene	U		0.422	1.27	1	04/29/2020 13:04	WG1467817

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U		11.3	25.0	1	05/01/2020 09:34	WG1468990
Acrylonitrile	U		0.671	5.00	1	05/01/2020 09:34	WG1468990
Benzene	U		0.0941	0.500	1	05/01/2020 09:34	WG1468990
Bromobenzene	U		0.118	0.500	1	05/01/2020 09:34	WG1468990
Bromodichloromethane	U		0.136	0.500	1	05/01/2020 09:34	WG1468990
Bromochloromethane	U		0.128	0.500	1	05/01/2020 09:34	WG1468990
Bromoform	U		0.129	0.500	1	05/01/2020 09:34	WG1468990
Bromomethane	U	UJ J0	0.605	2.50	1	05/01/2020 09:34	WG1468990
n-Butylbenzene	U		0.157	0.500	1	05/01/2020 09:34	WG1468990
sec-Butylbenzene	U		0.125	0.500	1	05/01/2020 09:34	WG1468990
tert-Butylbenzene	U		0.127	0.500	1	05/01/2020 09:34	WG1468990
Carbon disulfide	U		0.0962	0.500	1	05/01/2020 09:34	WG1468990
Carbon tetrachloride	U		0.128	0.500	1	05/01/2020 09:34	WG1468990
Chlorobenzene	U		0.117	0.500	1	05/01/2020 09:34	WG1468990
Chlorodibromomethane	U		0.140	0.500	1	05/01/2020 09:34	WG1468990
Chloroethane	U		0.192	2.50	1	05/01/2020 09:34	WG1468990
Chloroform	U		0.111	0.500	1	05/01/2020 09:34	WG1468990
Chloromethane	U		0.960	1.25	1	05/01/2020 09:34	WG1468990
2-Chlorotoluene	U		0.106	0.500	1	05/01/2020 09:34	WG1468990
4-Chlorotoluene	U		0.114	0.500	1	05/01/2020 09:34	WG1468990

JC 5/18/2020

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

	Result		Qualifier	MDL	RDL	Dilution	Analysis	Batch	
Analyte	ug/l			ug/l	ug/l		date / time		
1,2-Dibromo-3-Chloropropane	U	UJ	J0	0.276	2.50	1	05/01/2020 09:34	WG1468990	
1,2-Dibromoethane	U			0.126	0.500	1	05/01/2020 09:34	WG1468990	
Dibromomethane	U			0.122	0.500	1	05/01/2020 09:34	WG1468990	
1,2-Dichlorobenzene	U			0.107	0.500	1	05/01/2020 09:34	WG1468990	
1,3-Dichlorobenzene	U			0.299	0.500	1	05/01/2020 09:34	WG1468990	
1,4-Dichlorobenzene	U			0.120	0.500	1	05/01/2020 09:34	WG1468990	
Dichlorodifluoromethane	U			0.374	2.50	1	05/01/2020 09:34	WG1468990	
1,1-Dichloroethane	U			0.100	0.500	1	05/01/2020 09:34	WG1468990	
1,2-Dichloroethane	U			0.0819	0.500	1	05/01/2020 09:34	WG1468990	
1,1-Dichloroethene	U			0.188	0.500	1	05/01/2020 09:34	WG1468990	
cis-1,2-Dichloroethene	U			0.126	0.500	1	05/01/2020 09:34	WG1468990	
trans-1,2-Dichloroethene	U			0.149	0.500	1	05/01/2020 09:34	WG1468990	
1,2-Dichloropropane	U			0.149	0.500	1	05/01/2020 09:34	WG1468990	
1,1-Dichloropropene	U			0.142	0.500	1	05/01/2020 09:34	WG1468990	
1,3-Dichloropropane	U			0.109	1.00	1	05/01/2020 09:34	WG1468990	
cis-1,3-Dichloropropene	U			0.111	0.500	1	05/01/2020 09:34	WG1468990	
trans-1,3-Dichloropropene	U			0.118	0.500	1	05/01/2020 09:34	WG1468990	
trans-1,4-Dichloro-2-butene	U	UJ	J0	0.467	5.00	1	05/01/2020 09:34	WG1468990	
2,2-Dichloropropane	U			0.161	0.500	1	05/01/2020 09:34	WG1468990	
Di-isopropyl ether	U			0.105	0.500	1	05/01/2020 09:34	WG1468990	
Ethylbenzene	U			0.137	0.500	1	05/01/2020 09:34	WG1468990	
Hexachloro-1,3-butadiene	U	UJ	J0 J4	0.337	1.00	1	05/01/2020 09:34	WG1468990	
2-Hexanone	U			0.787	5.00	1	05/01/2020 09:34	WG1468990	
n-Hexane	U			0.749	5.00	1	05/01/2020 09:34	WG1468990	
Iodomethane	U			6.00	10.0	1	05/01/2020 09:34	WG1468990	
Isopropylbenzene	U			0.105	0.500	1	05/01/2020 09:34	WG1468990	
p-Isopropyltoluene	U			0.120	0.500	1	05/01/2020 09:34	WG1468990	
2-Butanone (MEK)	U			1.19	5.00	1	05/01/2020 09:34	WG1468990	
Methylene Chloride	U			0.430	2.50	1	05/01/2020 09:34	WG1468990	
4-Methyl-2-pentanone (MIBK)	U			0.478	5.00	1	05/01/2020 09:34	WG1468990	
Methyl tert-butyl ether	U			0.101	0.500	1	05/01/2020 09:34	WG1468990	
Naphthalene	U			0.174	2.50	1	05/01/2020 09:34	WG1468990	
n-Propylbenzene	U			0.0993	0.500	1	05/01/2020 09:34	WG1468990	
Styrene	U	UJ	J0	0.118	0.500	1	05/01/2020 09:34	WG1468990	
1,1,1,2-Tetrachloroethane	U			0.147	0.500	1	05/01/2020 09:34	WG1468990	
1,1,2,2-Tetrachloroethane	U			0.133	0.500	1	05/01/2020 09:34	WG1468990	
1,1,2-Trichlorotrifluoroethane	U			0.180	0.500	1	05/01/2020 09:34	WG1468990	
Tetrachloroethene	U			0.300	0.500	1	05/01/2020 09:34	WG1468990	
Toluene	U			0.278	0.500	1	05/01/2020 09:34	WG1468990	
1,2,3-Trichlorobenzene	U			0.164	0.500	1	05/05/2020 02:33	WG1470366	
1,2,4-Trichlorobenzene	U	UJ	J0	0.481	1.00	1	05/01/2020 09:34	WG1468990	
1,1,1-Trichloroethane	U			0.149	0.500	1	05/01/2020 09:34	WG1468990	
1,1,2-Trichloroethane	U			0.158	0.500	1	05/01/2020 09:34	WG1468990	
Trichloroethene	U			0.190	0.500	1	05/01/2020 09:34	WG1468990	
Trichlorofluoromethane	U			0.160	2.50	1	05/01/2020 09:34	WG1468990	
1,2,3-Trichloropropane	U			0.237	2.50	1	05/01/2020 09:34	WG1468990	
1,2,4-Trimethylbenzene	U			0.322	0.500	1	05/01/2020 09:34	WG1468990	
1,2,3-Trimethylbenzene	U			0.104	0.500	1	05/01/2020 09:34	WG1468990	
1,3,5-Trimethylbenzene	U			0.104	0.500	1	05/01/2020 09:34	WG1468990	
Vinyl acetate	U	UJ	J0	0.692	5.00	1	05/01/2020 09:34	WG1468990	JC 5/18/2020
Vinyl chloride	U			0.234	0.500	1	05/01/2020 09:34	WG1468990	
Xylenes, Total	U			0.174	1.50	1	05/01/2020 09:34	WG1468990	
(S) Toluene-d8	*105*				*80.0-120*		*05/01/2020 09:34*	WG1468990	
(S) Toluene-d8	*108*				*80.0-120*		*05/05/2020 02:33*	WG1470366	
(S) 4-Bromofluorobenzene	*97.6*				*77.0-126*		*05/01/2020 09:34*	WG1468990	
(S) 4-Bromofluorobenzene	*99.4*				*77.0-126*		*05/05/2020 02:33*	WG1470366	

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
(S) 1,2-Dichloroethane-d4	*114*			*70.0-130*		*05/01/2020 09:34*	WG1468990
(S) 1,2-Dichloroethane-d4	*85.9*			*70.0-130*		*05/05/2020 02:33*	WG1470366

JC 5/18/2020

Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	321000		8450	20000	1	04/30/2020 12:15	WG1467744

Sample Narrative:

L1212802-01 WG1467744: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	26600		379	1000	1	04/28/2020 19:21	WG1467229
Nitrate	U		48.0	100	1	04/28/2020 19:21	WG1467229
Sulfate	15800		594	5000	1	04/28/2020 19:21	WG1467229

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	12700		102	1000	1	04/30/2020 00:58	WG1467994

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	12600		48.9	100	1	05/01/2020 19:08	WG1467596
Manganese	2940		1.32	5.00	1	05/01/2020 19:08	WG1467596

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	900		2.87	6.78	10	04/30/2020 11:01	WG1468508
Ethane	U		0.296	1.29	1	04/29/2020 14:01	WG1467818
Ethene	U		0.422	1.27	1	04/29/2020 14:01	WG1467818

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U		11.3	25.0	1	05/01/2020 09:54	WG1468990
Acrylonitrile	U		0.671	5.00	1	05/01/2020 09:54	WG1468990
Benzene	U		0.0941	0.500	1	05/01/2020 09:54	WG1468990
Bromobenzene	U		0.118	0.500	1	05/01/2020 09:54	WG1468990
Bromodichloromethane	U		0.136	0.500	1	05/01/2020 09:54	WG1468990
Bromochloromethane	U		0.128	0.500	1	05/01/2020 09:54	WG1468990
Bromoform	U		0.129	0.500	1	05/01/2020 09:54	WG1468990
Bromomethane	U	UJ J0	0.605	2.50	1	05/01/2020 09:54	WG1468990
n-Butylbenzene	U		0.157	0.500	1	05/01/2020 09:54	WG1468990
sec-Butylbenzene	U		0.125	0.500	1	05/01/2020 09:54	WG1468990
tert-Butylbenzene	U		0.127	0.500	1	05/01/2020 09:54	WG1468990
Carbon disulfide	U		0.0962	0.500	1	05/01/2020 09:54	WG1468990
Carbon tetrachloride	U		0.128	0.500	1	05/01/2020 09:54	WG1468990
Chlorobenzene	U		0.117	0.500	1	05/01/2020 09:54	WG1468990
Chlorodibromomethane	U		0.140	0.500	1	05/01/2020 09:54	WG1468990
Chloroethane	U		0.192	2.50	1	05/01/2020 09:54	WG1468990
Chloroform	U		0.111	0.500	1	05/01/2020 09:54	WG1468990
Chloromethane	U		0.960	1.25	1	05/01/2020 09:54	WG1468990
2-Chlorotoluene	U		0.106	0.500	1	05/01/2020 09:54	WG1468990
4-Chlorotoluene	U		0.114	0.500	1	05/01/2020 09:54	WG1468990

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,2-Dibromo-3-Chloropropane	U UJ	J0	0.276	2.50	1	05/01/2020 09:54	WG1468990
1,2-Dibromoethane	U		0.126	0.500	1	05/01/2020 09:54	WG1468990
Dibromomethane	U		0.122	0.500	1	05/01/2020 09:54	WG1468990
1,2-Dichlorobenzene	U		0.107	0.500	1	05/01/2020 09:54	WG1468990
1,3-Dichlorobenzene	U		0.299	0.500	1	05/01/2020 09:54	WG1468990
1,4-Dichlorobenzene	U		0.120	0.500	1	05/01/2020 09:54	WG1468990
Dichlorodifluoromethane	U		0.374	2.50	1	05/01/2020 09:54	WG1468990
1,1-Dichloroethane	U		0.100	0.500	1	05/01/2020 09:54	WG1468990
1,2-Dichloroethane	U		0.0819	0.500	1	05/01/2020 09:54	WG1468990
1,1-Dichloroethene	U		0.188	0.500	1	05/01/2020 09:54	WG1468990
cis-1,2-Dichloroethene	U		0.126	0.500	1	05/01/2020 09:54	WG1468990
trans-1,2-Dichloroethene	U		0.149	0.500	1	05/01/2020 09:54	WG1468990
1,2-Dichloropropane	U		0.149	0.500	1	05/01/2020 09:54	WG1468990
1,1-Dichloropropene	U		0.142	0.500	1	05/01/2020 09:54	WG1468990
1,3-Dichloropropane	U		0.109	1.00	1	05/01/2020 09:54	WG1468990
cis-1,3-Dichloropropene	U		0.111	0.500	1	05/01/2020 09:54	WG1468990
trans-1,3-Dichloropropene	U		0.118	0.500	1	05/01/2020 09:54	WG1468990
trans-1,4-Dichloro-2-butene	U UJ	J0	0.467	5.00	1	05/01/2020 09:54	WG1468990
2,2-Dichloropropane	U		0.161	0.500	1	05/01/2020 09:54	WG1468990
Di-isopropyl ether	U		0.105	0.500	1	05/01/2020 09:54	WG1468990
Ethylbenzene	U		0.137	0.500	1	05/01/2020 09:54	WG1468990
Hexachloro-1,3-butadiene	U UJ	J0 J4	0.337	1.00	1	05/01/2020 09:54	WG1468990
2-Hexanone	U		0.787	5.00	1	05/01/2020 09:54	WG1468990
n-Hexane	U		0.749	5.00	1	05/01/2020 09:54	WG1468990
Iodomethane	U		6.00	10.0	1	05/01/2020 09:54	WG1468990
Isopropylbenzene	U		0.105	0.500	1	05/01/2020 09:54	WG1468990
p-Isopropyltoluene	U		0.120	0.500	1	05/01/2020 09:54	WG1468990
2-Butanone (MEK)	U		1.19	5.00	1	05/01/2020 09:54	WG1468990
Methylene Chloride	U		0.430	2.50	1	05/01/2020 09:54	WG1468990
4-Methyl-2-pentanone (MIBK)	U		0.478	5.00	1	05/01/2020 09:54	WG1468990
Methyl tert-butyl ether	U		0.101	0.500	1	05/01/2020 09:54	WG1468990
Naphthalene	U		0.174	2.50	1	05/01/2020 09:54	WG1468990
n-Propylbenzene	U		0.0993	0.500	1	05/01/2020 09:54	WG1468990
Styrene	U UJ	J0	0.118	0.500	1	05/01/2020 09:54	WG1468990
1,1,1,2-Tetrachloroethane	U		0.147	0.500	1	05/01/2020 09:54	WG1468990
1,1,2,2-Tetrachloroethane	U		0.133	0.500	1	05/01/2020 09:54	WG1468990
1,1,2-Trichlorotrifluoroethane	U		0.180	0.500	1	05/01/2020 09:54	WG1468990
Tetrachloroethene	U		0.300	0.500	1	05/01/2020 09:54	WG1468990
Toluene	U		0.278	0.500	1	05/01/2020 09:54	WG1468990
1,2,3-Trichlorobenzene	U		0.164	0.500	1	05/05/2020 02:53	WG1470366
1,2,4-Trichlorobenzene	U UJ	J0	0.481	1.00	1	05/01/2020 09:54	WG1468990
1,1,1-Trichloroethane	U		0.149	0.500	1	05/01/2020 09:54	WG1468990
1,1,2-Trichloroethane	U		0.158	0.500	1	05/01/2020 09:54	WG1468990
Trichloroethene	U		0.190	0.500	1	05/01/2020 09:54	WG1468990
Trichlorofluoromethane	U		0.160	2.50	1	05/01/2020 09:54	WG1468990
1,2,3-Trichloropropane	U		0.237	2.50	1	05/01/2020 09:54	WG1468990
1,2,4-Trimethylbenzene	U		0.322	0.500	1	05/01/2020 09:54	WG1468990
1,2,3-Trimethylbenzene	U		0.104	0.500	1	05/01/2020 09:54	WG1468990
1,3,5-Trimethylbenzene	U		0.104	0.500	1	05/01/2020 09:54	WG1468990
Vinyl acetate	U UJ	J0	0.692	5.00	1	05/01/2020 09:54	WG1468990
Vinyl chloride	U		0.234	0.500	1	05/01/2020 09:54	WG1468990
Xylenes, Total	U		0.174	1.50	1	05/01/2020 09:54	WG1468990
(S) Toluene-d8	*104*			*80.0-120*		*05/01/2020 09:54*	WG1468990
(S) Toluene-d8	*110*			*80.0-120*		*05/05/2020 02:53*	WG1470366
(S) 4-Bromofluorobenzene	*101*			*77.0-126*		*05/01/2020 09:54*	WG1468990
(S) 4-Bromofluorobenzene	*98.8*			*77.0-126*		*05/05/2020 02:53*	WG1470366

JC 5/18/2020

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
(S) 1,2-Dichloroethane-d4	*119*			*70.0-130*		*05/01/2020 09:54*	WG1468990
(S) 1,2-Dichloroethane-d4	*85.4*			*70.0-130*		*05/05/2020 02:53*	WG1470366

JC 5/18/2020

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

Wet Chemistry by Method 2320 B-2011

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Alkalinity	281000		8450	20000	1	04/30/2020 12:29	WG1467744

Sample Narrative:

L1212802-02 WG1467744: Endpoint pH 4.5

Wet Chemistry by Method 9056A

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Chloride	14900		379	1000	1	04/28/2020 19:39	WG1467229
Nitrate	U		48.0	100	1	04/28/2020 19:39	WG1467229
Sulfate	5670		594	5000	1	04/28/2020 19:39	WG1467229

Wet Chemistry by Method 9060A

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
TOC (Total Organic Carbon)	7190		102	1000	1	04/29/2020 23:43	WG1467996

Metals (ICPMS) by Method 6020B

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Iron	12300		48.9	100	1	05/01/2020 19:11	WG1467596
Manganese	3200		1.32	5.00	1	05/01/2020 19:11	WG1467596

Volatile Organic Compounds (GC) by Method RSK175

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Methane	480		0.287	0.678	1	04/29/2020 14:04	WG1467818
Ethane	U		0.296	1.29	1	04/29/2020 14:04	WG1467818
Ethene	U		0.422	1.27	1	04/29/2020 14:04	WG1467818

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

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Acetone	U		11.3	25.0	1	05/01/2020 10:15	WG1468990
Acrylonitrile	U		0.671	5.00	1	05/01/2020 10:15	WG1468990
Benzene	U		0.0941	0.500	1	05/01/2020 10:15	WG1468990
Bromobenzene	U		0.118	0.500	1	05/01/2020 10:15	WG1468990
Bromodichloromethane	U		0.136	0.500	1	05/01/2020 10:15	WG1468990
Bromochloromethane	U		0.128	0.500	1	05/01/2020 10:15	WG1468990
Bromoform	U		0.129	0.500	1	05/01/2020 10:15	WG1468990
Bromomethane	U	UJ J0	0.605	2.50	1	05/01/2020 10:15	WG1468990
n-Butylbenzene	U		0.157	0.500	1	05/01/2020 10:15	WG1468990
sec-Butylbenzene	U		0.125	0.500	1	05/01/2020 10:15	WG1468990
tert-Butylbenzene	U		0.127	0.500	1	05/01/2020 10:15	WG1468990
Carbon disulfide	U		0.0962	0.500	1	05/01/2020 10:15	WG1468990
Carbon tetrachloride	U		0.128	0.500	1	05/01/2020 10:15	WG1468990
Chlorobenzene	U		0.117	0.500	1	05/01/2020 10:15	WG1468990
Chlorodibromomethane	U		0.140	0.500	1	05/01/2020 10:15	WG1468990
Chloroethane	U		0.192	2.50	1	05/01/2020 10:15	WG1468990
Chloroform	U		0.111	0.500	1	05/01/2020 10:15	WG1468990
Chloromethane	U		0.960	1.25	1	05/01/2020 10:15	WG1468990
2-Chlorotoluene	U		0.106	0.500	1	05/01/2020 10:15	WG1468990
4-Chlorotoluene	U		0.114	0.500	1	05/01/2020 10:15	WG1468990

JC 5/18/2020

MW119-042720

Collected date/time: 04/27/20 10:40

SAMPLE RESULTS - 02

L1212802

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,2-Dibromo-3-Chloropropane	U UJ	J0	0.276	2.50	1	05/01/2020 10:15	WG1468990
1,2-Dibromoethane	U		0.126	0.500	1	05/01/2020 10:15	WG1468990
Dibromomethane	U		0.122	0.500	1	05/01/2020 10:15	WG1468990
1,2-Dichlorobenzene	U		0.107	0.500	1	05/01/2020 10:15	WG1468990
1,3-Dichlorobenzene	U		0.299	0.500	1	05/01/2020 10:15	WG1468990
1,4-Dichlorobenzene	U		0.120	0.500	1	05/01/2020 10:15	WG1468990
Dichlorodifluoromethane	U		0.374	2.50	1	05/01/2020 10:15	WG1468990
1,1-Dichloroethane	U		0.100	0.500	1	05/01/2020 10:15	WG1468990
1,2-Dichloroethane	U		0.0819	0.500	1	05/01/2020 10:15	WG1468990
1,1-Dichloroethene	U		0.188	0.500	1	05/01/2020 10:15	WG1468990
cis-1,2-Dichloroethene	6.88		0.126	0.500	1	05/01/2020 10:15	WG1468990
trans-1,2-Dichloroethene	U		0.149	0.500	1	05/01/2020 10:15	WG1468990
1,2-Dichloropropane	U		0.149	0.500	1	05/01/2020 10:15	WG1468990
1,1-Dichloropropene	U		0.142	0.500	1	05/01/2020 10:15	WG1468990
1,3-Dichloropropane	U		0.109	1.00	1	05/01/2020 10:15	WG1468990
cis-1,3-Dichloropropene	U		0.111	0.500	1	05/01/2020 10:15	WG1468990
trans-1,3-Dichloropropene	U		0.118	0.500	1	05/01/2020 10:15	WG1468990
trans-1,4-Dichloro-2-butene	U UJ	J0	0.467	5.00	1	05/01/2020 10:15	WG1468990
2,2-Dichloropropane	U		0.161	0.500	1	05/01/2020 10:15	WG1468990
Di-isopropyl ether	U		0.105	0.500	1	05/01/2020 10:15	WG1468990
Ethylbenzene	U		0.137	0.500	1	05/01/2020 10:15	WG1468990
Hexachloro-1,3-butadiene	U UJ	J0 J4	0.337	1.00	1	05/01/2020 10:15	WG1468990
2-Hexanone	U		0.787	5.00	1	05/01/2020 10:15	WG1468990
n-Hexane	U		0.749	5.00	1	05/01/2020 10:15	WG1468990
Iodomethane	U		6.00	10.0	1	05/01/2020 10:15	WG1468990
Isopropylbenzene	U		0.105	0.500	1	05/01/2020 10:15	WG1468990
p-Isopropyltoluene	U		0.120	0.500	1	05/01/2020 10:15	WG1468990
2-Butanone (MEK)	U		1.19	5.00	1	05/01/2020 10:15	WG1468990
Methylene Chloride	U		0.430	2.50	1	05/01/2020 10:15	WG1468990
4-Methyl-2-pentanone (MIBK)	U		0.478	5.00	1	05/01/2020 10:15	WG1468990
Methyl tert-butyl ether	U		0.101	0.500	1	05/01/2020 10:15	WG1468990
Naphthalene	U		0.174	2.50	1	05/01/2020 10:15	WG1468990
n-Propylbenzene	U		0.0993	0.500	1	05/01/2020 10:15	WG1468990
Styrene	U UJ	J0	0.118	0.500	1	05/01/2020 10:15	WG1468990
1,1,1,2-Tetrachloroethane	U		0.147	0.500	1	05/01/2020 10:15	WG1468990
1,1,2,2-Tetrachloroethane	U		0.133	0.500	1	05/01/2020 10:15	WG1468990
1,1,2-Trichlorotrifluoroethane	U		0.180	0.500	1	05/01/2020 10:15	WG1468990
Tetrachloroethene	0.595		0.300	0.500	1	05/01/2020 10:15	WG1468990
Toluene	U		0.278	0.500	1	05/01/2020 10:15	WG1468990
1,2,3-Trichlorobenzene	U		0.164	0.500	1	05/05/2020 03:13	WG1470366
1,2,4-Trichlorobenzene	U UJ	J0	0.481	1.00	1	05/01/2020 10:15	WG1468990
1,1,1-Trichloroethane	U		0.149	0.500	1	05/01/2020 10:15	WG1468990
1,1,2-Trichloroethane	U		0.158	0.500	1	05/01/2020 10:15	WG1468990
Trichloroethene	1.62		0.190	0.500	1	05/01/2020 10:15	WG1468990
Trichlorofluoromethane	U		0.160	2.50	1	05/01/2020 10:15	WG1468990
1,2,3-Trichloropropane	U		0.237	2.50	1	05/01/2020 10:15	WG1468990
1,2,4-Trimethylbenzene	U		0.322	0.500	1	05/01/2020 10:15	WG1468990
1,2,3-Trimethylbenzene	U		0.104	0.500	1	05/01/2020 10:15	WG1468990
1,3,5-Trimethylbenzene	U		0.104	0.500	1	05/01/2020 10:15	WG1468990
Vinyl acetate	U UJ	J0	0.692	5.00	1	05/01/2020 10:15	WG1468990
Vinyl chloride	U		0.234	0.500	1	05/01/2020 10:15	WG1468990
Xylenes, Total	U		0.174	1.50	1	05/01/2020 10:15	WG1468990
(S) Toluene-d8	*103*			*80.0-120*		*05/01/2020 10:15*	WG1468990
(S) Toluene-d8	*107*			*80.0-120*		*05/05/2020 03:13*	WG1470366
(S) 4-Bromofluorobenzene	*99.6*			*77.0-126*		*05/01/2020 10:15*	WG1468990
(S) 4-Bromofluorobenzene	*100*			*77.0-126*		*05/05/2020 03:13*	WG1470366

JC 5/18/2020

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

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
(S) 1,2-Dichloroethane-d4	*114*			*70.0-130*		*05/01/2020 10:15*	WG1468990
(S) 1,2-Dichloroethane-d4	*85.7*			*70.0-130*		*05/05/2020 03:13*	WG1470366

JC 5/18/2020

Wet Chemistry by Method 2320 B-2011

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Alkalinity	676000		8450	20000	1	04/30/2020 12:38	WG1467744

Sample Narrative:

L1212802-03 WG1467744: Endpoint pH 4.5

Wet Chemistry by Method 9056A

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Chloride	14500		379	1000	1	04/28/2020 20:50	WG1467229
Nitrate	U		48.0	100	1	04/28/2020 20:50	WG1467229
Sulfate	5120		594	5000	1	04/28/2020 20:50	WG1467229

Wet Chemistry by Method 9060A

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
TOC (Total Organic Carbon)	7870		102	1000	1	04/30/2020 00:01	WG1467996

Metals (ICPMS) by Method 6020B

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Iron	14900		48.9	100	1	05/01/2020 19:14	WG1467596
Manganese	3550		1.32	5.00	1	05/01/2020 19:14	WG1467596

Volatile Organic Compounds (GC) by Method RSK175

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Methane	6720		0.287	0.678	1	04/29/2020 14:08	WG1467818
Ethane	13.9		0.296	1.29	1	04/29/2020 14:08	WG1467818
Ethene	U		0.422	1.27	1	04/29/2020 14:08	WG1467818

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

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch	
Analyte	ug/l		ug/l	ug/l		date / time		
Acetone	U		11.3	25.0	1	05/01/2020 10:36	WG1468990	
Acrylonitrile	U		0.671	5.00	1	05/01/2020 10:36	WG1468990	
Benzene	22.6		0.0941	0.500	1	05/01/2020 10:36	WG1468990	
Bromobenzene	U		0.118	0.500	1	05/01/2020 10:36	WG1468990	
Bromodichloromethane	U		0.136	0.500	1	05/01/2020 10:36	WG1468990	
Bromochloromethane	U		0.128	0.500	1	05/01/2020 10:36	WG1468990	
Bromoform	U		0.129	0.500	1	05/01/2020 10:36	WG1468990	
Bromomethane	U	UJ J0	0.605	2.50	1	05/01/2020 10:36	WG1468990	
n-Butylbenzene	U		0.157	0.500	1	05/01/2020 10:36	WG1468990	
sec-Butylbenzene	U		0.125	0.500	1	05/01/2020 10:36	WG1468990	
tert-Butylbenzene	U		0.127	0.500	1	05/01/2020 10:36	WG1468990	
Carbon disulfide	U		0.0962	0.500	1	05/01/2020 10:36	WG1468990	
Carbon tetrachloride	U		0.128	0.500	1	05/01/2020 10:36	WG1468990	
Chlorobenzene	U		0.117	0.500	1	05/01/2020 10:36	WG1468990	
Chlorodibromomethane	U		0.140	0.500	1	05/01/2020 10:36	WG1468990	
Chloroethane	U		0.192	2.50	1	05/01/2020 10:36	WG1468990	
Chloroform	U		0.111	0.500	1	05/01/2020 10:36	WG1468990	
Chloromethane	U		0.960	1.25	1	05/01/2020 10:36	WG1468990	
2-Chlorotoluene	U		0.106	0.500	1	05/01/2020 10:36	WG1468990	JC 5/18/2020
4-Chlorotoluene	U		0.114	0.500	1	05/01/2020 10:36	WG1468990	

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,2-Dibromo-3-Chloropropane	U UJ	J0	0.276	2.50	1	05/01/2020 10:36	WG1468990
1,2-Dibromoethane	U		0.126	0.500	1	05/01/2020 10:36	WG1468990
Dibromomethane	U		0.122	0.500	1	05/01/2020 10:36	WG1468990
1,2-Dichlorobenzene	U		0.107	0.500	1	05/01/2020 10:36	WG1468990
1,3-Dichlorobenzene	U		0.299	0.500	1	05/01/2020 10:36	WG1468990
1,4-Dichlorobenzene	U		0.120	0.500	1	05/01/2020 10:36	WG1468990
Dichlorodifluoromethane	U		0.374	2.50	1	05/01/2020 10:36	WG1468990
1,1-Dichloroethane	0.222	J	0.100	0.500	1	05/01/2020 10:36	WG1468990
1,2-Dichloroethane	0.578		0.0819	0.500	1	05/01/2020 10:36	WG1468990
1,1-Dichloroethene	U		0.188	0.500	1	05/01/2020 10:36	WG1468990
cis-1,2-Dichloroethene	2.08		0.126	0.500	1	05/01/2020 10:36	WG1468990
trans-1,2-Dichloroethene	U		0.149	0.500	1	05/01/2020 10:36	WG1468990
1,2-Dichloropropane	U		0.149	0.500	1	05/01/2020 10:36	WG1468990
1,1-Dichloropropene	U		0.142	0.500	1	05/01/2020 10:36	WG1468990
1,3-Dichloropropane	U		0.109	1.00	1	05/01/2020 10:36	WG1468990
cis-1,3-Dichloropropene	U		0.111	0.500	1	05/01/2020 10:36	WG1468990
trans-1,3-Dichloropropene	U		0.118	0.500	1	05/01/2020 10:36	WG1468990
trans-1,4-Dichloro-2-butene	U UJ	J0	0.467	5.00	1	05/01/2020 10:36	WG1468990
2,2-Dichloropropane	U		0.161	0.500	1	05/01/2020 10:36	WG1468990
Di-isopropyl ether	0.243	J	0.105	0.500	1	05/01/2020 10:36	WG1468990
Ethylbenzene	U		0.137	0.500	1	05/01/2020 10:36	WG1468990
Hexachloro-1,3-butadiene	U UJ	J0 J4	0.337	1.00	1	05/01/2020 10:36	WG1468990
2-Hexanone	U		0.787	5.00	1	05/01/2020 10:36	WG1468990
n-Hexane	U		0.749	5.00	1	05/01/2020 10:36	WG1468990
Iodomethane	U		6.00	10.0	1	05/01/2020 10:36	WG1468990
Isopropylbenzene	U		0.105	0.500	1	05/01/2020 10:36	WG1468990
p-Isopropyltoluene	U		0.120	0.500	1	05/01/2020 10:36	WG1468990
2-Butanone (MEK)	U		1.19	5.00	1	05/01/2020 10:36	WG1468990
Methylene Chloride	U		0.430	2.50	1	05/01/2020 10:36	WG1468990
4-Methyl-2-pentanone (MIBK)	U		0.478	5.00	1	05/01/2020 10:36	WG1468990
Methyl tert-butyl ether	0.250	J	0.101	0.500	1	05/01/2020 10:36	WG1468990
Naphthalene	U		0.174	2.50	1	05/01/2020 10:36	WG1468990
n-Propylbenzene	U		0.0993	0.500	1	05/01/2020 10:36	WG1468990
Styrene	U UJ	J0	0.118	0.500	1	05/01/2020 10:36	WG1468990
1,1,1,2-Tetrachloroethane	U		0.147	0.500	1	05/01/2020 10:36	WG1468990
1,1,2,2-Tetrachloroethane	U		0.133	0.500	1	05/01/2020 10:36	WG1468990
1,1,2-Trichlorotrifluoroethane	U		0.180	0.500	1	05/01/2020 10:36	WG1468990
Tetrachloroethene	U		0.300	0.500	1	05/01/2020 10:36	WG1468990
Toluene	U		0.278	0.500	1	05/01/2020 10:36	WG1468990
1,2,3-Trichlorobenzene	U		0.164	0.500	1	05/05/2020 03:33	WG1470366
1,2,4-Trichlorobenzene	U UJ	J0	0.481	1.00	1	05/01/2020 10:36	WG1468990
1,1,1-Trichloroethane	U		0.149	0.500	1	05/01/2020 10:36	WG1468990
1,1,2-Trichloroethane	U		0.158	0.500	1	05/01/2020 10:36	WG1468990
Trichloroethene	U		0.190	0.500	1	05/01/2020 10:36	WG1468990
Trichlorofluoromethane	U		0.160	2.50	1	05/01/2020 10:36	WG1468990
1,2,3-Trichloropropane	U		0.237	2.50	1	05/01/2020 10:36	WG1468990
1,2,4-Trimethylbenzene	U		0.322	0.500	1	05/01/2020 10:36	WG1468990
1,2,3-Trimethylbenzene	U		0.104	0.500	1	05/01/2020 10:36	WG1468990
1,3,5-Trimethylbenzene	U		0.104	0.500	1	05/01/2020 10:36	WG1468990
Vinyl acetate	U UJ	J0	0.692	5.00	1	05/01/2020 10:36	WG1468990
Vinyl chloride	3.84		0.234	0.500	1	05/01/2020 10:36	WG1468990
Xylenes, Total	U		0.174	1.50	1	05/01/2020 10:36	WG1468990
(S) Toluene-d8	*103*			*80.0-120*		*05/01/2020 10:36*	WG1468990
(S) Toluene-d8	*107*			*80.0-120*		*05/05/2020 03:33*	WG1470366
(S) 4-Bromofluorobenzene	*99.9*			*77.0-126*		*05/01/2020 10:36*	WG1468990
(S) 4-Bromofluorobenzene	*102*			*77.0-126*		*05/05/2020 03:33*	WG1470366

JC 5/18/2020

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
(S) 1,2-Dichloroethane-d4	*116*			*70.0-130*		*05/01/2020 10:36*	WG1468990
(S) 1,2-Dichloroethane-d4	*84.3*			*70.0-130*		*05/05/2020 03:33*	WG1470366

JC 5/18/2020

Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	456000		8450	20000	1	04/30/2020 12:48	WG1467744

Sample Narrative:

L1212802-04 WG1467744: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	46000		379	1000	1	04/28/2020 21:26	WG1467229
Nitrate	92.1	J	48.0	100	1	04/28/2020 21:26	WG1467229
Sulfate	51200		594	5000	1	04/28/2020 21:26	WG1467229

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	9770		102	1000	1	04/30/2020 00:20	WG1467996

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	6640		48.9	100	1	05/01/2020 19:18	WG1467596
Manganese	743		1.32	5.00	1	05/01/2020 19:18	WG1467596

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	3760		0.287	0.678	1	04/29/2020 14:20	WG1467818
Ethane	60.0		0.296	1.29	1	04/29/2020 14:20	WG1467818
Ethene	U		0.422	1.27	1	04/29/2020 14:20	WG1467818

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U		1130	2500	100	05/01/2020 14:02	WG1468990
Acrylonitrile	U		67.1	500	100	05/01/2020 14:02	WG1468990
Benzene	U		9.41	50.0	100	05/01/2020 14:02	WG1468990
Bromobenzene	U		11.8	50.0	100	05/01/2020 14:02	WG1468990
Bromodichloromethane	U		13.6	50.0	100	05/01/2020 14:02	WG1468990
Bromochloromethane	U		12.8	50.0	100	05/01/2020 14:02	WG1468990
Bromoform	U		12.9	50.0	100	05/01/2020 14:02	WG1468990
Bromomethane	U	UJ J0	60.5	250	100	05/01/2020 14:02	WG1468990
n-Butylbenzene	U		15.7	50.0	100	05/01/2020 14:02	WG1468990
sec-Butylbenzene	U		12.5	50.0	100	05/01/2020 14:02	WG1468990
tert-Butylbenzene	U		12.7	50.0	100	05/01/2020 14:02	WG1468990
Carbon disulfide	U		9.62	50.0	100	05/01/2020 14:02	WG1468990
Carbon tetrachloride	U		12.8	50.0	100	05/01/2020 14:02	WG1468990
Chlorobenzene	U		11.7	50.0	100	05/01/2020 14:02	WG1468990
Chlorodibromomethane	U		14.0	50.0	100	05/01/2020 14:02	WG1468990
Chloroethane	U		19.2	250	100	05/01/2020 14:02	WG1468990
Chloroform	U		11.1	50.0	100	05/01/2020 14:02	WG1468990
Chloromethane	U		96.0	125	100	05/01/2020 14:02	WG1468990
2-Chlorotoluene	U		10.6	50.0	100	05/01/2020 14:02	WG1468990
4-Chlorotoluene	U		11.4	50.0	100	05/01/2020 14:02	WG1468990

JC 5/18/2020

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,2-Dibromo-3-Chloropropane	U	UJ J0	27.6	250	100	05/01/2020 14:02	WG1468990
1,2-Dibromoethane	U		12.6	50.0	100	05/01/2020 14:02	WG1468990
Dibromomethane	U		12.2	50.0	100	05/01/2020 14:02	WG1468990
1,2-Dichlorobenzene	U		10.7	50.0	100	05/01/2020 14:02	WG1468990
1,3-Dichlorobenzene	U		29.9	50.0	100	05/01/2020 14:02	WG1468990
1,4-Dichlorobenzene	U		12.0	50.0	100	05/01/2020 14:02	WG1468990
Dichlorodifluoromethane	U		37.4	250	100	05/01/2020 14:02	WG1468990
1,1-Dichloroethane	U		10.0	50.0	100	05/01/2020 14:02	WG1468990
1,2-Dichloroethane	U		8.19	50.0	100	05/01/2020 14:02	WG1468990
1,1-Dichloroethene	U		18.8	50.0	100	05/01/2020 14:02	WG1468990
cis-1,2-Dichloroethene	4320		12.6	50.0	100	05/01/2020 14:02	WG1468990
trans-1,2-Dichloroethene	U		14.9	50.0	100	05/01/2020 14:02	WG1468990
1,2-Dichloropropane	U		14.9	50.0	100	05/01/2020 14:02	WG1468990
1,1-Dichloropropene	U		14.2	50.0	100	05/01/2020 14:02	WG1468990
1,3-Dichloropropane	U		10.9	100	100	05/01/2020 14:02	WG1468990
cis-1,3-Dichloropropene	U		11.1	50.0	100	05/01/2020 14:02	WG1468990
trans-1,3-Dichloropropene	U		11.8	50.0	100	05/01/2020 14:02	WG1468990
trans-1,4-Dichloro-2-butene	U	UJ J0	46.7	500	100	05/01/2020 14:02	WG1468990
2,2-Dichloropropane	U		16.1	50.0	100	05/01/2020 14:02	WG1468990
Di-isopropyl ether	U		10.5	50.0	100	05/01/2020 14:02	WG1468990
Ethylbenzene	U		13.7	50.0	100	05/01/2020 14:02	WG1468990
Hexachloro-1,3-butadiene	U	UJ J0 J4	33.7	100	100	05/01/2020 14:02	WG1468990
2-Hexanone	U		78.7	500	100	05/01/2020 14:02	WG1468990
n-Hexane	U		74.9	500	100	05/01/2020 14:02	WG1468990
Iodomethane	U		600	1000	100	05/01/2020 14:02	WG1468990
Isopropylbenzene	U		10.5	50.0	100	05/01/2020 14:02	WG1468990
p-Isopropyltoluene	U		12.0	50.0	100	05/01/2020 14:02	WG1468990
2-Butanone (MEK)	U		119	500	100	05/01/2020 14:02	WG1468990
Methylene Chloride	U		43.0	250	100	05/01/2020 14:02	WG1468990
4-Methyl-2-pentanone (MIBK)	U		47.8	500	100	05/01/2020 14:02	WG1468990
Methyl tert-butyl ether	U		10.1	50.0	100	05/01/2020 14:02	WG1468990
Naphthalene	U		17.4	250	100	05/01/2020 14:02	WG1468990
n-Propylbenzene	U		9.93	50.0	100	05/01/2020 14:02	WG1468990
Styrene	U	UJ J0	11.8	50.0	100	05/01/2020 14:02	WG1468990
1,1,1,2-Tetrachloroethane	U		14.7	50.0	100	05/01/2020 14:02	WG1468990
1,1,2,2-Tetrachloroethane	U		13.3	50.0	100	05/01/2020 14:02	WG1468990
1,1,2-Trichlorotrifluoroethane	U		18.0	50.0	100	05/01/2020 14:02	WG1468990
Tetrachloroethene	U		30.0	50.0	100	05/01/2020 14:02	WG1468990
Toluene	U		27.8	50.0	100	05/01/2020 14:02	WG1468990
1,2,3-Trichlorobenzene	U		16.4	50.0	100	05/05/2020 09:31	WG1470366
1,2,4-Trichlorobenzene	U	UJ J0	48.1	100	100	05/01/2020 14:02	WG1468990
1,1,1-Trichloroethane	U		14.9	50.0	100	05/01/2020 14:02	WG1468990
1,1,2-Trichloroethane	U		15.8	50.0	100	05/01/2020 14:02	WG1468990
Trichloroethene	U		19.0	50.0	100	05/01/2020 14:02	WG1468990
Trichlorofluoromethane	U		16.0	250	100	05/01/2020 14:02	WG1468990
1,2,3-Trichloropropane	U		23.7	250	100	05/01/2020 14:02	WG1468990
1,2,4-Trimethylbenzene	U		32.2	50.0	100	05/01/2020 14:02	WG1468990
1,2,3-Trimethylbenzene	U		10.4	50.0	100	05/01/2020 14:02	WG1468990
1,3,5-Trimethylbenzene	U		10.4	50.0	100	05/01/2020 14:02	WG1468990
Vinyl acetate	U	UJ J0	69.2	500	100	05/01/2020 14:02	WG1468990
Vinyl chloride	75.9		23.4	50.0	100	05/01/2020 14:02	WG1468990
Xylenes, Total	U		17.4	150	100	05/01/2020 14:02	WG1468990
(S) Toluene-d8	*100*			*80.0-120*		*05/01/2020 14:02*	WG1468990
(S) Toluene-d8	*105*			*80.0-120*		*05/05/2020 09:31*	WG1470366
(S) 4-Bromofluorobenzene	*89.7*			*77.0-126*		*05/01/2020 14:02*	WG1468990
(S) 4-Bromofluorobenzene	*98.8*			*77.0-126*		*05/05/2020 09:31*	WG1470366

JC 5/18/2020

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
(S) 1,2-Dichloroethane-d4	*115*			*70.0-130*		*05/01/2020 14:02*	WG1468990
(S) 1,2-Dichloroethane-d4	*83.9*			*70.0-130*		*05/05/2020 09:31*	WG1470366

JC 5/18/2020

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

Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	250000		8450	20000	1	04/30/2020 12:57	WG1467744

Sample Narrative:

L1212802-05 WG1467744: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	18800		379	1000	1	04/28/2020 22:02	WG1467229
Nitrate	U		48.0	100	1	04/28/2020 22:02	WG1467229
Sulfate	82000		594	5000	1	04/28/2020 22:02	WG1467229

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	1990	~~B~~	102	1000	1	04/30/2020 00:34	WG1467996

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	4290		48.9	100	1	05/01/2020 19:21	WG1467596
Manganese	859		1.32	5.00	1	05/01/2020 19:21	WG1467596

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	197		0.287	0.678	1	04/29/2020 14:27	WG1467818
Ethane	U		0.296	1.29	1	04/29/2020 14:27	WG1467818
Ethene	U		0.422	1.27	1	04/29/2020 14:27	WG1467818

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U		11.3	25.0	1	05/01/2020 10:56	WG1468990
Acrylonitrile	U		0.671	5.00	1	05/01/2020 10:56	WG1468990
Benzene	U		0.0941	0.500	1	05/01/2020 10:56	WG1468990
Bromobenzene	U		0.118	0.500	1	05/01/2020 10:56	WG1468990
Bromodichloromethane	U		0.136	0.500	1	05/01/2020 10:56	WG1468990
Bromochloromethane	U		0.128	0.500	1	05/01/2020 10:56	WG1468990
Bromoform	U		0.129	0.500	1	05/01/2020 10:56	WG1468990
Bromomethane	U	UJ J0	0.605	2.50	1	05/01/2020 10:56	WG1468990
n-Butylbenzene	U		0.157	0.500	1	05/01/2020 10:56	WG1468990
sec-Butylbenzene	U		0.125	0.500	1	05/01/2020 10:56	WG1468990
tert-Butylbenzene	U		0.127	0.500	1	05/01/2020 10:56	WG1468990
Carbon disulfide	U		0.0962	0.500	1	05/01/2020 10:56	WG1468990
Carbon tetrachloride	U		0.128	0.500	1	05/01/2020 10:56	WG1468990
Chlorobenzene	U		0.117	0.500	1	05/01/2020 10:56	WG1468990
Chlorodibromomethane	U		0.140	0.500	1	05/01/2020 10:56	WG1468990
Chloroethane	U		0.192	2.50	1	05/01/2020 10:56	WG1468990
Chloroform	U		0.111	0.500	1	05/01/2020 10:56	WG1468990
Chloromethane	U		0.960	1.25	1	05/01/2020 10:56	WG1468990
2-Chlorotoluene	U		0.106	0.500	1	05/01/2020 10:56	WG1468990
4-Chlorotoluene	U		0.114	0.500	1	05/01/2020 10:56	WG1468990

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

Analyte	Result ug/l		Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,2-Dibromo-3-Chloropropane	U	UJ	J0	0.276	2.50	1	05/01/2020 10:56	WG1468990
1,2-Dibromoethane	U			0.126	0.500	1	05/01/2020 10:56	WG1468990
Dibromomethane	U			0.122	0.500	1	05/01/2020 10:56	WG1468990
1,2-Dichlorobenzene	U			0.107	0.500	1	05/01/2020 10:56	WG1468990
1,3-Dichlorobenzene	U			0.299	0.500	1	05/01/2020 10:56	WG1468990
1,4-Dichlorobenzene	U			0.120	0.500	1	05/01/2020 10:56	WG1468990
Dichlorodifluoromethane	U			0.374	2.50	1	05/01/2020 10:56	WG1468990
1,1-Dichloroethane	0.438		J	0.100	0.500	1	05/01/2020 10:56	WG1468990
1,2-Dichloroethane	U			0.0819	0.500	1	05/01/2020 10:56	WG1468990
1,1-Dichloroethene	U			0.188	0.500	1	05/01/2020 10:56	WG1468990
cis-1,2-Dichloroethene	54.1			0.126	0.500	1	05/01/2020 10:56	WG1468990
trans-1,2-Dichloroethene	U			0.149	0.500	1	05/01/2020 10:56	WG1468990
1,2-Dichloropropane	U			0.149	0.500	1	05/01/2020 10:56	WG1468990
1,1-Dichloropropene	U			0.142	0.500	1	05/01/2020 10:56	WG1468990
1,3-Dichloropropane	U			0.109	1.00	1	05/01/2020 10:56	WG1468990
cis-1,3-Dichloropropene	U			0.111	0.500	1	05/01/2020 10:56	WG1468990
trans-1,3-Dichloropropene	U			0.118	0.500	1	05/01/2020 10:56	WG1468990
trans-1,4-Dichloro-2-butene	U	UJ	J0	0.467	5.00	1	05/01/2020 10:56	WG1468990
2,2-Dichloropropane	U			0.161	0.500	1	05/01/2020 10:56	WG1468990
Di-isopropyl ether	U			0.105	0.500	1	05/01/2020 10:56	WG1468990
Ethylbenzene	U			0.137	0.500	1	05/01/2020 10:56	WG1468990
Hexachloro-1,3-butadiene	U	UJ	J0 J4	0.337	1.00	1	05/01/2020 10:56	WG1468990
2-Hexanone	U			0.787	5.00	1	05/01/2020 10:56	WG1468990
n-Hexane	U			0.749	5.00	1	05/01/2020 10:56	WG1468990
Iodomethane	U			6.00	10.0	1	05/01/2020 10:56	WG1468990
Isopropylbenzene	U			0.105	0.500	1	05/01/2020 10:56	WG1468990
p-Isopropyltoluene	U			0.120	0.500	1	05/01/2020 10:56	WG1468990
2-Butanone (MEK)	U			1.19	5.00	1	05/01/2020 10:56	WG1468990
Methylene Chloride	U			0.430	2.50	1	05/01/2020 10:56	WG1468990
4-Methyl-2-pentanone (MIBK)	U			0.478	5.00	1	05/01/2020 10:56	WG1468990
Methyl tert-butyl ether	U			0.101	0.500	1	05/01/2020 10:56	WG1468990
Naphthalene	U			0.174	2.50	1	05/01/2020 10:56	WG1468990
n-Propylbenzene	U			0.0993	0.500	1	05/01/2020 10:56	WG1468990
Styrene	U	UJ	J0	0.118	0.500	1	05/01/2020 10:56	WG1468990
1,1,1,2-Tetrachloroethane	U			0.147	0.500	1	05/01/2020 10:56	WG1468990
1,1,2,2-Tetrachloroethane	U			0.133	0.500	1	05/01/2020 10:56	WG1468990
1,1,2-Trichlorotrifluoroethane	U			0.180	0.500	1	05/01/2020 10:56	WG1468990
Tetrachloroethene	U			0.300	0.500	1	05/01/2020 10:56	WG1468990
Toluene	U			0.278	0.500	1	05/01/2020 10:56	WG1468990
1,2,3-Trichlorobenzene	U			0.164	0.500	1	05/05/2020 03:53	WG1470366
1,2,4-Trichlorobenzene	U	UJ	J0	0.481	1.00	1	05/01/2020 10:56	WG1468990
1,1,1-Trichloroethane	U			0.149	0.500	1	05/01/2020 10:56	WG1468990
1,1,2-Trichloroethane	U			0.158	0.500	1	05/01/2020 10:56	WG1468990
Trichloroethene	10.7			0.190	0.500	1	05/01/2020 10:56	WG1468990
Trichlorofluoromethane	U			0.160	2.50	1	05/01/2020 10:56	WG1468990
1,2,3-Trichloropropane	U			0.237	2.50	1	05/01/2020 10:56	WG1468990
1,2,4-Trimethylbenzene	U			0.322	0.500	1	05/01/2020 10:56	WG1468990
1,2,3-Trimethylbenzene	U			0.104	0.500	1	05/01/2020 10:56	WG1468990
1,3,5-Trimethylbenzene	U			0.104	0.500	1	05/01/2020 10:56	WG1468990
Vinyl acetate	U	UJ	J0	0.692	5.00	1	05/01/2020 10:56	WG1468990
Vinyl chloride	4.52			0.234	0.500	1	05/01/2020 10:56	WG1468990
Xylenes, Total	U			0.174	1.50	1	05/01/2020 10:56	WG1468990
(S) Toluene-d8	*103*				*80.0-120*		*05/01/2020 10:56*	WG1468990
(S) Toluene-d8	*107*				*80.0-120*		*05/05/2020 03:53*	WG1470366
(S) 4-Bromofluorobenzene	*93.7*				*77.0-126*		*05/01/2020 10:56*	WG1468990
(S) 4-Bromofluorobenzene	*99.6*				*77.0-126*		*05/05/2020 03:53*	WG1470366

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
(S) 1,2-Dichloroethane-d4	*109*			*70.0-130*		*05/01/2020 10:56*	WG1468990
(S) 1,2-Dichloroethane-d4	*83.7*			*70.0-130*		*05/05/2020 03:53*	WG1470366

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Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	497000		8450	20000	1	04/30/2020 13:16	WG1467744

Sample Narrative:

L1212802-06 WG1467744: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	18600		379	1000	1	04/28/2020 22:20	WG1467229
Nitrate	U		48.0	100	1	04/28/2020 22:20	WG1467229
Sulfate	1240	J	594	5000	1	04/28/2020 22:20	WG1467229

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	5070		102	1000	1	04/30/2020 00:56	WG1467996

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	10500		48.9	100	1	05/04/2020 11:11	WG1467597
Manganese	385		1.32	5.00	1	05/04/2020 11:11	WG1467597

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	14200		2.87	6.78	10	04/30/2020 11:05	WG1468508
Ethane	10.4		0.296	1.29	1	04/29/2020 14:30	WG1467818
Ethene	59.2		0.422	1.27	1	04/29/2020 14:30	WG1467818

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U		11.3	25.0	1	05/01/2020 11:17	WG1468990
Acrylonitrile	U		0.671	5.00	1	05/01/2020 11:17	WG1468990
Benzene	18.3		0.0941	0.500	1	05/01/2020 11:17	WG1468990
Bromobenzene	U		0.118	0.500	1	05/01/2020 11:17	WG1468990
Bromodichloromethane	U		0.136	0.500	1	05/01/2020 11:17	WG1468990
Bromochloromethane	U		0.128	0.500	1	05/01/2020 11:17	WG1468990
Bromoform	U		0.129	0.500	1	05/01/2020 11:17	WG1468990
Bromomethane	U UJ	J0	0.605	2.50	1	05/01/2020 11:17	WG1468990
n-Butylbenzene	U		0.157	0.500	1	05/01/2020 11:17	WG1468990
sec-Butylbenzene	U		0.125	0.500	1	05/01/2020 11:17	WG1468990
tert-Butylbenzene	U		0.127	0.500	1	05/01/2020 11:17	WG1468990
Carbon disulfide	U		0.0962	0.500	1	05/01/2020 11:17	WG1468990
Carbon tetrachloride	U		0.128	0.500	1	05/01/2020 11:17	WG1468990
Chlorobenzene	U		0.117	0.500	1	05/01/2020 11:17	WG1468990
Chlorodibromomethane	U		0.140	0.500	1	05/01/2020 11:17	WG1468990
Chloroethane	U		0.192	2.50	1	05/01/2020 11:17	WG1468990
Chloroform	U		0.111	0.500	1	05/01/2020 11:17	WG1468990
Chloromethane	U		0.960	1.25	1	05/01/2020 11:17	WG1468990
2-Chlorotoluene	U		0.106	0.500	1	05/01/2020 11:17	WG1468990
4-Chlorotoluene	U		0.114	0.500	1	05/01/2020 11:17	WG1468990

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

Analyte	Result ug/l		Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,2-Dibromo-3-Chloropropane	U	UJ	J0	0.276	2.50	1	05/01/2020 11:17	WG1468990
1,2-Dibromoethane	U			0.126	0.500	1	05/01/2020 11:17	WG1468990
Dibromomethane	U			0.122	0.500	1	05/01/2020 11:17	WG1468990
1,2-Dichlorobenzene	U			0.107	0.500	1	05/01/2020 11:17	WG1468990
1,3-Dichlorobenzene	U			0.299	0.500	1	05/01/2020 11:17	WG1468990
1,4-Dichlorobenzene	U			0.120	0.500	1	05/01/2020 11:17	WG1468990
Dichlorodifluoromethane	U			0.374	2.50	1	05/01/2020 11:17	WG1468990
1,1-Dichloroethane	U			0.100	0.500	1	05/01/2020 11:17	WG1468990
1,2-Dichloroethane	U			0.0819	0.500	1	05/01/2020 11:17	WG1468990
1,1-Dichloroethene	U			0.188	0.500	1	05/01/2020 11:17	WG1468990
cis-1,2-Dichloroethene	1.04			0.126	0.500	1	05/01/2020 11:17	WG1468990
trans-1,2-Dichloroethene	U			0.149	0.500	1	05/01/2020 11:17	WG1468990
1,2-Dichloropropane	U			0.149	0.500	1	05/01/2020 11:17	WG1468990
1,1-Dichloropropene	U			0.142	0.500	1	05/01/2020 11:17	WG1468990
1,3-Dichloropropane	U			0.109	1.00	1	05/01/2020 11:17	WG1468990
cis-1,3-Dichloropropene	U			0.111	0.500	1	05/01/2020 11:17	WG1468990
trans-1,3-Dichloropropene	U			0.118	0.500	1	05/01/2020 11:17	WG1468990
trans-1,4-Dichloro-2-butene	U	UJ	J0	0.467	5.00	1	05/01/2020 11:17	WG1468990
2,2-Dichloropropane	U			0.161	0.500	1	05/01/2020 11:17	WG1468990
Di-isopropyl ether	0.119		J	0.105	0.500	1	05/01/2020 11:17	WG1468990
Ethylbenzene	U			0.137	0.500	1	05/01/2020 11:17	WG1468990
Hexachloro-1,3-butadiene	U	UJ	J0 J4	0.337	1.00	1	05/01/2020 11:17	WG1468990
2-Hexanone	U			0.787	5.00	1	05/01/2020 11:17	WG1468990
n-Hexane	U			0.749	5.00	1	05/01/2020 11:17	WG1468990
Iodomethane	U			6.00	10.0	1	05/01/2020 11:17	WG1468990
Isopropylbenzene	U			0.105	0.500	1	05/01/2020 11:17	WG1468990
p-Isopropyltoluene	U			0.120	0.500	1	05/01/2020 11:17	WG1468990
2-Butanone (MEK)	U			1.19	5.00	1	05/01/2020 11:17	WG1468990
Methylene Chloride	U			0.430	2.50	1	05/01/2020 11:17	WG1468990
4-Methyl-2-pentanone (MIBK)	U			0.478	5.00	1	05/01/2020 11:17	WG1468990
Methyl tert-butyl ether	U			0.101	0.500	1	05/01/2020 11:17	WG1468990
Naphthalene	U			0.174	2.50	1	05/01/2020 11:17	WG1468990
n-Propylbenzene	U			0.0993	0.500	1	05/01/2020 11:17	WG1468990
Styrene	U	UJ	J0	0.118	0.500	1	05/01/2020 11:17	WG1468990
1,1,1,2-Tetrachloroethane	U			0.147	0.500	1	05/01/2020 11:17	WG1468990
1,1,2,2-Tetrachloroethane	U			0.133	0.500	1	05/01/2020 11:17	WG1468990
1,1,2-Trichlorotrifluoroethane	U			0.180	0.500	1	05/01/2020 11:17	WG1468990
Tetrachloroethene	U			0.300	0.500	1	05/01/2020 11:17	WG1468990
Toluene	U			0.278	0.500	1	05/01/2020 11:17	WG1468990
1,2,3-Trichlorobenzene	U			0.164	0.500	1	05/05/2020 04:13	WG1470366
1,2,4-Trichlorobenzene	U	UJ	J0	0.481	1.00	1	05/01/2020 11:17	WG1468990
1,1,1-Trichloroethane	U			0.149	0.500	1	05/01/2020 11:17	WG1468990
1,1,2-Trichloroethane	U			0.158	0.500	1	05/01/2020 11:17	WG1468990
Trichloroethene	U			0.190	0.500	1	05/01/2020 11:17	WG1468990
Trichlorofluoromethane	U			0.160	2.50	1	05/01/2020 11:17	WG1468990
1,2,3-Trichloropropane	U			0.237	2.50	1	05/01/2020 11:17	WG1468990
1,2,4-Trimethylbenzene	U			0.322	0.500	1	05/01/2020 11:17	WG1468990
1,2,3-Trimethylbenzene	U			0.104	0.500	1	05/01/2020 11:17	WG1468990
1,3,5-Trimethylbenzene	U			0.104	0.500	1	05/01/2020 11:17	WG1468990
Vinyl acetate	U	UJ	J0	0.692	5.00	1	05/01/2020 11:17	WG1468990
Vinyl chloride	53.2			0.234	0.500	1	05/01/2020 11:17	WG1468990
Xylenes, Total	U			0.174	1.50	1	05/01/2020 11:17	WG1468990
(S) Toluene-d8	*101*				*80.0-120*		*05/01/2020 11:17*	WG1468990
(S) Toluene-d8	*108*				*80.0-120*		*05/05/2020 04:13*	WG1470366
(S) 4-Bromofluorobenzene	*90.4*				*77.0-126*		*05/01/2020 11:17*	WG1468990
(S) 4-Bromofluorobenzene	*101*				*77.0-126*		*05/05/2020 04:13*	WG1470366

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
(S) 1,2-Dichloroethane-d4	*112*			*70.0-130*		*05/01/2020 11:17*	WG1468990
(S) 1,2-Dichloroethane-d4	*84.3*			*70.0-130*		*05/05/2020 04:13*	WG1470366

JC 5/18/2020

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

Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	457000		8450	20000	1	04/30/2020 13:24	WG1467744

Sample Narrative:

L1212802-07 WG1467744: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	39000		379	1000	1	04/28/2020 22:38	WG1467229
Nitrate	U		48.0	100	1	04/28/2020 22:38	WG1467229
Sulfate	14400		594	5000	1	04/28/2020 22:38	WG1467229

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	3500	~~B~~	102	1000	1	04/30/2020 01:09	WG1467996

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	11100		48.9	100	1	05/04/2020 11:27	WG1467597
Manganese	2140		1.32	5.00	1	05/04/2020 11:27	WG1467597

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	955		0.287	0.678	1	04/29/2020 14:34	WG1467818
Ethane	24.2		0.296	1.29	1	04/29/2020 14:34	WG1467818
Ethene	U		0.422	1.27	1	04/29/2020 14:34	WG1467818

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U		11.3	25.0	1	05/01/2020 11:37	WG1468990
Acrylonitrile	U		0.671	5.00	1	05/01/2020 11:37	WG1468990
Benzene	0.704		0.0941	0.500	1	05/01/2020 11:37	WG1468990
Bromobenzene	U		0.118	0.500	1	05/01/2020 11:37	WG1468990
Bromodichloromethane	U		0.136	0.500	1	05/01/2020 11:37	WG1468990
Bromochloromethane	U		0.128	0.500	1	05/01/2020 11:37	WG1468990
Bromoform	U		0.129	0.500	1	05/01/2020 11:37	WG1468990
Bromomethane	U UJ	J0	0.605	2.50	1	05/01/2020 11:37	WG1468990
n-Butylbenzene	U		0.157	0.500	1	05/01/2020 11:37	WG1468990
sec-Butylbenzene	U		0.125	0.500	1	05/01/2020 11:37	WG1468990
tert-Butylbenzene	U		0.127	0.500	1	05/01/2020 11:37	WG1468990
Carbon disulfide	U		0.0962	0.500	1	05/01/2020 11:37	WG1468990
Carbon tetrachloride	U		0.128	0.500	1	05/01/2020 11:37	WG1468990
Chlorobenzene	U		0.117	0.500	1	05/01/2020 11:37	WG1468990
Chlorodibromomethane	U		0.140	0.500	1	05/01/2020 11:37	WG1468990
Chloroethane	U		0.192	2.50	1	05/01/2020 11:37	WG1468990
Chloroform	U		0.111	0.500	1	05/01/2020 11:37	WG1468990
Chloromethane	U		0.960	1.25	1	05/01/2020 11:37	WG1468990
2-Chlorotoluene	U		0.106	0.500	1	05/01/2020 11:37	WG1468990
4-Chlorotoluene	U		0.114	0.500	1	05/01/2020 11:37	WG1468990

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MW-329-042720
Collected date/time: 04/27/20 14:00

SAMPLE RESULTS - 07

L1212802

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,2-Dibromo-3-Chloropropane	U	UJ J0	0.276	2.50	1	05/01/2020 11:37	WG1468990
1,2-Dibromoethane	U		0.126	0.500	1	05/01/2020 11:37	WG1468990
Dibromomethane	U		0.122	0.500	1	05/01/2020 11:37	WG1468990
1,2-Dichlorobenzene	U		0.107	0.500	1	05/01/2020 11:37	WG1468990
1,3-Dichlorobenzene	U		0.299	0.500	1	05/01/2020 11:37	WG1468990
1,4-Dichlorobenzene	U		0.120	0.500	1	05/01/2020 11:37	WG1468990
Dichlorodifluoromethane	U		0.374	2.50	1	05/01/2020 11:37	WG1468990
1,1-Dichloroethane	U		0.100	0.500	1	05/01/2020 11:37	WG1468990
1,2-Dichloroethane	U		0.0819	0.500	1	05/01/2020 11:37	WG1468990
1,1-Dichloroethene	U		0.188	0.500	1	05/01/2020 11:37	WG1468990
cis-1,2-Dichloroethene	17.5		0.126	0.500	1	05/01/2020 11:37	WG1468990
trans-1,2-Dichloroethene	U		0.149	0.500	1	05/01/2020 11:37	WG1468990
1,2-Dichloropropane	U		0.149	0.500	1	05/01/2020 11:37	WG1468990
1,1-Dichloropropene	U		0.142	0.500	1	05/01/2020 11:37	WG1468990
1,3-Dichloropropane	U		0.109	1.00	1	05/01/2020 11:37	WG1468990
cis-1,3-Dichloropropene	U		0.111	0.500	1	05/01/2020 11:37	WG1468990
trans-1,3-Dichloropropene	U		0.118	0.500	1	05/01/2020 11:37	WG1468990
trans-1,4-Dichloro-2-butene	U	UJ J0	0.467	5.00	1	05/01/2020 11:37	WG1468990
2,2-Dichloropropane	U		0.161	0.500	1	05/01/2020 11:37	WG1468990
Di-isopropyl ether	0.113	J	0.105	0.500	1	05/01/2020 11:37	WG1468990
Ethylbenzene	U		0.137	0.500	1	05/01/2020 11:37	WG1468990
Hexachloro-1,3-butadiene	U	UJ J0 J4	0.337	1.00	1	05/01/2020 11:37	WG1468990
2-Hexanone	U		0.787	5.00	1	05/01/2020 11:37	WG1468990
n-Hexane	U		0.749	5.00	1	05/01/2020 11:37	WG1468990
Iodomethane	U		6.00	10.0	1	05/01/2020 11:37	WG1468990
Isopropylbenzene	U		0.105	0.500	1	05/01/2020 11:37	WG1468990
p-Isopropyltoluene	U		0.120	0.500	1	05/01/2020 11:37	WG1468990
2-Butanone (MEK)	U		1.19	5.00	1	05/01/2020 11:37	WG1468990
Methylene Chloride	U		0.430	2.50	1	05/01/2020 11:37	WG1468990
4-Methyl-2-pentanone (MIBK)	U		0.478	5.00	1	05/01/2020 11:37	WG1468990
Methyl tert-butyl ether	U		0.101	0.500	1	05/01/2020 11:37	WG1468990
Naphthalene	U		0.174	2.50	1	05/01/2020 11:37	WG1468990
n-Propylbenzene	U		0.0993	0.500	1	05/01/2020 11:37	WG1468990
Styrene	U	UJ J0	0.118	0.500	1	05/01/2020 11:37	WG1468990
1,1,1,2-Tetrachloroethane	U		0.147	0.500	1	05/01/2020 11:37	WG1468990
1,1,2,2-Tetrachloroethane	U		0.133	0.500	1	05/01/2020 11:37	WG1468990
1,1,2-Trichlorotrifluoroethane	U		0.180	0.500	1	05/01/2020 11:37	WG1468990
Tetrachloroethene	U		0.300	0.500	1	05/01/2020 11:37	WG1468990
Toluene	0.434	J	0.278	0.500	1	05/01/2020 11:37	WG1468990
1,2,3-Trichlorobenzene	U		0.164	0.500	1	05/05/2020 08:10	WG1470366
1,2,4-Trichlorobenzene	U	UJ J0	0.481	1.00	1	05/01/2020 11:37	WG1468990
1,1,1-Trichloroethane	U		0.149	0.500	1	05/01/2020 11:37	WG1468990
1,1,2-Trichloroethane	U		0.158	0.500	1	05/01/2020 11:37	WG1468990
Trichloroethene	U		0.190	0.500	1	05/01/2020 11:37	WG1468990
Trichlorofluoromethane	U		0.160	2.50	1	05/01/2020 11:37	WG1468990
1,2,3-Trichloropropane	U		0.237	2.50	1	05/01/2020 11:37	WG1468990
1,2,4-Trimethylbenzene	U		0.322	0.500	1	05/01/2020 11:37	WG1468990
1,2,3-Trimethylbenzene	U		0.104	0.500	1	05/01/2020 11:37	WG1468990
1,3,5-Trimethylbenzene	U		0.104	0.500	1	05/01/2020 11:37	WG1468990
Vinyl acetate	U	UJ J0	0.692	5.00	1	05/01/2020 11:37	WG1468990
Vinyl chloride	23.6		0.234	0.500	1	05/01/2020 11:37	WG1468990
Xylenes, Total	U		0.174	1.50	1	05/01/2020 11:37	WG1468990
(S) Toluene-d8	*102*			*80.0-120*		*05/01/2020 11:37*	WG1468990
(S) Toluene-d8	*108*			*80.0-120*		*05/05/2020 08:10*	WG1470366
(S) 4-Bromofluorobenzene	*93.9*			*77.0-126*		*05/01/2020 11:37*	WG1468990
(S) 4-Bromofluorobenzene	*104*			*77.0-126*		*05/05/2020 08:10*	WG1470366

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
(S) 1,2-Dichloroethane-d4	*111*			*70.0-130*		*05/01/2020 11:37*	WG1468990
(S) 1,2-Dichloroethane-d4	*87.4*			*70.0-130*		*05/05/2020 08:10*	WG1470366

JC 5/18/2020

MEMORANDUM

TO: Project File **DATE:** May 20, 2020

FROM: Jessie Compeau

SUBJECT: Laboratory Data Validation Review

PROJECT: American Linen Data Validation

PROJECT #: 1413.001.02.501E

TASK: EIM Data Validation Level EPA2A for 2nd Quarter Monitoring – Groundwater Samples - Group 3

LAB: Pace Sample Delivery Groups (SDGs): L1213148, L1213621, L1214057, L1214418, and L1214811

Thirty-two (32) groundwater samples (including one field duplicate), one equipment blank, and two trip blanks were collected as part of the 2nd Quarterly Monitoring Round for 2020 for the ongoing Remedial Investigation (RI) sampling at the Former American Linen Supply Site, in Seattle, Washington in April and May of 2020. The samples were shipped and delivered to Pace Lab Sciences (Pace) of Mount Juliet, TN for laboratory analysis. Selected samples were analyzed for the following:

- Volatile organic compounds (VOCs) by United States Environmental Protection Agency (USEPA) Method 8260D;
- Total petroleum hydrocarbons as gasoline (TPH-Gx) by NWTPH-Gx per analytical method stipulated by Washington State Department of Ecology;
- VOCs (dissolved gases – methane, ethane, and ethene) by EPA SOP RSK 175;
- Alkalinity by Method 2320 B-2011;
- Anions (chloride, nitrate, and sulfate) by USEPA Method 9056A;
- Total Organic Carbon (TOC) by USEPA Method 9060A; and
- Metals (iron and manganese) by USEPA Method 6020B.

The RI sampling was conducted in the spring of 2020. Results are reported in multiple SDGs from Pace. Pace SDGs are reviewed in groups (up to 10 SDGs) for each data validation report. Group 3 analytical results are reported in SDGs L1213148, L1213621, L1214057, L1214418, and L1214811. The quality assurance review of the laboratory data associated with Group 3 is summarized below.

DATA QUALIFICATIONS

Guidelines established by USEPA for a limited data validation review of analytical data along with Pace control limit criteria were used to validate the data. The comments presented in this memorandum refer to the laboratory's performance in meeting the quality control criteria

outlined in the USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (USEPA, 2017) and USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Superfund Methods Data Review (USEPA, 2017). Following Guidelines, non-project-specific laboratory duplicates and matrix spike results were not evaluated as part of this data validation.

DATA VALIDATION

Completeness

All samples were collected and analyzed as requested.

Sample Collection and Preservation

Samples were collected in laboratory-supplied sample containers preserved as appropriate for the individual analyses conducted. The samples were packed on ice in coolers and delivered by courier to the analytical laboratory. The laboratory reported that the coolers were received at a cooler temperature less than the recommended temperature preservation of 6°C. Samples were received in good condition except for issues mentioned in the Completeness section. No data were qualified based upon the sample collection and preservation information with the following discussions:

- SDG L1213621: PES review of field notes indicated that there was a work trailer parked over the top of monitoring well FMW-131 and it was sampled with the peristaltic pump instead of the bladder pump. The depth to water was measured at 22.4 feet below top of casing (TOC) however the SAP stipulates that well locations with water levels lower than 20.0 feet below TOC should be sampled with a bladder pump. Past and current data sets of analytical data for monitoring well FMW-131 were reviewed for comparability. The historical data appear to be generally consistent with current analytical data from monitoring well FMW-131. No further action is taken other than to note this.

- SDG L1213621: Pace's original sample narrative (May 8, 2020) for VOC results on sample MW-322-042920 read "non-target compounds too high to run at a dilution". PES followed up to confirm the types of non-target compounds that may have been present. Pace confirmed, May 27, 2020, that the statement was erroneously added by the bench analyst and should have read "target compounds too high to run at a lower dilution". SDG L1213621 was reissued on May 27, 2020 with the modified sample narrative for sample MW-322-042920 VOC results.

- SDG L1214418: Pace Log In comments indicate that samples were shipped without ice and received at 8.7 °C however emails between Pace and PES indicate that ice was included in the coolers prior to shipment. Validator recommends that PES pack coolers with additional bags of ice particularly for the upcoming warmer seasons. No action is taken on this basis since the cooler temperatures only marginally exceeded the recommended temperature and were received less than 10 °C.

- SDG L1213621: PES requested on May 1, 2020 that sample MW-116-042920 identification on the chain of custody be changed to sample MW116-042920.

Holding Times

USEPA Method 8260D:
All samples were analyzed for VOCs within the EPA recommended holding time of fourteen days for preserved waters from the date of collection. All holding time criteria are met.

NWTPH-Gx Method:
All samples were analyzed within the WA State recommended holding time of fourteen days for preserved waters from the date of sample collection. All holding time criteria are met.

Dissolved Gases (Methane, Ethane, and Ethene) by RSK 175:
All samples were analyzed within the WA State recommended holding time of fourteen days for preserved waters from the date of sample collection. All holding time criteria are met.

USEPA Method 6020B:
All samples were analyzed within the USEPA recommended holding time for iron and manganese of 180 days for preserved waters from the date of sample collection. All holding time criteria are met.

General Chemistry (Alkalinity, Chloride, Sulfate, Nitrate, and TOC):
All samples were analyzed within the USEPA recommended holding time for alkalinity (14 days), chloride (28 days), sulfate (28 days), and nitrate (48 hours), and TOC (28 days) for preserved waters from the date of sample collection. All holding time criteria are met.

Initial and Continuing Calibration

Calibration data for this project are not required for this deliverable however Pace's notes indicate the following:

- Multiple SDGs - *USEPA Method 8260D:* Continuing calibration verification (CCV) issues were noted by Pace for multiple compounds associated with analytical batches in each SDG. These compounds are qualified by the laboratory "J0" to indicate that percent difference CCV is outside of laboratory acceptance criteria. **Associated sample results with laboratory qualified (J0) results are estimated and qualified (J/UJ).**

Method Blank Results

USEPA Method 8260D:
Laboratory method blanks were included with the analytical batches per method requirement. The target analytes were not detected in the method blanks at or above the reporting detection limits (RDLs).

NWTPH-Gx Method:

Laboratory method blanks were included with the analytical batches per method requirement. The target analyte (gasoline) was not detected in the method blanks at or above the RDLs with one exception:

- SDG L1213148 – Analytical batch WG1469578: A low level of gasoline was detected in the method blank. The associated gasoline detection in sample MW-307-042820 is above the RDL and no action is taken. **Gasoline was detected below the RDL in samples MW-305-042820 and MW-306-042820. Gasoline results for samples are qualified as non-detected (U) due to blank contamination.**

- SDG L1213621 – Analytical batch WG1469667: Low levels of gasoline concentrations were detected in the method, trip, and equipment blanks. No action is taken on this basis.

- SDG L1213621 – Analytical batch WG1470018: Low level of gasoline concentrations were detected in the method, trip, and equipment blanks. Associated sample MW-147-042920 result is greater than the RDL and no action is taken on this basis.

- SDG L1214057 - Analytical batch WG1470453: A low levels of gasoline was detected in the method blank. The associated gasoline detection in sample MW-146-043020 is above the RDL and no action is taken. **Gasoline was detected below the RDL in samples MW-154-043020, MW-153-043020, and MW-148-043020. Gasoline results for these samples are qualified as non-detected (U) due to blank contamination.**

- SDG L1214418 - Analytical batch WG1472292: Low levels of gasoline concentrations were detected in the method and trip blank. The associated gasoline detection in sample MW-146-043020 is above the RDL and no action is taken. **Gasoline was detected below the RDL in samples MW-168-050120, MW-176-050120, MW-167-050120, MW-175-050120, MW-165-050120, MW-174-050120, and MW-166-050120. Gasoline results for these samples are qualified as non-detected (U) due to blank contamination.**

- SDG L1214418 - Analytical batch WG1472903: Low levels of gasoline concentrations were detected in the method and trip blank. No action is needed since gasoline was not detected in the associated sample (MW-173-050120).

Dissolved Gases (Methane, Ethane, and Ethene) by RSK 175:
Laboratory method blanks were included with the analytical batches per method requirement. The target analytes (dissolved gases) are not detected in the method blanks at or above the RDLs.

USEPA Method 6020B and General Chemistry (Alkalinity, Chloride, Sulfate, Nitrate, and TOC):
Laboratory method blanks were included with the analytical batches per method requirement. The target analytes were detected in the method blanks below the RDLs. Per Guidance, no action is taken for blank detections less than the RDL when associated sample detections are greater than the RDL. General chemistry and metal blank detections are shown below:

SDG	Batch	Method	Analyte	Method Blank Result	Qualifier	RDL	Units	Associated Result(s) Qualified
L1213148	WG1468666	9060A	TOC	193	J	1000	µg/L	NO
L1213148	WG1470661	9060A	TOC	445	J	1000	µg/L	NO
L1213621	WG1469258	9060A	TOC	389	J	1000	µg/L	NO
L1213621	WG1470661	9060A	TOC	445	J	1000	µg/L	NO
L1214057	WG1471458	9060A	TOC	347	J	1000	µg/L	NO
L1214057	WG1471459	9060A	TOC	227	J	1000	µg/L	NO
L1214418	WG1471459	9060A	TOC	227	J	1000	µg/L	NO
L1214418	WG1472044	9060A	TOC	247	J	1000	µg/L	NO
L1214811	WG1472044	9060A	TOC	247	J	1000	µg/L	NO
L1214811	WG1472048	9060A	TOC	530	J	1000	µg/L	NO

Target analytes were detected in method blanks at low levels with no impact to the associated samples with the following discussions:

- SDGs L1213148: TOC was detected in sample MW-305-042820 at 921 µg/L slightly below the RDL of 1000 µg/L. TOC was also detected in the method blank at 193 µg/L. In this case professional judgment was used and no action is taken other than to remove the “B” qualifier from the EDD and Form 1 results.

- SDG L1214057: TOC was detected in sample MW-153-043020 at 843 µg/L slightly below the RDL. TOC was also detected in the method blank at 227 ug/L. In this case professional judgment was used and no action is taken other than to remove the “B” qualifier from the EDD and Form 1 results.

Trip Blank Results

USEPA Method 8260D, NWTPH-Gx:
Two trip blanks were collected. The target analytes are not detected in the method blanks at or above the RDLs with the following exceptions:

- SDG L1213621: A low level of gasoline is detected in the trip blank (TB-042920). Low levels of gasoline were also detected in the equipment and method blanks. Associated sample MW-147-042920 gasoline result is not impacted since the detection is significantly greater than the RDL.

- SDG L1214418: A low level of gasoline is detected in the trip blank (TB-050120). A low level of gasoline was also detected in the method blank. Associated sample MW-147-042920 is not impacted since the gasoline detection is significantly greater than the RDL. **Gasoline was detected below the RDL in samples MW-168-050120, MW-176-050120, MW-167-050120, MW-175-050120, MW-165-050120, MW-174-050120, and MW-166-050120. Gasoline results for these samples are qualified as non-detected (U) due to blank (method and trip) contamination.**

Field, Rinsate, or Equipment Blank Results

All Analytical Methods:

One equipment blank (EQ-042920 with SDG L1213621) is associated with all samples collected via bladder pump on April 29, 2020. Associated samples are MW-320-042920, MW-333-042920, MW-322-042920**,** MW116-042920, and MW-147-042920. Low levels of gasoline, TOC, and manganese were detected in the equipment blank. No action is taken for low level of gasoline, TOC, and manganese since the amounts in the associated samples are far greater than the detections in the equipment blank.

Field Duplicate Analyses

Field duplicate pairs were submitted and analyzed. Field duplicate sample pair is as follows:

- SDG L1213621: Sample GEI-1-042920 is a field duplicate of MW-929-042920

Target analyte results are comparable and within a relative percent difference (RPD) of 30% (± 1x RDL for groundwater results <5X the RDL) for the field duplicate pair.

Laboratory Duplicate Analyses

USEPA Method 8260D:
Laboratory duplicate samples were not analyzed. Refer to laboratory control sample/sample duplicate (LCS/LCSD) or matrix spike/matrix spike duplicate (MS/MSD) results for precision data.

NWTPH-Gx Method:
Laboratory duplicate samples were not analyzed. Refer to field duplicate, LCS, or MS results for additional information.

Dissolved Gases (Methane, Ethane, and Ethene) by RSK 175:
Laboratory duplicate sample analyses were performed on client and non-client samples within the analytical batches. The primary/duplicate RPDs for dissolved gas analyses are within the laboratory control limit of 20%.

USEPA Method 6020B:
Laboratory duplicate samples were not analyzed. Refer to LCS/LCSD or MS/MSD results for precision data.

General Chemistry (Alkalinity, Chloride, Sulfate, Nitrate, and TOC):
Laboratory duplicate sample analyses were performed on client samples and/or on non-client samples. The primary/duplicate RPDs for general chemistry parameters are within the laboratory control RPD limits or ± 1x RDL for groundwater results <5X the RDL with the following discussions:

- SDG L1214057: A laboratory duplicate was performed on a non-client sample with a nitrate RPD result exceeding laboratory QC criteria and laboratory qualified (J3). No action is taken on this basis since the laboratory duplicate was performed on a non-client sample. Refer to matrix spike results for precision data.

- SDG L1214811: A laboratory duplicate was performed on a non-client sample with a chloride RPD result exceeding laboratory QC criteria and laboratory qualified (P1). No action is taken on this basis since the results are less than 5X the RL and ± <1X the RDL.

- SDG L1214811: A laboratory duplicate was performed on a non-client sample with a TOC RPD result exceeding laboratory QC criteria and laboratory qualified (P1). No action is taken on this basis since the results are less than 5X the RL and ± <1X the RDL.

Surrogate Recoveries

USEPA Method 8260D:
The surrogate recovery results for the samples, laboratory control samples, matrix spike samples, and the method blanks are within the laboratory surrogate control limits for all the analyses.

NWTPH-Gx Method:
The surrogate recovery results for the samples, laboratory control samples, matrix spike samples, and the method blanks are within the laboratory surrogate control limits for all analyses.

Laboratory Control Samples

USEPA Method 8260D:
Laboratory control sample/laboratory control sample duplicate (LCS/LCSD) or laboratory control sample (LCS) were analyzed by USEPA Method 8260D method. The LCS % Rs or LCS/LCSD % Rs and RPDs for the all target compounds are within the laboratory control criteria for waters with the following discussion:

- SDG L1210457 - Analytical batch WG1470473: LCS/LCSD % recoveries for acetone are above laboratory acceptance criteria and laboratory qualified (J4). No action is needed since acetone is not detected in the associated samples.

- SDG L1214811 - Analytical batch WG1470473: LCS/LCSD RPD exceeds criteria for two compounds (trans-1,4-dichloro-2-butene and 2-butanone) and laboratory qualified (J3). Recoveries are within criteria but are recovered wide. No action is taken on this basis.

NWTPH-Gx Method:
The LCS % Rs for the target compound (gasoline) are within the laboratory control criteria for waters. No measures of precision are provided with the analytical batch. No action is taken other than to note this.

Dissolved Gases (Methane, Ethane, and Ethene) by RSK 175:
The LCS/LCSD % Rs and RPDs for the target compound (dissolved gases) are within the laboratory control criteria for waters.

USEPA Method 6020B:
The LCS % Rs or LCS/LCSD % Rs and RPDs for the target compound (iron and manganese) are within the laboratory control criteria for waters.

General Chemistry (Alkalinity, Chloride, Sulfate, Nitrate, and TOC):
The LCS % Rs for general chemistry parameters are within the laboratory control criteria for waters.

Matrix Spike/Matrix Spike Duplicates

USEPA Method 8260D:
Matrix spike/matrix spike duplicate (MS/MSD) analyses were not performed. Refer to LCS results. In some cases, no measure of precision was provided. Refer to the field duplicate results for precision data. No action was taken other than to note this.

NWTPH-Gx Method:
MS/MSD analyses were not performed. Refer to LCS results. No measure of precision was provided. In some cases, no measure of precision was provided. No action was taken other than to note this.

Dissolved Gases (Methane, Ethane, and Ethene) by RSK 175:
MS/MSD analyses were not performed. Refer to LCS results and field duplicate sample for accuracy and precision data.

USEPA Method 6020B:
MS/MSD analyses were performed on client and on non-client samples within the analytical batches. The MS/MSD % Rs and RPD were acceptable and within laboratory control limit criteria for water samples with the following discussion:

- SDG L1213621: MS/MSD was performed on sample MW-929-042920 with MSD recovery below criteria for manganese and laboratory qualified (V). Per Guidelines, no action is taken for manganese since the sample amount is greater than four times the spike amount.

- SDG L1214057: Matrix spike analysis was performed on client sample MW-146-043020 and manganese spike results are laboratory qualified (V) to indicate that the sample concentration is greater than 4X the spike amount. Per guidance no action is necessary. Refer to LCS results for accuracy data.

General Chemistry (Alkalinity, Chloride, Sulfate, Nitrate, and TOC):
MS or MS/MSD analyses were performed on client and/or non-client samples within the analytical batches. In cases where MS/MSD spike analyses are not performed refer to LCS/LCSD or laboratory duplicate data for accuracy and precision data. The MS/MSD % Rs and RPDs are acceptable and within laboratory control limit criteria for water samples with the following discussion:

- SDG L1213148: Matrix spike analysis was performed on client sample MW-307-042820 and sulfate spike results are laboratory qualified (E) to indicate that the sample concentration exceeds the linear calibration range. No action is taken in this case since the RPD criteria is met.

- SDG L1214418: Matrix spike analysis was performed on a non-client sample. Chloride and sulfate spike results are laboratory qualified (EV) to indicate that the sample concentration exceeds the linear calibration range and is greater than 4X the spike amount. No action is taken in this case since the spike was performed on a non-client sample. Refer to MS results on client sample MW-175-050120 for accuracy data.

Other Quality Control Issues

No laboratory quality control issues were identified in the laboratory report with the following discussions:

- Multiple SDGs: Sample narratives for alkalinity results indicate that the endpoint pH is 4.5. No action was taken other than to note that this reflects total alkalinity.

- Electronic data deliverables (EDDs) for these SDGs were provided by the laboratory and data validator qualifiers were entered. In some cases, different chemical synonyms are used between the EDD and the hardcopy however associated Chemical Abstracts Service (CAS) numbers are provided in the EDD to confirm chemical identifications.

Compound Identification and Quantitation Limits

Results of the analyses were reported based on laboratory RDLs for all compounds. RDLs for selected compounds are elevated due to method-required dilutions. In some cases, non-target compounds are too high to run at a lower dilution. No action is taken other than to note this.

Gasoline and gasoline range organics are analyzed for via Volatile Organic Compounds (GC) by Washington State Method NWTPHGx (using a gas chromatograph/flame ionization detector (GC/FID)) and Pace reported gasoline range organic-NWTPH results. Several chlorinated VOC compounds (including cis-1,2-dichloroethene, trans-1,2-dichloroethene, trichloroethene, and tetrachloroethene) elute within the gasoline range organics (GRO) retention time range as specified by Washington State (detections falling between the toluene and dodecane range).

Non-petroleum organics (e.g. chlorinated VOC compounds) eluting within the gasoline range contribute to the GRO result and GRO results are likely biased high (J+). PES requested that Pace evaluate chromatograms associated with positive sample detections to confirm the potential presence of gasoline. Per PES's request Pace reviewed selected sample chromatograms against the gasoline standard chromatograms and assigned "no discernible petroleum pattern" to GRO results associated with this Task. PES assigned an additional project level qualifier (Z) to GRO results when the chromatogram for the sample does not match a discernible gasoline standard pattern. No action is taken in these cases other than to note that this is likely due to report formatting error. Associated chromatograms and qualified samples for this Task are as follows:

Sample ID	Laboratory Identification	Gasoline Range Organic Result (μg/L)	DV Qualifier	Data Validation Comments	Pace Chromatogram Review Notes

MW-307-042820	L1213148-02	146	Z, J+	Elevated chlorinated VOCs detected within the GRO elution range	No discernible petroleum pattern present.
MW-147-042920	L1213621-10	1,150	Z, J+	Elevated chlorinated VOCs detected within the GRO elution range	No discernible petroleum pattern present.
MW-146-043020	L1214057-01	1,080	Z, J+	Elevated chlorinated VOCs detected within the GRO elution range	No discernible petroleum pattern present.

Project level qualifiers have been included to the PES's project database (Epiphany) as (ZJ+). Washington State EIM valid values were reviewed. In this case no Washington State EIM valid value descriptor is ideal and the default estimated value (J) has been selected as the best match to qualify GRO (Z,J+) data.

Data Assessment

The laboratory data reported for this project were reviewed based on the criteria outlined in:

- USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (USEPA, 2017); and
- USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Superfund Methods Data Review (USEPA, 2017).

Data qualifiers are assigned and laboratory report pages with qualifiers are attached. All data, including qualified data, are judged to be acceptable for their intended use.

Wet Chemistry by Method 2320 B-2011

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Alkalinity	587000		8450	20000	1	05/01/2020 13:37	WG1468407

Sample Narrative:

L1213148-01 WG1468407: Endpoint pH 4.5

Wet Chemistry by Method 9056A

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Chloride	26800		379	1000	1	04/29/2020 12:36	WG1468009
Nitrate	U		48.0	100	1	04/29/2020 12:36	WG1468009
Sulfate	47200		594	5000	1	04/29/2020 12:36	WG1468009

Wet Chemistry by Method 9060A

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
TOC (Total Organic Carbon)	7940		102	1000	1	04/30/2020 22:02	WG1468666

Metals (ICPMS) by Method 6020B

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Iron	22000		48.9	100	1	05/01/2020 12:20	WG1469077
Manganese	2560		1.32	5.00	1	05/01/2020 12:20	WG1469077

Volatile Organic Compounds (GC) by Method RSK175

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Methane	4640		0.287	0.678	1	04/30/2020 13:27	WG1468509
Ethane	40.3		0.296	1.29	1	04/30/2020 13:27	WG1468509
Ethene	36.3		0.422	1.27	1	04/30/2020 13:27	WG1468509

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

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Acetone	U		11.3	25.0	1	05/07/2020 15:34	WG1472090
Acrylonitrile	U		0.671	5.00	1	05/07/2020 15:34	WG1472090
Benzene	43.3		0.0941	0.500	1	05/07/2020 15:34	WG1472090
Bromobenzene	U		0.118	0.500	1	05/07/2020 15:34	WG1472090
Bromodichloromethane	U		0.136	0.500	1	05/07/2020 15:34	WG1472090
Bromochloromethane	U		0.128	0.500	1	05/07/2020 15:34	WG1472090
Bromoform	U		0.129	0.500	1	05/07/2020 15:34	WG1472090
Bromomethane	U		0.605	2.50	1	05/07/2020 15:34	WG1472090
n-Butylbenzene	U		0.157	0.500	1	05/07/2020 15:34	WG1472090
sec-Butylbenzene	U		0.125	0.500	1	05/07/2020 15:34	WG1472090
tert-Butylbenzene	U		0.127	0.500	1	05/07/2020 15:34	WG1472090
Carbon disulfide	U		0.0962	0.500	1	05/07/2020 15:34	WG1472090
Carbon tetrachloride	U		0.128	0.500	1	05/07/2020 15:34	WG1472090
Chlorobenzene	U		0.117	0.500	1	05/07/2020 15:34	WG1472090
Chlorodibromomethane	U		0.140	0.500	1	05/07/2020 15:34	WG1472090
Chloroethane	U		0.192	2.50	1	05/07/2020 15:34	WG1472090
Chloroform	U		0.111	0.500	1	05/07/2020 15:34	WG1472090
Chloromethane	U		0.960	1.25	1	05/07/2020 15:34	WG1472090
2-Chlorotoluene	U		0.106	0.500	1	05/07/2020 15:34	WG1472090
4-Chlorotoluene	U		0.114	0.500	1	05/07/2020 15:34	WG1472090

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FMW-140-042820

Collected date/time: 04/28/20 08:40

SAMPLE RESULTS - 01

L1213148

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,2-Dibromo-3-Chloropropane	U		0.276	2.50	1	05/07/2020 15:34	WG1472090
1,2-Dibromoethane	U		0.126	0.500	1	05/07/2020 15:34	WG1472090
Dibromomethane	U		0.122	0.500	1	05/07/2020 15:34	WG1472090
1,2-Dichlorobenzene	U		0.107	0.500	1	05/07/2020 15:34	WG1472090
1,3-Dichlorobenzene	U		0.299	0.500	1	05/07/2020 15:34	WG1472090
1,4-Dichlorobenzene	U		0.120	0.500	1	05/07/2020 15:34	WG1472090
Dichlorodifluoromethane	U		0.374	2.50	1	05/07/2020 15:34	WG1472090
1,1-Dichloroethane	0.370	J	0.100	0.500	1	05/07/2020 15:34	WG1472090
1,2-Dichloroethane	0.239	J	0.0819	0.500	1	05/07/2020 15:34	WG1472090
1,1-Dichloroethene	U		0.188	0.500	1	05/07/2020 15:34	WG1472090
cis-1,2-Dichloroethene	27.1		0.126	0.500	1	05/07/2020 15:34	WG1472090
trans-1,2-Dichloroethene	0.217	J	0.149	0.500	1	05/07/2020 15:34	WG1472090
1,2-Dichloropropane	U		0.149	0.500	1	05/07/2020 15:34	WG1472090
1,1-Dichloropropene	U		0.142	0.500	1	05/07/2020 15:34	WG1472090
1,3-Dichloropropane	U		0.109	1.00	1	05/07/2020 15:34	WG1472090
cis-1,3-Dichloropropene	U		0.111	0.500	1	05/07/2020 15:34	WG1472090
trans-1,3-Dichloropropene	U		0.118	0.500	1	05/07/2020 15:34	WG1472090
trans-1,4-Dichloro-2-butene	U		0.467	5.00	1	05/07/2020 15:34	WG1472090
2,2-Dichloropropane	U		0.161	0.500	1	05/07/2020 15:34	WG1472090
Di-isopropyl ether	0.479	J	0.105	0.500	1	05/07/2020 15:34	WG1472090
Ethylbenzene	U		0.137	0.500	1	05/07/2020 15:34	WG1472090
Hexachloro-1,3-butadiene	U		0.337	1.00	1	05/07/2020 15:34	WG1472090
2-Hexanone	U		0.787	5.00	1	05/07/2020 15:34	WG1472090
n-Hexane	U		0.749	5.00	1	05/07/2020 15:34	WG1472090
Iodomethane	U		0.554	5.00	1	05/07/2020 15:34	WG1472090
Isopropylbenzene	U		0.105	0.500	1	05/07/2020 15:34	WG1472090
p-Isopropyltoluene	U		0.120	0.500	1	05/07/2020 15:34	WG1472090
2-Butanone (MEK)	U		1.19	5.00	1	05/07/2020 15:34	WG1472090
Methylene Chloride	U		0.430	2.50	1	05/07/2020 15:34	WG1472090
4-Methyl-2-pentanone (MIBK)	U		0.478	5.00	1	05/07/2020 15:34	WG1472090
Methyl tert-butyl ether	0.333	J	0.101	0.500	1	05/07/2020 15:34	WG1472090
Naphthalene	U		0.174	2.50	1	05/07/2020 15:34	WG1472090
n-Propylbenzene	U		0.0993	0.500	1	05/07/2020 15:34	WG1472090
Styrene	U		0.118	0.500	1	05/07/2020 15:34	WG1472090
1,1,1,2-Tetrachloroethane	U		0.147	0.500	1	05/07/2020 15:34	WG1472090
1,1,2,2-Tetrachloroethane	U		0.133	0.500	1	05/07/2020 15:34	WG1472090
1,1,2-Trichlorotrifluoroethane	U		0.180	0.500	1	05/07/2020 15:34	WG1472090
Tetrachloroethene	U		0.300	0.500	1	05/07/2020 15:34	WG1472090
Toluene	U		0.278	0.500	1	05/07/2020 15:34	WG1472090
1,2,3-Trichlorobenzene	U		0.164	0.500	1	05/07/2020 15:34	WG1472090
1,2,4-Trichlorobenzene	U		0.481	1.00	1	05/07/2020 15:34	WG1472090
1,1,1-Trichloroethane	U		0.149	0.500	1	05/07/2020 15:34	WG1472090
1,1,2-Trichloroethane	U		0.158	0.500	1	05/07/2020 15:34	WG1472090
Trichloroethene	U		0.190	0.500	1	05/07/2020 15:34	WG1472090
Trichlorofluoromethane	U		0.160	2.50	1	05/07/2020 15:34	WG1472090
1,2,3-Trichloropropane	U		0.237	2.50	1	05/07/2020 15:34	WG1472090
1,2,4-Trimethylbenzene	U		0.322	0.500	1	05/07/2020 15:34	WG1472090
1,2,3-Trimethylbenzene	U		0.104	0.500	1	05/07/2020 15:34	WG1472090
1,3,5-Trimethylbenzene	U		0.104	0.500	1	05/07/2020 15:34	WG1472090
Vinyl acetate	U		0.692	5.00	1	05/07/2020 15:34	WG1472090
Vinyl chloride	147		0.234	0.500	1	05/07/2020 15:34	WG1472090
Xylenes, Total	U		0.174	1.50	1	05/07/2020 15:34	WG1472090
(S) Toluene-d8	*98.2*			*80.0-120*		*05/07/2020 15:34*	WG1472090
(S) 4-Bromofluorobenzene	*90.9*			*77.0-126*		*05/07/2020 15:34*	WG1472090
(S) 1,2-Dichloroethane-d4	*88.1*			*70.0-130*		*05/07/2020 15:34*	WG1472090

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Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	274000		8450	20000	1	05/01/2020 13:46	WG1468407

Sample Narrative:

L1213148-02 WG1468407: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	14800		379	1000	1	04/29/2020 13:04	WG1468009
Nitrate	U		48.0	100	1	04/29/2020 13:04	WG1468009
Sulfate	72000		594	5000	1	04/29/2020 13:04	WG1468009

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	3560		102	1000	1	04/30/2020 22:15	WG1468666

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	1190		48.9	100	1	05/01/2020 12:24	WG1469077
Manganese	172		1.32	5.00	1	05/01/2020 12:24	WG1469077

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	146	Z,J+ ~~B~~	31.6	100	1	05/02/2020 15:37	WG1469578
(S) a,a,a-Trifluorotoluene(FID)	*97.8*			*78.0-120*		*05/02/2020 15:37*	WG1469578

Sample Narrative:

L1213148-02 WG1469578: No discernable petroleum pattern.

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	25.0		0.287	0.678	1	04/30/2020 13:30	WG1468509
Ethane	U		0.296	1.29	1	04/30/2020 13:30	WG1468509
Ethene	U		0.422	1.27	1	04/30/2020 13:30	WG1468509

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U		11.3	25.0	1	05/02/2020 21:20	WG1469806
Acrylonitrile	U		0.671	5.00	1	05/02/2020 21:20	WG1469806
Benzene	0.172	J	0.0941	0.500	1	05/02/2020 21:20	WG1469806
Bromobenzene	U		0.118	0.500	1	05/02/2020 21:20	WG1469806
Bromodichloromethane	U		0.136	0.500	1	05/02/2020 21:20	WG1469806
Bromochloromethane	U		0.128	0.500	1	05/02/2020 21:20	WG1469806
Bromoform	U		0.129	0.500	1	05/02/2020 21:20	WG1469806
Bromomethane	U		0.605	2.50	1	05/02/2020 21:20	WG1469806
n-Butylbenzene	U		0.157	0.500	1	05/02/2020 21:20	WG1469806
sec-Butylbenzene	U		0.125	0.500	1	05/02/2020 21:20	WG1469806

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
tert-Butylbenzene	U		0.127	0.500	1	05/02/2020 21:20	WG1469806
Carbon disulfide	6.95	UJ J0	0.0962	0.500	1	05/02/2020 21:20	WG1469806
Carbon tetrachloride	U		0.128	0.500	1	05/02/2020 21:20	WG1469806
Chlorobenzene	U		0.117	0.500	1	05/02/2020 21:20	WG1469806
Chlorodibromomethane	U		0.140	0.500	1	05/02/2020 21:20	WG1469806
Chloroethane	U		0.192	2.50	1	05/02/2020 21:20	WG1469806
Chloroform	U		0.111	0.500	1	05/02/2020 21:20	WG1469806
Chloromethane	U		0.960	1.25	1	05/02/2020 21:20	WG1469806
2-Chlorotoluene	U		0.106	0.500	1	05/02/2020 21:20	WG1469806
4-Chlorotoluene	U		0.114	0.500	1	05/02/2020 21:20	WG1469806
1,2-Dibromo-3-Chloropropane	U		0.276	2.50	1	05/02/2020 21:20	WG1469806
1,2-Dibromoethane	U		0.126	0.500	1	05/02/2020 21:20	WG1469806
Dibromomethane	U		0.122	0.500	1	05/02/2020 21:20	WG1469806
1,2-Dichlorobenzene	U		0.107	0.500	1	05/02/2020 21:20	WG1469806
1,3-Dichlorobenzene	U		0.299	0.500	1	05/02/2020 21:20	WG1469806
1,4-Dichlorobenzene	U		0.120	0.500	1	05/02/2020 21:20	WG1469806
Dichlorodifluoromethane	U		0.374	2.50	1	05/02/2020 21:20	WG1469806
1,1-Dichloroethane	U		0.100	0.500	1	05/02/2020 21:20	WG1469806
1,2-Dichloroethane	U		0.0819	0.500	1	05/02/2020 21:20	WG1469806
1,1-Dichloroethene	U		0.188	0.500	1	05/02/2020 21:20	WG1469806
cis-1,2-Dichloroethene	U		0.126	0.500	1	05/02/2020 21:20	WG1469806
trans-1,2-Dichloroethene	U		0.149	0.500	1	05/02/2020 21:20	WG1469806
1,2-Dichloropropane	U		0.149	0.500	1	05/02/2020 21:20	WG1469806
1,1-Dichloropropene	U		0.142	0.500	1	05/02/2020 21:20	WG1469806
1,3-Dichloropropane	U		0.109	1.00	1	05/02/2020 21:20	WG1469806
cis-1,3-Dichloropropene	U		0.111	0.500	1	05/02/2020 21:20	WG1469806
trans-1,3-Dichloropropene	U		0.118	0.500	1	05/02/2020 21:20	WG1469806
trans-1,4-Dichloro-2-butene	U		0.467	5.00	1	05/02/2020 21:20	WG1469806
2,2-Dichloropropane	U		0.161	0.500	1	05/02/2020 21:20	WG1469806
Di-isopropyl ether	U		0.105	0.500	1	05/02/2020 21:20	WG1469806
Ethylbenzene	U		0.137	0.500	1	05/02/2020 21:20	WG1469806
Hexachloro-1,3-butadiene	U		0.337	1.00	1	05/02/2020 21:20	WG1469806
2-Hexanone	U		0.787	5.00	1	05/02/2020 21:20	WG1469806
n-Hexane	U		0.749	5.00	1	05/02/2020 21:20	WG1469806
Iodomethane	U	UJ J0	0.554	5.00	1	05/02/2020 21:20	WG1469806
Isopropylbenzene	U		0.105	0.500	1	05/02/2020 21:20	WG1469806
p-Isopropyltoluene	U		0.120	0.500	1	05/02/2020 21:20	WG1469806
2-Butanone (MEK)	U		1.19	5.00	1	05/02/2020 21:20	WG1469806
Methylene Chloride	U	UJ J0	0.430	2.50	1	05/02/2020 21:20	WG1469806
4-Methyl-2-pentanone (MIBK)	U		0.478	5.00	1	05/02/2020 21:20	WG1469806
Methyl tert-butyl ether	U		0.101	0.500	1	05/02/2020 21:20	WG1469806
Naphthalene	U		0.174	2.50	1	05/02/2020 21:20	WG1469806
n-Propylbenzene	U		0.0993	0.500	1	05/02/2020 21:20	WG1469806
Styrene	U		0.118	0.500	1	05/02/2020 21:20	WG1469806
1,1,1,2-Tetrachloroethane	U		0.147	0.500	1	05/02/2020 21:20	WG1469806
1,1,2,2-Tetrachloroethane	U		0.133	0.500	1	05/02/2020 21:20	WG1469806
1,1,2-Trichlorotrifluoroethane	U		0.180	0.500	1	05/02/2020 21:20	WG1469806
Tetrachloroethene	U		0.300	0.500	1	05/02/2020 21:20	WG1469806
Toluene	0.452	J	0.278	0.500	1	05/02/2020 21:20	WG1469806
1,2,3-Trichlorobenzene	U		0.164	0.500	1	05/02/2020 21:20	WG1469806
1,2,4-Trichlorobenzene	U		0.481	1.00	1	05/02/2020 21:20	WG1469806
1,1,1-Trichloroethane	U		0.149	0.500	1	05/02/2020 21:20	WG1469806
1,1,2-Trichloroethane	U		0.158	0.500	1	05/02/2020 21:20	WG1469806
Trichloroethene	U		0.190	0.500	1	05/02/2020 21:20	WG1469806
Trichlorofluoromethane	U		0.160	2.50	1	05/02/2020 21:20	WG1469806
1,2,3-Trichloropropane	U		0.237	2.50	1	05/02/2020 21:20	WG1469806

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,2,4-Trimethylbenzene	U		0.322	0.500	1	05/02/2020 21:20	WG1469806
1,2,3-Trimethylbenzene	U		0.104	0.500	1	05/02/2020 21:20	WG1469806
1,3,5-Trimethylbenzene	U		0.104	0.500	1	05/02/2020 21:20	WG1469806
Vinyl acetate	U		0.692	5.00	1	05/02/2020 21:20	WG1469806
Vinyl chloride	U		0.234	0.500	1	05/02/2020 21:20	WG1469806
Xylenes, Total	U		0.174	1.50	1	05/02/2020 21:20	WG1469806
(S) Toluene-d8	*109*			*80.0-120*		*05/02/2020 21:20*	WG1469806
(S) 4-Bromofluorobenzene	*103*			*77.0-126*		*05/02/2020 21:20*	WG1469806
(S) 1,2-Dichloroethane-d4	*108*			*70.0-130*		*05/02/2020 21:20*	WG1469806

JC 5/20/2020

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

Wet Chemistry by Method 2320 B-2011

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Alkalinity	167000		8450	20000	1	05/01/2020 13:56	WG1468407

Sample Narrative:

L1213148-03 WG1468407: Endpoint pH 4.5

Wet Chemistry by Method 9056A

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Chloride	16500		379	1000	1	04/29/2020 13:47	WG1468009
Nitrate	86.6	J	48.0	100	1	04/29/2020 13:47	WG1468009
Sulfate	3090	J	594	5000	1	04/29/2020 13:47	WG1468009

Wet Chemistry by Method 9060A

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
TOC (Total Organic Carbon)	4570		102	1000	1	04/30/2020 22:28	WG1468666

Metals (ICPMS) by Method 6020B

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Iron	1610		48.9	100	1	05/01/2020 12:27	WG1469077
Manganese	407		1.32	5.00	1	05/01/2020 12:27	WG1469077

Volatile Organic Compounds (GC) by Method RSK175

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Methane	2910		0.287	0.678	1	04/30/2020 13:34	WG1468509
Ethane	33.1		0.296	1.29	1	04/30/2020 13:34	WG1468509
Ethene	322		0.422	1.27	1	04/30/2020 13:34	WG1468509

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

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Acetone	U		56.5	125	5	05/02/2020 21:39	WG1469806
Acrylonitrile	U		3.36	25.0	5	05/02/2020 21:39	WG1469806
Benzene	U		0.471	2.50	5	05/02/2020 21:39	WG1469806
Bromobenzene	U		0.590	2.50	5	05/02/2020 21:39	WG1469806
Bromodichloromethane	U		0.680	2.50	5	05/02/2020 21:39	WG1469806
Bromochloromethane	U		0.640	2.50	5	05/02/2020 21:39	WG1469806
Bromoform	U		0.645	2.50	5	05/02/2020 21:39	WG1469806
Bromomethane	U		3.03	12.5	5	05/02/2020 21:39	WG1469806
n-Butylbenzene	U		0.785	2.50	5	05/02/2020 21:39	WG1469806
sec-Butylbenzene	U		0.625	2.50	5	05/02/2020 21:39	WG1469806
tert-Butylbenzene	U		0.635	2.50	5	05/02/2020 21:39	WG1469806
Carbon disulfide	U UJ	J0	0.481	2.50	5	05/02/2020 21:39	WG1469806
Carbon tetrachloride	U		0.640	2.50	5	05/02/2020 21:39	WG1469806
Chlorobenzene	U		0.585	2.50	5	05/02/2020 21:39	WG1469806
Chlorodibromomethane	U		0.700	2.50	5	05/02/2020 21:39	WG1469806
Chloroethane	U		0.960	12.5	5	05/02/2020 21:39	WG1469806
Chloroform	U		0.555	2.50	5	05/02/2020 21:39	WG1469806
Chloromethane	U		4.80	6.25	5	05/02/2020 21:39	WG1469806
2-Chlorotoluene	U		0.530	2.50	5	05/02/2020 21:39	WG1469806
4-Chlorotoluene	U		0.570	2.50	5	05/02/2020 21:39	WG1469806

JC 5/20/2020

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

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,2-Dibromo-3-Chloropropane	U		1.38	12.5	5	05/02/2020 21:39	WG1469806
1,2-Dibromoethane	U		0.630	2.50	5	05/02/2020 21:39	WG1469806
Dibromomethane	U		0.610	2.50	5	05/02/2020 21:39	WG1469806
1,2-Dichlorobenzene	U		0.535	2.50	5	05/02/2020 21:39	WG1469806
1,3-Dichlorobenzene	U		1.49	2.50	5	05/02/2020 21:39	WG1469806
1,4-Dichlorobenzene	U		0.600	2.50	5	05/02/2020 21:39	WG1469806
Dichlorodifluoromethane	U		1.87	12.5	5	05/02/2020 21:39	WG1469806
1,1-Dichloroethane	U		0.500	2.50	5	05/02/2020 21:39	WG1469806
1,2-Dichloroethane	U		0.409	2.50	5	05/02/2020 21:39	WG1469806
1,1-Dichloroethene	U		0.940	2.50	5	05/02/2020 21:39	WG1469806
cis-1,2-Dichloroethene	1300		2.52	10.0	20	05/07/2020 01:29	WG1471604
trans-1,2-Dichloroethene	4.62		0.745	2.50	5	05/02/2020 21:39	WG1469806
1,2-Dichloropropane	U		0.745	2.50	5	05/02/2020 21:39	WG1469806
1,1-Dichloropropene	U		0.710	2.50	5	05/02/2020 21:39	WG1469806
1,3-Dichloropropane	U		0.545	5.00	5	05/02/2020 21:39	WG1469806
cis-1,3-Dichloropropene	U		0.555	2.50	5	05/02/2020 21:39	WG1469806
trans-1,3-Dichloropropene	U		0.590	2.50	5	05/02/2020 21:39	WG1469806
trans-1,4-Dichloro-2-butene	U		2.34	25.0	5	05/02/2020 21:39	WG1469806
2,2-Dichloropropane	U		0.805	2.50	5	05/02/2020 21:39	WG1469806
Di-isopropyl ether	U		0.525	2.50	5	05/02/2020 21:39	WG1469806
Ethylbenzene	U		0.685	2.50	5	05/02/2020 21:39	WG1469806
Hexachloro-1,3-butadiene	U		1.69	5.00	5	05/02/2020 21:39	WG1469806
2-Hexanone	U		3.94	25.0	5	05/02/2020 21:39	WG1469806
n-Hexane	U		3.74	25.0	5	05/02/2020 21:39	WG1469806
Iodomethane	U UJ	J0	2.77	25.0	5	05/02/2020 21:39	WG1469806
Isopropylbenzene	U		0.525	2.50	5	05/02/2020 21:39	WG1469806
p-Isopropyltoluene	U		0.600	2.50	5	05/02/2020 21:39	WG1469806
2-Butanone (MEK)	U		5.95	25.0	5	05/02/2020 21:39	WG1469806
Methylene Chloride	U UJ	J0	2.15	12.5	5	05/02/2020 21:39	WG1469806
4-Methyl-2-pentanone (MIBK)	U		2.39	25.0	5	05/02/2020 21:39	WG1469806
Methyl tert-butyl ether	U		0.505	2.50	5	05/02/2020 21:39	WG1469806
Naphthalene	U		0.870	12.5	5	05/02/2020 21:39	WG1469806
n-Propylbenzene	U		0.497	2.50	5	05/02/2020 21:39	WG1469806
Styrene	U		0.590	2.50	5	05/02/2020 21:39	WG1469806
1,1,1,2-Tetrachloroethane	U		0.735	2.50	5	05/02/2020 21:39	WG1469806
1,1,2,2-Tetrachloroethane	U		0.665	2.50	5	05/02/2020 21:39	WG1469806
1,1,2-Trichlorotrifluoroethane	U		0.900	2.50	5	05/02/2020 21:39	WG1469806
Tetrachloroethene	U		1.50	2.50	5	05/02/2020 21:39	WG1469806
Toluene	U		1.39	2.50	5	05/02/2020 21:39	WG1469806
1,2,3-Trichlorobenzene	U		0.820	2.50	5	05/02/2020 21:39	WG1469806
1,2,4-Trichlorobenzene	U		2.41	5.00	5	05/02/2020 21:39	WG1469806
1,1,1-Trichloroethane	U		0.745	2.50	5	05/02/2020 21:39	WG1469806
1,1,2-Trichloroethane	U		0.790	2.50	5	05/02/2020 21:39	WG1469806
Trichloroethene	3.08		0.950	2.50	5	05/02/2020 21:39	WG1469806
Trichlorofluoromethane	U		0.800	12.5	5	05/02/2020 21:39	WG1469806
1,2,3-Trichloropropane	U		1.19	12.5	5	05/02/2020 21:39	WG1469806
1,2,4-Trimethylbenzene	U		1.61	2.50	5	05/02/2020 21:39	WG1469806
1,2,3-Trimethylbenzene	U		0.520	2.50	5	05/02/2020 21:39	WG1469806
1,3,5-Trimethylbenzene	U		0.520	2.50	5	05/02/2020 21:39	WG1469806
Vinyl acetate	U		3.46	25.0	5	05/02/2020 21:39	WG1469806
Vinyl chloride	468		1.17	2.50	5	05/02/2020 21:39	WG1469806
Xylenes, Total	U		0.870	7.50	5	05/02/2020 21:39	WG1469806
(S) Toluene-d8	*107*			*80.0-120*		*05/02/2020 21:39*	WG1469806
(S) Toluene-d8	*97.3*			*80.0-120*		*05/07/2020 01:29*	WG1471604
(S) 4-Bromofluorobenzene	*102*			*77.0-126*		*05/02/2020 21:39*	WG1469806
(S) 4-Bromofluorobenzene	*82.0*			*77.0-126*		*05/07/2020 01:29*	WG1471604

JC 5/20/2020

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
(S) 1,2-Dichloroethane-d4	*109*			*70.0-130*		*05/02/2020 21:39*	WG1469806
(S) 1,2-Dichloroethane-d4	*94.1*			*70.0-130*		*05/07/2020 01:29*	WG1471604

JC 5/20/2020

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

Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	105000		8450	20000	1	05/01/2020 14:05	WG1468407

Sample Narrative:

L1213148-04 WG1468407: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	48100		379	1000	1	04/29/2020 14:02	WG1468009
Nitrate	2100		48.0	100	1	04/29/2020 14:02	WG1468009
Sulfate	23000		594	5000	1	04/29/2020 14:02	WG1468009

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	921	~~B J~~	102	1000	1	04/30/2020 22:43	WG1468666

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	16000		48.9	100	1	05/01/2020 12:30	WG1469077
Manganese	221		1.32	5.00	1	05/01/2020 12:30	WG1469077

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	54.4	U ~~B J~~	31.6	100	1	05/02/2020 15:58	WG1469578
(S) a,a,a-Trifluorotoluene(FID)	*97.2*			*78.0-120*		*05/02/2020 15:58*	WG1469578

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	U		0.287	0.678	1	04/30/2020 13:37	WG1468509
Ethane	U		0.296	1.29	1	04/30/2020 13:37	WG1468509
Ethene	U		0.422	1.27	1	04/30/2020 13:37	WG1468509

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U		11.3	25.0	1	05/02/2020 21:58	WG1469806
Acrylonitrile	U		0.671	5.00	1	05/02/2020 21:58	WG1469806
Benzene	U		0.0941	0.500	1	05/02/2020 21:58	WG1469806
Bromobenzene	U		0.118	0.500	1	05/02/2020 21:58	WG1469806
Bromodichloromethane	U		0.136	0.500	1	05/02/2020 21:58	WG1469806
Bromochloromethane	U		0.128	0.500	1	05/02/2020 21:58	WG1469806
Bromoform	U		0.129	0.500	1	05/02/2020 21:58	WG1469806
Bromomethane	U		0.605	2.50	1	05/02/2020 21:58	WG1469806
n-Butylbenzene	U		0.157	0.500	1	05/02/2020 21:58	WG1469806
sec-Butylbenzene	U		0.125	0.500	1	05/02/2020 21:58	WG1469806
tert-Butylbenzene	U		0.127	0.500	1	05/02/2020 21:58	WG1469806
Carbon disulfide	U	UJ J0	0.0962	0.500	1	05/02/2020 21:58	WG1469806
Carbon tetrachloride	0.273	J	0.128	0.500	1	05/02/2020 21:58	WG1469806

JC 5/20/2020

MW-305-042820

Collected date/time: 04/28/20 12:55

SAMPLE RESULTS - 04

L1213148

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

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chlorobenzene	U		0.117	0.500	1	05/02/2020 21:58	WG1469806
Chlorodibromomethane	U		0.140	0.500	1	05/02/2020 21:58	WG1469806
Chloroethane	U		0.192	2.50	1	05/02/2020 21:58	WG1469806
Chloroform	U		0.111	0.500	1	05/02/2020 21:58	WG1469806
Chloromethane	U		0.960	1.25	1	05/02/2020 21:58	WG1469806
2-Chlorotoluene	U		0.106	0.500	1	05/02/2020 21:58	WG1469806
4-Chlorotoluene	U		0.114	0.500	1	05/02/2020 21:58	WG1469806
1,2-Dibromo-3-Chloropropane	U		0.276	2.50	1	05/02/2020 21:58	WG1469806
1,2-Dibromoethane	U		0.126	0.500	1	05/02/2020 21:58	WG1469806
Dibromomethane	U		0.122	0.500	1	05/02/2020 21:58	WG1469806
1,2-Dichlorobenzene	U		0.107	0.500	1	05/02/2020 21:58	WG1469806
1,3-Dichlorobenzene	U		0.299	0.500	1	05/02/2020 21:58	WG1469806
1,4-Dichlorobenzene	U		0.120	0.500	1	05/02/2020 21:58	WG1469806
Dichlorodifluoromethane	U		0.374	2.50	1	05/02/2020 21:58	WG1469806
1,1-Dichloroethane	U		0.100	0.500	1	05/02/2020 21:58	WG1469806
1,2-Dichloroethane	U		0.0819	0.500	1	05/02/2020 21:58	WG1469806
1,1-Dichloroethene	U		0.188	0.500	1	05/02/2020 21:58	WG1469806
cis-1,2-Dichloroethene	U		0.126	0.500	1	05/07/2020 01:50	WG1471604
trans-1,2-Dichloroethene	U		0.149	0.500	1	05/02/2020 21:58	WG1469806
1,2-Dichloropropane	U		0.149	0.500	1	05/02/2020 21:58	WG1469806
1,1-Dichloropropene	U		0.142	0.500	1	05/02/2020 21:58	WG1469806
1,3-Dichloropropane	U		0.109	1.00	1	05/02/2020 21:58	WG1469806
cis-1,3-Dichloropropene	U		0.111	0.500	1	05/02/2020 21:58	WG1469806
trans-1,3-Dichloropropene	U		0.118	0.500	1	05/02/2020 21:58	WG1469806
trans-1,4-Dichloro-2-butene	U		0.467	5.00	1	05/02/2020 21:58	WG1469806
2,2-Dichloropropane	U		0.161	0.500	1	05/02/2020 21:58	WG1469806
Di-isopropyl ether	U		0.105	0.500	1	05/02/2020 21:58	WG1469806
Ethylbenzene	U		0.137	0.500	1	05/02/2020 21:58	WG1469806
Hexachloro-1,3-butadiene	U		0.337	1.00	1	05/02/2020 21:58	WG1469806
2-Hexanone	U		0.787	5.00	1	05/02/2020 21:58	WG1469806
n-Hexane	U		0.749	5.00	1	05/02/2020 21:58	WG1469806
Iodomethane	U UJ	J0	0.554	5.00	1	05/02/2020 21:58	WG1469806
Isopropylbenzene	U		0.105	0.500	1	05/02/2020 21:58	WG1469806
p-Isopropyltoluene	U		0.120	0.500	1	05/02/2020 21:58	WG1469806
2-Butanone (MEK)	U		1.19	5.00	1	05/02/2020 21:58	WG1469806
Methylene Chloride	U UJ	J0	0.430	2.50	1	05/02/2020 21:58	WG1469806
4-Methyl-2-pentanone (MIBK)	U		0.478	5.00	1	05/02/2020 21:58	WG1469806
Methyl tert-butyl ether	U		0.101	0.500	1	05/02/2020 21:58	WG1469806
Naphthalene	U		0.174	2.50	1	05/02/2020 21:58	WG1469806
n-Propylbenzene	U		0.0993	0.500	1	05/02/2020 21:58	WG1469806
Styrene	U		0.118	0.500	1	05/02/2020 21:58	WG1469806
1,1,1,2-Tetrachloroethane	U		0.147	0.500	1	05/02/2020 21:58	WG1469806
1,1,2,2-Tetrachloroethane	U		0.133	0.500	1	05/02/2020 21:58	WG1469806
1,1,2-Trichlorotrifluoroethane	U		0.180	0.500	1	05/02/2020 21:58	WG1469806
Tetrachloroethene	U		0.300	0.500	1	05/02/2020 21:58	WG1469806
Toluene	U		0.278	0.500	1	05/02/2020 21:58	WG1469806
1,2,3-Trichlorobenzene	U		0.164	0.500	1	05/02/2020 21:58	WG1469806
1,2,4-Trichlorobenzene	U		0.481	1.00	1	05/02/2020 21:58	WG1469806
1,1,1-Trichloroethane	U		0.149	0.500	1	05/02/2020 21:58	WG1469806
1,1,2-Trichloroethane	U		0.158	0.500	1	05/02/2020 21:58	WG1469806
Trichloroethene	U		0.190	0.500	1	05/02/2020 21:58	WG1469806
Trichlorofluoromethane	U		0.160	2.50	1	05/02/2020 21:58	WG1469806
1,2,3-Trichloropropane	U		0.237	2.50	1	05/02/2020 21:58	WG1469806
1,2,4-Trimethylbenzene	U		0.322	0.500	1	05/02/2020 21:58	WG1469806
1,2,3-Trimethylbenzene	U		0.104	0.500	1	05/02/2020 21:58	WG1469806
1,3,5-Trimethylbenzene	U		0.104	0.500	1	05/02/2020 21:58	WG1469806

JC 5/20/2020

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Vinyl acetate	U		0.692	5.00	1	05/02/2020 21:58	WG1469806
Vinyl chloride	U		0.234	0.500	1	05/02/2020 21:58	WG1469806
Xylenes, Total	U		0.174	1.50	1	05/02/2020 21:58	WG1469806
(S) Toluene-d8	*107*			*80.0-120*		*05/02/2020 21:58*	WG1469806
(S) Toluene-d8	*95.6*			*80.0-120*		*05/07/2020 01:50*	WG1471604
(S) 4-Bromofluorobenzene	*102*			*77.0-126*		*05/02/2020 21:58*	WG1469806
(S) 4-Bromofluorobenzene	*83.6*			*77.0-126*		*05/07/2020 01:50*	WG1471604
(S) 1,2-Dichloroethane-d4	*108*			*70.0-130*		*05/02/2020 21:58*	WG1469806
(S) 1,2-Dichloroethane-d4	*104*			*70.0-130*		*05/07/2020 01:50*	WG1471604

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Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	363000		8450	20000	1	05/01/2020 14:14	WG1468407

Sample Narrative:

L1213148-05 WG1468407: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	23900		379	1000	1	04/29/2020 14:45	WG1468009
Nitrate	U		48.0	100	1	04/29/2020 14:45	WG1468009
Sulfate	7040		594	5000	1	04/29/2020 14:45	WG1468009

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	5730		102	1000	1	04/30/2020 23:43	WG1468666

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	5550		48.9	100	1	05/01/2020 12:34	WG1469077
Manganese	273		1.32	5.00	1	05/01/2020 12:34	WG1469077

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	9280		2.87	6.78	10	05/01/2020 10:28	WG1469136
Ethane	U		0.296	1.29	1	04/30/2020 13:39	WG1468509
Ethene	U		0.422	1.27	1	04/30/2020 13:39	WG1468509

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U		11.3	25.0	1	05/02/2020 22:17	WG1469806
Acrylonitrile	U		0.671	5.00	1	05/02/2020 22:17	WG1469806
Benzene	U		0.0941	0.500	1	05/02/2020 22:17	WG1469806
Bromobenzene	U		0.118	0.500	1	05/02/2020 22:17	WG1469806
Bromodichloromethane	U		0.136	0.500	1	05/02/2020 22:17	WG1469806
Bromochloromethane	U		0.128	0.500	1	05/02/2020 22:17	WG1469806
Bromoform	U		0.129	0.500	1	05/02/2020 22:17	WG1469806
Bromomethane	U		0.605	2.50	1	05/02/2020 22:17	WG1469806
n-Butylbenzene	U		0.157	0.500	1	05/02/2020 22:17	WG1469806
sec-Butylbenzene	U		0.125	0.500	1	05/02/2020 22:17	WG1469806
tert-Butylbenzene	U		0.127	0.500	1	05/02/2020 22:17	WG1469806
Carbon disulfide	U	UJ J0	0.0962	0.500	1	05/02/2020 22:17	WG1469806
Carbon tetrachloride	U		0.128	0.500	1	05/02/2020 22:17	WG1469806
Chlorobenzene	U		0.117	0.500	1	05/02/2020 22:17	WG1469806
Chlorodibromomethane	U		0.140	0.500	1	05/02/2020 22:17	WG1469806
Chloroethane	U		0.192	2.50	1	05/02/2020 22:17	WG1469806
Chloroform	U		0.111	0.500	1	05/02/2020 22:17	WG1469806
Chloromethane	U		0.960	1.25	1	05/02/2020 22:17	WG1469806
2-Chlorotoluene	U		0.106	0.500	1	05/02/2020 22:17	WG1469806
4-Chlorotoluene	U		0.114	0.500	1	05/02/2020 22:17	WG1469806

JC 5/20/2020

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,2-Dibromo-3-Chloropropane	U		0.276	2.50	1	05/02/2020 22:17	WG1469806
1,2-Dibromoethane	U		0.126	0.500	1	05/02/2020 22:17	WG1469806
Dibromomethane	U		0.122	0.500	1	05/02/2020 22:17	WG1469806
1,2-Dichlorobenzene	U		0.107	0.500	1	05/02/2020 22:17	WG1469806
1,3-Dichlorobenzene	U		0.299	0.500	1	05/02/2020 22:17	WG1469806
1,4-Dichlorobenzene	U		0.120	0.500	1	05/02/2020 22:17	WG1469806
Dichlorodifluoromethane	U		0.374	2.50	1	05/02/2020 22:17	WG1469806
1,1-Dichloroethane	U		0.100	0.500	1	05/02/2020 22:17	WG1469806
1,2-Dichloroethane	U		0.0819	0.500	1	05/02/2020 22:17	WG1469806
1,1-Dichloroethene	U		0.188	0.500	1	05/02/2020 22:17	WG1469806
cis-1,2-Dichloroethene	U		0.126	0.500	1	05/02/2020 22:17	WG1469806
trans-1,2-Dichloroethene	U		0.149	0.500	1	05/02/2020 22:17	WG1469806
1,2-Dichloropropane	U		0.149	0.500	1	05/02/2020 22:17	WG1469806
1,1-Dichloropropene	U		0.142	0.500	1	05/02/2020 22:17	WG1469806
1,3-Dichloropropane	U		0.109	1.00	1	05/02/2020 22:17	WG1469806
cis-1,3-Dichloropropene	U		0.111	0.500	1	05/02/2020 22:17	WG1469806
trans-1,3-Dichloropropene	U		0.118	0.500	1	05/02/2020 22:17	WG1469806
trans-1,4-Dichloro-2-butene	U		0.467	5.00	1	05/02/2020 22:17	WG1469806
2,2-Dichloropropane	U		0.161	0.500	1	05/02/2020 22:17	WG1469806
Di-isopropyl ether	U		0.105	0.500	1	05/02/2020 22:17	WG1469806
Ethylbenzene	U		0.137	0.500	1	05/02/2020 22:17	WG1469806
Hexachloro-1,3-butadiene	U		0.337	1.00	1	05/02/2020 22:17	WG1469806
2-Hexanone	U		0.787	5.00	1	05/02/2020 22:17	WG1469806
n-Hexane	U		0.749	5.00	1	05/02/2020 22:17	WG1469806
Iodomethane	U	UJ J0	0.554	5.00	1	05/02/2020 22:17	WG1469806
Isopropylbenzene	U		0.105	0.500	1	05/02/2020 22:17	WG1469806
p-Isopropyltoluene	U		0.120	0.500	1	05/02/2020 22:17	WG1469806
2-Butanone (MEK)	U		1.19	5.00	1	05/02/2020 22:17	WG1469806
Methylene Chloride	U	UJ J0	0.430	2.50	1	05/02/2020 22:17	WG1469806
4-Methyl-2-pentanone (MIBK)	U		0.478	5.00	1	05/02/2020 22:17	WG1469806
Methyl tert-butyl ether	U		0.101	0.500	1	05/02/2020 22:17	WG1469806
Naphthalene	U		0.174	2.50	1	05/02/2020 22:17	WG1469806
n-Propylbenzene	U		0.0993	0.500	1	05/02/2020 22:17	WG1469806
Styrene	U		0.118	0.500	1	05/02/2020 22:17	WG1469806
1,1,1,2-Tetrachloroethane	U		0.147	0.500	1	05/02/2020 22:17	WG1469806
1,1,2,2-Tetrachloroethane	U		0.133	0.500	1	05/02/2020 22:17	WG1469806
1,1,2-Trichlorotrifluoroethane	U		0.180	0.500	1	05/02/2020 22:17	WG1469806
Tetrachloroethene	U		0.300	0.500	1	05/02/2020 22:17	WG1469806
Toluene	U		0.278	0.500	1	05/02/2020 22:17	WG1469806
1,2,3-Trichlorobenzene	U		0.164	0.500	1	05/02/2020 22:17	WG1469806
1,2,4-Trichlorobenzene	U		0.481	1.00	1	05/02/2020 22:17	WG1469806
1,1,1-Trichloroethane	U		0.149	0.500	1	05/02/2020 22:17	WG1469806
1,1,2-Trichloroethane	U		0.158	0.500	1	05/02/2020 22:17	WG1469806
Trichloroethene	U		0.190	0.500	1	05/02/2020 22:17	WG1469806
Trichlorofluoromethane	U		0.160	2.50	1	05/02/2020 22:17	WG1469806
1,2,3-Trichloropropane	U		0.237	2.50	1	05/02/2020 22:17	WG1469806
1,2,4-Trimethylbenzene	U		0.322	0.500	1	05/02/2020 22:17	WG1469806
1,2,3-Trimethylbenzene	U		0.104	0.500	1	05/02/2020 22:17	WG1469806
1,3,5-Trimethylbenzene	U		0.104	0.500	1	05/02/2020 22:17	WG1469806
Vinyl acetate	U		0.692	5.00	1	05/02/2020 22:17	WG1469806
Vinyl chloride	U		0.234	0.500	1	05/02/2020 22:17	WG1469806
Xylenes, Total	U		0.174	1.50	1	05/02/2020 22:17	WG1469806
(S) Toluene-d8	*108*			*80.0-120*		*05/02/2020 22:17*	WG1469806
(S) 4-Bromofluorobenzene	*101*			*77.0-126*		*05/02/2020 22:17*	WG1469806
(S) 1,2-Dichloroethane-d4	*110*			*70.0-130*		*05/02/2020 22:17*	WG1469806

JC 5/20/2020

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

Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	192000		8450	20000	1	05/01/2020 14:33	WG1468407

Sample Narrative:

L1213148-06 WG1468407: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	10300		379	1000	1	04/29/2020 15:00	WG1468009
Nitrate	U		48.0	100	1	04/29/2020 15:00	WG1468009
Sulfate	75800		594	5000	1	04/29/2020 15:00	WG1468009

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	3030	~~B~~	102	1000	1	05/05/2020 13:44	WG1470661

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	2940		48.9	100	1	05/01/2020 12:37	WG1469077
Manganese	483		1.32	5.00	1	05/01/2020 12:37	WG1469077

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	42.7	UJ ~~B J~~	31.6	100	1	05/02/2020 16:20	WG1469578
(S) a,a,a-Trifluorotoluene(FID)	*97.2*			*78.0-120*		*05/02/2020 16:20*	WG1469578

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	U		0.287	0.678	1	04/30/2020 13:43	WG1468509
Ethane	U		0.296	1.29	1	04/30/2020 13:43	WG1468509
Ethene	U		0.422	1.27	1	04/30/2020 13:43	WG1468509

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U		11.3	25.0	1	05/02/2020 22:36	WG1469806
Acrylonitrile	U		0.671	5.00	1	05/02/2020 22:36	WG1469806
Benzene	U		0.0941	0.500	1	05/02/2020 22:36	WG1469806
Bromobenzene	U		0.118	0.500	1	05/02/2020 22:36	WG1469806
Bromodichloromethane	U		0.136	0.500	1	05/02/2020 22:36	WG1469806
Bromochloromethane	U		0.128	0.500	1	05/02/2020 22:36	WG1469806
Bromoform	U		0.129	0.500	1	05/02/2020 22:36	WG1469806
Bromomethane	U		0.605	2.50	1	05/02/2020 22:36	WG1469806
n-Butylbenzene	U		0.157	0.500	1	05/02/2020 22:36	WG1469806
sec-Butylbenzene	U		0.125	0.500	1	05/02/2020 22:36	WG1469806
tert-Butylbenzene	U		0.127	0.500	1	05/02/2020 22:36	WG1469806
Carbon disulfide	U	UJ J0	0.0962	0.500	1	05/02/2020 22:36	WG1469806
Carbon tetrachloride	U		0.128	0.500	1	05/02/2020 22:36	WG1469806

JC 5/20/2020

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

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chlorobenzene	U		0.117	0.500	1	05/02/2020 22:36	WG1469806
Chlorodibromomethane	U		0.140	0.500	1	05/02/2020 22:36	WG1469806
Chloroethane	U		0.192	2.50	1	05/02/2020 22:36	WG1469806
Chloroform	U		0.111	0.500	1	05/02/2020 22:36	WG1469806
Chloromethane	U		0.960	1.25	1	05/02/2020 22:36	WG1469806
2-Chlorotoluene	U		0.106	0.500	1	05/02/2020 22:36	WG1469806
4-Chlorotoluene	U		0.114	0.500	1	05/02/2020 22:36	WG1469806
1,2-Dibromo-3-Chloropropane	U		0.276	2.50	1	05/02/2020 22:36	WG1469806
1,2-Dibromoethane	U		0.126	0.500	1	05/02/2020 22:36	WG1469806
Dibromomethane	U		0.122	0.500	1	05/02/2020 22:36	WG1469806
1,2-Dichlorobenzene	U		0.107	0.500	1	05/02/2020 22:36	WG1469806
1,3-Dichlorobenzene	U		0.299	0.500	1	05/02/2020 22:36	WG1469806
1,4-Dichlorobenzene	U		0.120	0.500	1	05/02/2020 22:36	WG1469806
Dichlorodifluoromethane	U		0.374	2.50	1	05/02/2020 22:36	WG1469806
1,1-Dichloroethane	U		0.100	0.500	1	05/02/2020 22:36	WG1469806
1,2-Dichloroethane	U		0.0819	0.500	1	05/02/2020 22:36	WG1469806
1,1-Dichloroethene	U		0.188	0.500	1	05/02/2020 22:36	WG1469806
cis-1,2-Dichloroethene	U		0.126	0.500	1	05/02/2020 22:36	WG1469806
trans-1,2-Dichloroethene	U		0.149	0.500	1	05/02/2020 22:36	WG1469806
1,2-Dichloropropane	U		0.149	0.500	1	05/02/2020 22:36	WG1469806
1,1-Dichloropropene	U		0.142	0.500	1	05/02/2020 22:36	WG1469806
1,3-Dichloropropane	U		0.109	1.00	1	05/02/2020 22:36	WG1469806
cis-1,3-Dichloropropene	U		0.111	0.500	1	05/02/2020 22:36	WG1469806
trans-1,3-Dichloropropene	U		0.118	0.500	1	05/02/2020 22:36	WG1469806
trans-1,4-Dichloro-2-butene	U		0.467	5.00	1	05/02/2020 22:36	WG1469806
2,2-Dichloropropane	U		0.161	0.500	1	05/02/2020 22:36	WG1469806
Di-isopropyl ether	U		0.105	0.500	1	05/02/2020 22:36	WG1469806
Ethylbenzene	U		0.137	0.500	1	05/02/2020 22:36	WG1469806
Hexachloro-1,3-butadiene	U		0.337	1.00	1	05/02/2020 22:36	WG1469806
2-Hexanone	U		0.787	5.00	1	05/02/2020 22:36	WG1469806
n-Hexane	U		0.749	5.00	1	05/02/2020 22:36	WG1469806
Iodomethane	U	UJ J0	0.554	5.00	1	05/02/2020 22:36	WG1469806
Isopropylbenzene	U		0.105	0.500	1	05/02/2020 22:36	WG1469806
p-Isopropyltoluene	U		0.120	0.500	1	05/02/2020 22:36	WG1469806
2-Butanone (MEK)	U		1.19	5.00	1	05/02/2020 22:36	WG1469806
Methylene Chloride	U	UJ J0	0.430	2.50	1	05/02/2020 22:36	WG1469806
4-Methyl-2-pentanone (MIBK)	U		0.478	5.00	1	05/02/2020 22:36	WG1469806
Methyl tert-butyl ether	U		0.101	0.500	1	05/02/2020 22:36	WG1469806
Naphthalene	U		0.174	2.50	1	05/02/2020 22:36	WG1469806
n-Propylbenzene	U		0.0993	0.500	1	05/02/2020 22:36	WG1469806
Styrene	U		0.118	0.500	1	05/02/2020 22:36	WG1469806
1,1,1,2-Tetrachloroethane	U		0.147	0.500	1	05/02/2020 22:36	WG1469806
1,1,2,2-Tetrachloroethane	U		0.133	0.500	1	05/02/2020 22:36	WG1469806
1,1,2-Trichlorotrifluoroethane	U		0.180	0.500	1	05/02/2020 22:36	WG1469806
Tetrachloroethene	U		0.300	0.500	1	05/02/2020 22:36	WG1469806
Toluene	U		0.278	0.500	1	05/02/2020 22:36	WG1469806
1,2,3-Trichlorobenzene	U		0.164	0.500	1	05/02/2020 22:36	WG1469806
1,2,4-Trichlorobenzene	U		0.481	1.00	1	05/02/2020 22:36	WG1469806
1,1,1-Trichloroethane	U		0.149	0.500	1	05/02/2020 22:36	WG1469806
1,1,2-Trichloroethane	U		0.158	0.500	1	05/02/2020 22:36	WG1469806
Trichloroethene	U		0.190	0.500	1	05/02/2020 22:36	WG1469806
Trichlorofluoromethane	U		0.160	2.50	1	05/02/2020 22:36	WG1469806
1,2,3-Trichloropropane	U		0.237	2.50	1	05/02/2020 22:36	WG1469806
1,2,4-Trimethylbenzene	U		0.322	0.500	1	05/02/2020 22:36	WG1469806
1,2,3-Trimethylbenzene	U		0.104	0.500	1	05/02/2020 22:36	WG1469806
1,3,5-Trimethylbenzene	U		0.104	0.500	1	05/02/2020 22:36	WG1469806

JC 5/20/2020

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Vinyl acetate	U		0.692	5.00	1	05/02/2020 22:36	WG1469806
Vinyl chloride	U		0.234	0.500	1	05/02/2020 22:36	WG1469806
Xylenes, Total	U		0.174	1.50	1	05/02/2020 22:36	WG1469806
(S) Toluene-d8	*107*			*80.0-120*		*05/02/2020 22:36*	WG1469806
(S) 4-Bromofluorobenzene	*101*			*77.0-126*		*05/02/2020 22:36*	WG1469806
(S) 1,2-Dichloroethane-d4	*109*			*70.0-130*		*05/02/2020 22:36*	WG1469806

JC 5/20/2020

Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	287000		8450	20000	1	05/05/2020 07:12	WG1469122

Sample Narrative:

L1213621-01 WG1469122: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	15800		379	1000	1	04/30/2020 22:46	WG1468704
Nitrate	181		48.0	100	1	04/30/2020 22:46	WG1468704
Sulfate	36200		594	5000	1	04/30/2020 22:46	WG1468704

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	4970		102	1000	1	05/01/2020 23:24	WG1469258

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	6570		48.9	100	1	05/06/2020 07:53	WG1469555
Manganese	1310	~~V~~	1.32	5.00	1	05/06/2020 07:53	WG1469555

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	7980		2.87	6.78	10	05/07/2020 09:36	WG1471907
Ethane	U		0.296	1.29	1	05/06/2020 10:48	WG1470548
Ethene	U		0.422	1.27	1	05/06/2020 10:48	WG1470548

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U		11.3	25.0	1	05/02/2020 22:55	WG1469806
Acrylonitrile	U		0.671	5.00	1	05/02/2020 22:55	WG1469806
Benzene	U		0.0941	0.500	1	05/02/2020 22:55	WG1469806
Bromobenzene	U		0.118	0.500	1	05/02/2020 22:55	WG1469806
Bromodichloromethane	U		0.136	0.500	1	05/02/2020 22:55	WG1469806
Bromochloromethane	U		0.128	0.500	1	05/02/2020 22:55	WG1469806
Bromoform	U		0.129	0.500	1	05/02/2020 22:55	WG1469806
Bromomethane	U		0.605	2.50	1	05/02/2020 22:55	WG1469806
n-Butylbenzene	U		0.157	0.500	1	05/02/2020 22:55	WG1469806
sec-Butylbenzene	U		0.125	0.500	1	05/02/2020 22:55	WG1469806
tert-Butylbenzene	U		0.127	0.500	1	05/02/2020 22:55	WG1469806
Carbon disulfide	U UJ	J0	0.0962	0.500	1	05/02/2020 22:55	WG1469806
Carbon tetrachloride	U		0.128	0.500	1	05/02/2020 22:55	WG1469806
Chlorobenzene	U		0.117	0.500	1	05/02/2020 22:55	WG1469806
Chlorodibromomethane	U		0.140	0.500	1	05/02/2020 22:55	WG1469806
Chloroethane	U		0.192	2.50	1	05/02/2020 22:55	WG1469806
Chloroform	U		0.111	0.500	1	05/02/2020 22:55	WG1469806
Chloromethane	U		0.960	1.25	1	05/02/2020 22:55	WG1469806
2-Chlorotoluene	U		0.106	0.500	1	05/02/2020 22:55	WG1469806
4-Chlorotoluene	U		0.114	0.500	1	05/02/2020 22:55	WG1469806

JC 5/20/2020

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,2-Dibromo-3-Chloropropane	U		0.276	2.50	1	05/02/2020 22:55	WG1469806
1,2-Dibromoethane	U		0.126	0.500	1	05/02/2020 22:55	WG1469806
Dibromomethane	U		0.122	0.500	1	05/02/2020 22:55	WG1469806
1,2-Dichlorobenzene	U		0.107	0.500	1	05/02/2020 22:55	WG1469806
1,3-Dichlorobenzene	U		0.299	0.500	1	05/02/2020 22:55	WG1469806
1,4-Dichlorobenzene	U		0.120	0.500	1	05/02/2020 22:55	WG1469806
Dichlorodifluoromethane	U		0.374	2.50	1	05/02/2020 22:55	WG1469806
1,1-Dichloroethane	U		0.100	0.500	1	05/02/2020 22:55	WG1469806
1,2-Dichloroethane	U		0.0819	0.500	1	05/02/2020 22:55	WG1469806
1,1-Dichloroethene	U		0.188	0.500	1	05/02/2020 22:55	WG1469806
cis-1,2-Dichloroethene	U		0.126	0.500	1	05/02/2020 22:55	WG1469806
trans-1,2-Dichloroethene	U		0.149	0.500	1	05/02/2020 22:55	WG1469806
1,2-Dichloropropane	U		0.149	0.500	1	05/02/2020 22:55	WG1469806
1,1-Dichloropropene	U		0.142	0.500	1	05/02/2020 22:55	WG1469806
1,3-Dichloropropane	U		0.109	1.00	1	05/02/2020 22:55	WG1469806
cis-1,3-Dichloropropene	U		0.111	0.500	1	05/02/2020 22:55	WG1469806
trans-1,3-Dichloropropene	U		0.118	0.500	1	05/02/2020 22:55	WG1469806
trans-1,4-Dichloro-2-butene	U		0.467	5.00	1	05/02/2020 22:55	WG1469806
2,2-Dichloropropane	U		0.161	0.500	1	05/02/2020 22:55	WG1469806
Di-isopropyl ether	U		0.105	0.500	1	05/02/2020 22:55	WG1469806
Ethylbenzene	U		0.137	0.500	1	05/02/2020 22:55	WG1469806
Hexachloro-1,3-butadiene	U		0.337	1.00	1	05/02/2020 22:55	WG1469806
2-Hexanone	U		0.787	5.00	1	05/02/2020 22:55	WG1469806
n-Hexane	U		0.749	5.00	1	05/02/2020 22:55	WG1469806
Iodomethane	U	UJ J0	0.554	5.00	1	05/02/2020 22:55	WG1469806
Isopropylbenzene	U		0.105	0.500	1	05/02/2020 22:55	WG1469806
p-Isopropyltoluene	U		0.120	0.500	1	05/02/2020 22:55	WG1469806
2-Butanone (MEK)	U		1.19	5.00	1	05/02/2020 22:55	WG1469806
Methylene Chloride	U	UJ J0	0.430	2.50	1	05/02/2020 22:55	WG1469806
4-Methyl-2-pentanone (MIBK)	U		0.478	5.00	1	05/02/2020 22:55	WG1469806
Methyl tert-butyl ether	U		0.101	0.500	1	05/02/2020 22:55	WG1469806
Naphthalene	U		0.174	2.50	1	05/02/2020 22:55	WG1469806
n-Propylbenzene	U		0.0993	0.500	1	05/02/2020 22:55	WG1469806
Styrene	U		0.118	0.500	1	05/02/2020 22:55	WG1469806
1,1,1,2-Tetrachloroethane	U		0.147	0.500	1	05/02/2020 22:55	WG1469806
1,1,2,2-Tetrachloroethane	U		0.133	0.500	1	05/02/2020 22:55	WG1469806
1,1,2-Trichlorotrifluoroethane	U		0.180	0.500	1	05/02/2020 22:55	WG1469806
Tetrachloroethene	U		0.300	0.500	1	05/02/2020 22:55	WG1469806
Toluene	0.286	J	0.278	0.500	1	05/02/2020 22:55	WG1469806
1,2,3-Trichlorobenzene	U		0.164	0.500	1	05/02/2020 22:55	WG1469806
1,2,4-Trichlorobenzene	U		0.481	1.00	1	05/02/2020 22:55	WG1469806
1,1,1-Trichloroethane	U		0.149	0.500	1	05/02/2020 22:55	WG1469806
1,1,2-Trichloroethane	U		0.158	0.500	1	05/02/2020 22:55	WG1469806
Trichloroethene	U		0.190	0.500	1	05/02/2020 22:55	WG1469806
Trichlorofluoromethane	U		0.160	2.50	1	05/02/2020 22:55	WG1469806
1,2,3-Trichloropropane	U		0.237	2.50	1	05/02/2020 22:55	WG1469806
1,2,4-Trimethylbenzene	U		0.322	0.500	1	05/02/2020 22:55	WG1469806
1,2,3-Trimethylbenzene	U		0.104	0.500	1	05/02/2020 22:55	WG1469806
1,3,5-Trimethylbenzene	U		0.104	0.500	1	05/02/2020 22:55	WG1469806
Vinyl acetate	U		0.692	5.00	1	05/02/2020 22:55	WG1469806
Vinyl chloride	U		0.234	0.500	1	05/02/2020 22:55	WG1469806
Xylenes, Total	U		0.174	1.50	1	05/02/2020 22:55	WG1469806
(S) Toluene-d8	*106*			*80.0-120*		*05/02/2020 22:55*	WG1469806
(S) 4-Bromofluorobenzene	*102*			*77.0-126*		*05/02/2020 22:55*	WG1469806
(S) 1,2-Dichloroethane-d4	*110*			*70.0-130*		*05/02/2020 22:55*	WG1469806

JC 5/20/2020

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

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	282000		8450	20000	1	05/05/2020 07:29	WG1469122

Sample Narrative:

L1213621-02 WG1469122: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	56500		379	1000	1	04/30/2020 23:04	WG1468704
Nitrate	U		48.0	100	1	04/30/2020 23:04	WG1468704
Sulfate	67000		594	5000	1	04/30/2020 23:04	WG1468704

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	4700		102	1000	1	05/01/2020 23:46	WG1469258

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	5330		48.9	100	1	05/06/2020 08:53	WG1469555
Manganese	3660		1.32	5.00	1	05/06/2020 08:53	WG1469555

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	158		0.287	0.678	1	05/06/2020 11:06	WG1470548
Ethane	U		0.296	1.29	1	05/06/2020 11:06	WG1470548
Ethene	U		0.422	1.27	1	05/06/2020 11:06	WG1470548

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U		11.3	25.0	1	05/02/2020 23:15	WG1469806
Acrylonitrile	U		0.671	5.00	1	05/02/2020 23:15	WG1469806
Benzene	U		0.0941	0.500	1	05/02/2020 23:15	WG1469806
Bromobenzene	U		0.118	0.500	1	05/02/2020 23:15	WG1469806
Bromodichloromethane	U		0.136	0.500	1	05/02/2020 23:15	WG1469806
Bromochloromethane	U		0.128	0.500	1	05/02/2020 23:15	WG1469806
Bromoform	U		0.129	0.500	1	05/02/2020 23:15	WG1469806
Bromomethane	U		0.605	2.50	1	05/02/2020 23:15	WG1469806
n-Butylbenzene	U		0.157	0.500	1	05/02/2020 23:15	WG1469806
sec-Butylbenzene	U		0.125	0.500	1	05/02/2020 23:15	WG1469806
tert-Butylbenzene	0.865		0.127	0.500	1	05/02/2020 23:15	WG1469806
Carbon disulfide	U	UJ J0	0.0962	0.500	1	05/02/2020 23:15	WG1469806
Carbon tetrachloride	U		0.128	0.500	1	05/02/2020 23:15	WG1469806
Chlorobenzene	U		0.117	0.500	1	05/02/2020 23:15	WG1469806
Chlorodibromomethane	U		0.140	0.500	1	05/02/2020 23:15	WG1469806
Chloroethane	U		0.192	2.50	1	05/02/2020 23:15	WG1469806
Chloroform	U		0.111	0.500	1	05/02/2020 23:15	WG1469806
Chloromethane	U		0.960	1.25	1	05/02/2020 23:15	WG1469806
2-Chlorotoluene	U		0.106	0.500	1	05/02/2020 23:15	WG1469806
4-Chlorotoluene	U		0.114	0.500	1	05/02/2020 23:15	WG1469806

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Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,2-Dibromo-3-Chloropropane	U		0.276	2.50	1	05/02/2020 23:15	WG1469806
1,2-Dibromoethane	U		0.126	0.500	1	05/02/2020 23:15	WG1469806
Dibromomethane	U		0.122	0.500	1	05/02/2020 23:15	WG1469806
1,2-Dichlorobenzene	U		0.107	0.500	1	05/02/2020 23:15	WG1469806
1,3-Dichlorobenzene	U		0.299	0.500	1	05/02/2020 23:15	WG1469806
1,4-Dichlorobenzene	U		0.120	0.500	1	05/02/2020 23:15	WG1469806
Dichlorodifluoromethane	U		0.374	2.50	1	05/02/2020 23:15	WG1469806
1,1-Dichloroethane	U		0.100	0.500	1	05/02/2020 23:15	WG1469806
1,2-Dichloroethane	U		0.0819	0.500	1	05/02/2020 23:15	WG1469806
1,1-Dichloroethene	U		0.188	0.500	1	05/02/2020 23:15	WG1469806
cis-1,2-Dichloroethene	U		0.126	0.500	1	05/02/2020 23:15	WG1469806
trans-1,2-Dichloroethene	U		0.149	0.500	1	05/02/2020 23:15	WG1469806
1,2-Dichloropropane	U		0.149	0.500	1	05/02/2020 23:15	WG1469806
1,1-Dichloropropene	U		0.142	0.500	1	05/02/2020 23:15	WG1469806
1,3-Dichloropropane	U		0.109	1.00	1	05/02/2020 23:15	WG1469806
cis-1,3-Dichloropropene	U		0.111	0.500	1	05/02/2020 23:15	WG1469806
trans-1,3-Dichloropropene	U		0.118	0.500	1	05/02/2020 23:15	WG1469806
trans-1,4-Dichloro-2-butene	U		0.467	5.00	1	05/02/2020 23:15	WG1469806
2,2-Dichloropropane	U		0.161	0.500	1	05/02/2020 23:15	WG1469806
Di-isopropyl ether	U		0.105	0.500	1	05/02/2020 23:15	WG1469806
Ethylbenzene	U		0.137	0.500	1	05/02/2020 23:15	WG1469806
Hexachloro-1,3-butadiene	U		0.337	1.00	1	05/02/2020 23:15	WG1469806
2-Hexanone	U		0.787	5.00	1	05/02/2020 23:15	WG1469806
n-Hexane	U		0.749	5.00	1	05/02/2020 23:15	WG1469806
Iodomethane	U	UJ J0	0.554	5.00	1	05/02/2020 23:15	WG1469806
Isopropylbenzene	U		0.105	0.500	1	05/02/2020 23:15	WG1469806
p-Isopropyltoluene	U		0.120	0.500	1	05/02/2020 23:15	WG1469806
2-Butanone (MEK)	U		1.19	5.00	1	05/02/2020 23:15	WG1469806
Methylene Chloride	U	UJ J0	0.430	2.50	1	05/02/2020 23:15	WG1469806
4-Methyl-2-pentanone (MIBK)	U		0.478	5.00	1	05/02/2020 23:15	WG1469806
Methyl tert-butyl ether	U		0.101	0.500	1	05/02/2020 23:15	WG1469806
Naphthalene	U		0.174	2.50	1	05/02/2020 23:15	WG1469806
n-Propylbenzene	U		0.0993	0.500	1	05/02/2020 23:15	WG1469806
Styrene	U		0.118	0.500	1	05/02/2020 23:15	WG1469806
1,1,1,2-Tetrachloroethane	U		0.147	0.500	1	05/02/2020 23:15	WG1469806
1,1,2,2-Tetrachloroethane	U		0.133	0.500	1	05/02/2020 23:15	WG1469806
1,1,2-Trichlorotrifluoroethane	U		0.180	0.500	1	05/02/2020 23:15	WG1469806
Tetrachloroethene	U		0.300	0.500	1	05/02/2020 23:15	WG1469806
Toluene	U		0.278	0.500	1	05/02/2020 23:15	WG1469806
1,2,3-Trichlorobenzene	U		0.164	0.500	1	05/02/2020 23:15	WG1469806
1,2,4-Trichlorobenzene	U		0.481	1.00	1	05/02/2020 23:15	WG1469806
1,1,1-Trichloroethane	U		0.149	0.500	1	05/02/2020 23:15	WG1469806
1,1,2-Trichloroethane	U		0.158	0.500	1	05/02/2020 23:15	WG1469806
Trichloroethene	U		0.190	0.500	1	05/02/2020 23:15	WG1469806
Trichlorofluoromethane	U		0.160	2.50	1	05/02/2020 23:15	WG1469806
1,2,3-Trichloropropane	U		0.237	2.50	1	05/02/2020 23:15	WG1469806
1,2,4-Trimethylbenzene	U		0.322	0.500	1	05/02/2020 23:15	WG1469806
1,2,3-Trimethylbenzene	U		0.104	0.500	1	05/02/2020 23:15	WG1469806
1,3,5-Trimethylbenzene	U		0.104	0.500	1	05/02/2020 23:15	WG1469806
Vinyl acetate	U		0.692	5.00	1	05/02/2020 23:15	WG1469806
Vinyl chloride	U		0.234	0.500	1	05/02/2020 23:15	WG1469806
Xylenes, Total	U		0.174	1.50	1	05/02/2020 23:15	WG1469806
(S) Toluene-d8	*96.3*			*80.0-120*		*05/02/2020 23:15*	WG1469806
(S) 4-Bromofluorobenzene	*95.1*			*77.0-126*		*05/02/2020 23:15*	WG1469806
(S) 1,2-Dichloroethane-d4	*108*			*70.0-130*		*05/02/2020 23:15*	WG1469806

JC 5/20/2020

Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	296000		8450	20000	1	05/05/2020 07:36	WG1469122

Sample Narrative:

L1213621-03 WG1469122: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	15900		379	1000	1	05/01/2020 00:16	WG1468704
Nitrate	118		48.0	100	1	05/01/2020 00:16	WG1468704
Sulfate	36000		594	5000	1	05/01/2020 00:16	WG1468704

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	5300		102	1000	1	05/02/2020 00:05	WG1469258

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	7960		48.9	100	1	05/06/2020 08:56	WG1469555
Manganese	1590		1.32	5.00	1	05/06/2020 08:56	WG1469555

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	9170		2.87	6.78	10	05/07/2020 09:38	WG1471907
Ethane	U		0.296	1.29	1	05/06/2020 11:11	WG1470548
Ethene	U		0.422	1.27	1	05/06/2020 11:11	WG1470548

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U		11.3	25.0	1	05/02/2020 23:34	WG1469806
Acrylonitrile	U		0.671	5.00	1	05/02/2020 23:34	WG1469806
Benzene	U		0.0941	0.500	1	05/02/2020 23:34	WG1469806
Bromobenzene	U		0.118	0.500	1	05/02/2020 23:34	WG1469806
Bromodichloromethane	U		0.136	0.500	1	05/02/2020 23:34	WG1469806
Bromochloromethane	U		0.128	0.500	1	05/02/2020 23:34	WG1469806
Bromoform	U		0.129	0.500	1	05/02/2020 23:34	WG1469806
Bromomethane	U		0.605	2.50	1	05/02/2020 23:34	WG1469806
n-Butylbenzene	U		0.157	0.500	1	05/02/2020 23:34	WG1469806
sec-Butylbenzene	U		0.125	0.500	1	05/02/2020 23:34	WG1469806
tert-Butylbenzene	U		0.127	0.500	1	05/02/2020 23:34	WG1469806
Carbon disulfide	U	UJ J0	0.0962	0.500	1	05/02/2020 23:34	WG1469806
Carbon tetrachloride	U		0.128	0.500	1	05/02/2020 23:34	WG1469806
Chlorobenzene	U		0.117	0.500	1	05/02/2020 23:34	WG1469806
Chlorodibromomethane	U		0.140	0.500	1	05/02/2020 23:34	WG1469806
Chloroethane	U		0.192	2.50	1	05/02/2020 23:34	WG1469806
Chloroform	U		0.111	0.500	1	05/02/2020 23:34	WG1469806
Chloromethane	U		0.960	1.25	1	05/02/2020 23:34	WG1469806
2-Chlorotoluene	U		0.106	0.500	1	05/02/2020 23:34	WG1469806
4-Chlorotoluene	U		0.114	0.500	1	05/02/2020 23:34	WG1469806

JC 5/20/2020

GEI-1-042920

Collected date/time: 04/29/20 09:55

SAMPLE RESULTS - 03

L1213621

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,2-Dibromo-3-Chloropropane	U		0.276	2.50	1	05/02/2020 23:34	WG1469806
1,2-Dibromoethane	U		0.126	0.500	1	05/02/2020 23:34	WG1469806
Dibromomethane	U		0.122	0.500	1	05/02/2020 23:34	WG1469806
1,2-Dichlorobenzene	U		0.107	0.500	1	05/02/2020 23:34	WG1469806
1,3-Dichlorobenzene	U		0.299	0.500	1	05/02/2020 23:34	WG1469806
1,4-Dichlorobenzene	U		0.120	0.500	1	05/02/2020 23:34	WG1469806
Dichlorodifluoromethane	U		0.374	2.50	1	05/02/2020 23:34	WG1469806
1,1-Dichloroethane	U		0.100	0.500	1	05/02/2020 23:34	WG1469806
1,2-Dichloroethane	U		0.0819	0.500	1	05/02/2020 23:34	WG1469806
1,1-Dichloroethene	U		0.188	0.500	1	05/02/2020 23:34	WG1469806
cis-1,2-Dichloroethene	U		0.126	0.500	1	05/02/2020 23:34	WG1469806
trans-1,2-Dichloroethene	U		0.149	0.500	1	05/02/2020 23:34	WG1469806
1,2-Dichloropropane	U		0.149	0.500	1	05/02/2020 23:34	WG1469806
1,1-Dichloropropene	U		0.142	0.500	1	05/02/2020 23:34	WG1469806
1,3-Dichloropropane	U		0.109	1.00	1	05/02/2020 23:34	WG1469806
cis-1,3-Dichloropropene	U		0.111	0.500	1	05/02/2020 23:34	WG1469806
trans-1,3-Dichloropropene	U		0.118	0.500	1	05/02/2020 23:34	WG1469806
trans-1,4-Dichloro-2-butene	U		0.467	5.00	1	05/02/2020 23:34	WG1469806
2,2-Dichloropropane	U		0.161	0.500	1	05/02/2020 23:34	WG1469806
Di-isopropyl ether	U		0.105	0.500	1	05/02/2020 23:34	WG1469806
Ethylbenzene	U		0.137	0.500	1	05/02/2020 23:34	WG1469806
Hexachloro-1,3-butadiene	U		0.337	1.00	1	05/02/2020 23:34	WG1469806
2-Hexanone	U		0.787	5.00	1	05/02/2020 23:34	WG1469806
n-Hexane	U		0.749	5.00	1	05/02/2020 23:34	WG1469806
Iodomethane	U	UJ J0	0.554	5.00	1	05/02/2020 23:34	WG1469806
Isopropylbenzene	U		0.105	0.500	1	05/02/2020 23:34	WG1469806
p-Isopropyltoluene	U		0.120	0.500	1	05/02/2020 23:34	WG1469806
2-Butanone (MEK)	U		1.19	5.00	1	05/02/2020 23:34	WG1469806
Methylene Chloride	U	UJ J0	0.430	2.50	1	05/02/2020 23:34	WG1469806
4-Methyl-2-pentanone (MIBK)	U		0.478	5.00	1	05/02/2020 23:34	WG1469806
Methyl tert-butyl ether	U		0.101	0.500	1	05/02/2020 23:34	WG1469806
Naphthalene	U		0.174	2.50	1	05/02/2020 23:34	WG1469806
n-Propylbenzene	U		0.0993	0.500	1	05/02/2020 23:34	WG1469806
Styrene	U		0.118	0.500	1	05/02/2020 23:34	WG1469806
1,1,1,2-Tetrachloroethane	U		0.147	0.500	1	05/02/2020 23:34	WG1469806
1,1,2,2-Tetrachloroethane	U		0.133	0.500	1	05/02/2020 23:34	WG1469806
1,1,2-Trichlorotrifluoroethane	U		0.180	0.500	1	05/02/2020 23:34	WG1469806
Tetrachloroethene	U		0.300	0.500	1	05/02/2020 23:34	WG1469806
Toluene	U		0.278	0.500	1	05/02/2020 23:34	WG1469806
1,2,3-Trichlorobenzene	U		0.164	0.500	1	05/02/2020 23:34	WG1469806
1,2,4-Trichlorobenzene	U		0.481	1.00	1	05/02/2020 23:34	WG1469806
1,1,1-Trichloroethane	U		0.149	0.500	1	05/02/2020 23:34	WG1469806
1,1,2-Trichloroethane	U		0.158	0.500	1	05/02/2020 23:34	WG1469806
Trichloroethene	U		0.190	0.500	1	05/02/2020 23:34	WG1469806
Trichlorofluoromethane	U		0.160	2.50	1	05/02/2020 23:34	WG1469806
1,2,3-Trichloropropane	U		0.237	2.50	1	05/02/2020 23:34	WG1469806
1,2,4-Trimethylbenzene	U		0.322	0.500	1	05/02/2020 23:34	WG1469806
1,2,3-Trimethylbenzene	U		0.104	0.500	1	05/02/2020 23:34	WG1469806
1,3,5-Trimethylbenzene	U		0.104	0.500	1	05/02/2020 23:34	WG1469806
Vinyl acetate	U		0.692	5.00	1	05/02/2020 23:34	WG1469806
Vinyl chloride	U		0.234	0.500	1	05/02/2020 23:34	WG1469806
Xylenes, Total	0.254	J	0.174	1.50	1	05/02/2020 23:34	WG1469806
(S) Toluene-d8	*107*			*80.0-120*		*05/02/2020 23:34*	WG1469806
(S) 4-Bromofluorobenzene	*103*			*77.0-126*		*05/02/2020 23:34*	WG1469806
(S) 1,2-Dichloroethane-d4	*111*			*70.0-130*		*05/02/2020 23:34*	WG1469806

JC 5/20/2020

Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	890000		8450	20000	1	05/05/2020 09:59	WG1469123

Sample Narrative:

L1213621-04 WG1469123: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	33900		379	1000	1	05/01/2020 00:51	WG1468704
Nitrate	U		48.0	100	1	05/01/2020 00:51	WG1468704
Sulfate	1370	J	594	5000	1	05/01/2020 00:51	WG1468704

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	13500		102	1000	1	05/02/2020 00:25	WG1469258

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	26200		48.9	100	1	05/06/2020 08:59	WG1469555
Manganese	2160		1.32	5.00	1	05/06/2020 08:59	WG1469555

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	24300		2.87	6.78	10	05/07/2020 09:40	WG1471907
Ethane	U		0.296	1.29	1	05/06/2020 11:14	WG1470548
Ethene	U		0.422	1.27	1	05/06/2020 11:14	WG1470548

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U		11.3	25.0	1	05/02/2020 23:53	WG1469806
Acrylonitrile	U		0.671	5.00	1	05/02/2020 23:53	WG1469806
Benzene	U		0.0941	0.500	1	05/02/2020 23:53	WG1469806
Bromobenzene	U		0.118	0.500	1	05/02/2020 23:53	WG1469806
Bromodichloromethane	U		0.136	0.500	1	05/02/2020 23:53	WG1469806
Bromochloromethane	U		0.128	0.500	1	05/02/2020 23:53	WG1469806
Bromoform	U		0.129	0.500	1	05/02/2020 23:53	WG1469806
Bromomethane	U		0.605	2.50	1	05/02/2020 23:53	WG1469806
n-Butylbenzene	U		0.157	0.500	1	05/02/2020 23:53	WG1469806
sec-Butylbenzene	U		0.125	0.500	1	05/02/2020 23:53	WG1469806
tert-Butylbenzene	U		0.127	0.500	1	05/02/2020 23:53	WG1469806
Carbon disulfide	U	UJ J0	0.0962	0.500	1	05/02/2020 23:53	WG1469806
Carbon tetrachloride	U		0.128	0.500	1	05/02/2020 23:53	WG1469806
Chlorobenzene	U		0.117	0.500	1	05/02/2020 23:53	WG1469806
Chlorodibromomethane	U		0.140	0.500	1	05/02/2020 23:53	WG1469806
Chloroethane	U		0.192	2.50	1	05/02/2020 23:53	WG1469806
Chloroform	U		0.111	0.500	1	05/02/2020 23:53	WG1469806
Chloromethane	U		0.960	1.25	1	05/02/2020 23:53	WG1469806
2-Chlorotoluene	U		0.106	0.500	1	05/02/2020 23:53	WG1469806
4-Chlorotoluene	U		0.114	0.500	1	05/02/2020 23:53	WG1469806

JC 5/20/2020

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch	
1,2-Dibromo-3-Chloropropane	U		0.276	2.50	1	05/02/2020 23:53	WG1469806	
1,2-Dibromoethane	U		0.126	0.500	1	05/02/2020 23:53	WG1469806	
Dibromomethane	U		0.122	0.500	1	05/02/2020 23:53	WG1469806	
1,2-Dichlorobenzene	U		0.107	0.500	1	05/02/2020 23:53	WG1469806	
1,3-Dichlorobenzene	U		0.299	0.500	1	05/02/2020 23:53	WG1469806	
1,4-Dichlorobenzene	U		0.120	0.500	1	05/02/2020 23:53	WG1469806	
Dichlorodifluoromethane	U		0.374	2.50	1	05/02/2020 23:53	WG1469806	
1,1-Dichloroethane	U		0.100	0.500	1	05/02/2020 23:53	WG1469806	
1,2-Dichloroethane	U		0.0819	0.500	1	05/02/2020 23:53	WG1469806	
1,1-Dichloroethene	U		0.188	0.500	1	05/02/2020 23:53	WG1469806	
cis-1,2-Dichloroethene	U		0.126	0.500	1	05/02/2020 23:53	WG1469806	
trans-1,2-Dichloroethene	U		0.149	0.500	1	05/02/2020 23:53	WG1469806	
1,2-Dichloropropane	U		0.149	0.500	1	05/02/2020 23:53	WG1469806	
1,1-Dichloropropene	U		0.142	0.500	1	05/02/2020 23:53	WG1469806	
1,3-Dichloropropane	U		0.109	1.00	1	05/02/2020 23:53	WG1469806	
cis-1,3-Dichloropropene	U		0.111	0.500	1	05/02/2020 23:53	WG1469806	
trans-1,3-Dichloropropene	U		0.118	0.500	1	05/02/2020 23:53	WG1469806	
trans-1,4-Dichloro-2-butene	U		0.467	5.00	1	05/02/2020 23:53	WG1469806	
2,2-Dichloropropane	U		0.161	0.500	1	05/02/2020 23:53	WG1469806	
Di-isopropyl ether	0.158	J	0.105	0.500	1	05/02/2020 23:53	WG1469806	
Ethylbenzene	0.189	J	0.137	0.500	1	05/02/2020 23:53	WG1469806	
Hexachloro-1,3-butadiene	U		0.337	1.00	1	05/02/2020 23:53	WG1469806	
2-Hexanone	U		0.787	5.00	1	05/02/2020 23:53	WG1469806	
n-Hexane	U		0.749	5.00	1	05/02/2020 23:53	WG1469806	
Iodomethane	U UJ	J0	0.554	5.00	1	05/02/2020 23:53	WG1469806	
Isopropylbenzene	U		0.105	0.500	1	05/02/2020 23:53	WG1469806	
p-Isopropyltoluene	U		0.120	0.500	1	05/02/2020 23:53	WG1469806	
2-Butanone (MEK)	U		1.19	5.00	1	05/02/2020 23:53	WG1469806	
Methylene Chloride	U UJ	J0	0.430	2.50	1	05/02/2020 23:53	WG1469806	
4-Methyl-2-pentanone (MIBK)	U		0.478	5.00	1	05/02/2020 23:53	WG1469806	
Methyl tert-butyl ether	U		0.101	0.500	1	05/02/2020 23:53	WG1469806	
Naphthalene	U		0.174	2.50	1	05/02/2020 23:53	WG1469806	
n-Propylbenzene	U		0.0993	0.500	1	05/02/2020 23:53	WG1469806	
Styrene	U		0.118	0.500	1	05/02/2020 23:53	WG1469806	
1,1,1,2-Tetrachloroethane	U		0.147	0.500	1	05/02/2020 23:53	WG1469806	
1,1,2,2-Tetrachloroethane	U		0.133	0.500	1	05/02/2020 23:53	WG1469806	
1,1,2-Trichlorotrifluoroethane	U		0.180	0.500	1	05/02/2020 23:53	WG1469806	
Tetrachloroethene	U		0.300	0.500	1	05/02/2020 23:53	WG1469806	
Toluene	1.08		0.278	0.500	1	05/02/2020 23:53	WG1469806	
1,2,3-Trichlorobenzene	U		0.164	0.500	1	05/02/2020 23:53	WG1469806	
1,2,4-Trichlorobenzene	U		0.481	1.00	1	05/02/2020 23:53	WG1469806	
1,1,1-Trichloroethane	U		0.149	0.500	1	05/02/2020 23:53	WG1469806	
1,1,2-Trichloroethane	U		0.158	0.500	1	05/02/2020 23:53	WG1469806	
Trichloroethene	U		0.190	0.500	1	05/02/2020 23:53	WG1469806	
Trichlorofluoromethane	U		0.160	2.50	1	05/02/2020 23:53	WG1469806	
1,2,3-Trichloropropane	U		0.237	2.50	1	05/02/2020 23:53	WG1469806	
1,2,4-Trimethylbenzene	U		0.322	0.500	1	05/02/2020 23:53	WG1469806	
1,2,3-Trimethylbenzene	U		0.104	0.500	1	05/02/2020 23:53	WG1469806	
1,3,5-Trimethylbenzene	U		0.104	0.500	1	05/02/2020 23:53	WG1469806	
Vinyl acetate	U		0.692	5.00	1	05/02/2020 23:53	WG1469806	
Vinyl chloride	U		0.234	0.500	1	05/02/2020 23:53	WG1469806	
Xylenes, Total	0.854	J	0.174	1.50	1	05/02/2020 23:53	WG1469806	
(S) Toluene-d8	*108*			*80.0-120*		*05/02/2020 23:53*	WG1469806	
(S) 4-Bromofluorobenzene	*105*			*77.0-126*		*05/02/2020 23:53*	WG1469806	JC 5/20/2020
(S) 1,2-Dichloroethane-d4	*111*			*70.0-130*		*05/02/2020 23:53*	WG1469806	

MW-322-042920

Collected date/time: 04/29/20 12:00

SAMPLE RESULTS - 05

L1213621

Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	547000		8450	20000	1	05/05/2020 10:18	WG1469123

Sample Narrative:

L1213621-05 WG1469123: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	30400		379	1000	1	05/01/2020 01:09	WG1468704
Nitrate	U		48.0	100	1	05/01/2020 01:09	WG1468704
Sulfate	69900		594	5000	1	05/01/2020 01:09	WG1468704

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	5490		102	1000	1	05/02/2020 00:41	WG1469258

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	14600		48.9	100	1	05/06/2020 09:03	WG1469555
Manganese	2320		1.32	5.00	1	05/06/2020 09:03	WG1469555

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	2360		0.287	0.678	1	05/06/2020 11:16	WG1470548
Ethane	86.6		0.296	1.29	1	05/06/2020 11:16	WG1470548
Ethene	22.2		0.422	1.27	1	05/06/2020 11:16	WG1470548

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U		1130	2500	100	05/03/2020 00:13	WG1469806
Acrylonitrile	U		67.1	500	100	05/03/2020 00:13	WG1469806
Benzene	15.5	J	9.41	50.0	100	05/03/2020 00:13	WG1469806
Bromobenzene	U		11.8	50.0	100	05/03/2020 00:13	WG1469806
Bromodichloromethane	U		13.6	50.0	100	05/03/2020 00:13	WG1469806
Bromochloromethane	U		12.8	50.0	100	05/03/2020 00:13	WG1469806
Bromoform	U		12.9	50.0	100	05/03/2020 00:13	WG1469806
Bromomethane	U		60.5	250	100	05/03/2020 00:13	WG1469806
n-Butylbenzene	U		15.7	50.0	100	05/03/2020 00:13	WG1469806
sec-Butylbenzene	U		12.5	50.0	100	05/03/2020 00:13	WG1469806
tert-Butylbenzene	U		12.7	50.0	100	05/03/2020 00:13	WG1469806
Carbon disulfide	U	UJ J0	9.62	50.0	100	05/03/2020 00:13	WG1469806
Carbon tetrachloride	U		12.8	50.0	100	05/03/2020 00:13	WG1469806
Chlorobenzene	U		11.7	50.0	100	05/03/2020 00:13	WG1469806
Chlorodibromomethane	U		14.0	50.0	100	05/03/2020 00:13	WG1469806
Chloroethane	U		19.2	250	100	05/03/2020 00:13	WG1469806
Chloroform	U		11.1	50.0	100	05/03/2020 00:13	WG1469806
Chloromethane	U		96.0	125	100	05/03/2020 00:13	WG1469806
2-Chlorotoluene	U		10.6	50.0	100	05/03/2020 00:13	WG1469806
4-Chlorotoluene	U		11.4	50.0	100	05/03/2020 00:13	WG1469806

JC 5/27/2020

MW-322-042920

Collected date/time: 04/29/20 12:00

SAMPLE RESULTS - 05

L1213621

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,2-Dibromo-3-Chloropropane	U		27.6	250	100	05/03/2020 00:13	WG1469806
1,2-Dibromoethane	U		12.6	50.0	100	05/03/2020 00:13	WG1469806
Dibromomethane	U		12.2	50.0	100	05/03/2020 00:13	WG1469806
1,2-Dichlorobenzene	U		10.7	50.0	100	05/03/2020 00:13	WG1469806
1,3-Dichlorobenzene	U		29.9	50.0	100	05/03/2020 00:13	WG1469806
1,4-Dichlorobenzene	U		12.0	50.0	100	05/03/2020 00:13	WG1469806
Dichlorodifluoromethane	U		37.4	250	100	05/03/2020 00:13	WG1469806
1,1-Dichloroethane	U		10.0	50.0	100	05/03/2020 00:13	WG1469806
1,2-Dichloroethane	U		8.19	50.0	100	05/03/2020 00:13	WG1469806
1,1-Dichloroethene	U		18.8	50.0	100	05/03/2020 00:13	WG1469806
cis-1,2-Dichloroethene	1510		12.6	50.0	100	05/03/2020 00:13	WG1469806
trans-1,2-Dichloroethene	U		14.9	50.0	100	05/03/2020 00:13	WG1469806
1,2-Dichloropropane	U		14.9	50.0	100	05/03/2020 00:13	WG1469806
1,1-Dichloropropene	U		14.2	50.0	100	05/03/2020 00:13	WG1469806
1,3-Dichloropropane	U		10.9	100	100	05/03/2020 00:13	WG1469806
cis-1,3-Dichloropropene	U		11.1	50.0	100	05/03/2020 00:13	WG1469806
trans-1,3-Dichloropropene	U		11.8	50.0	100	05/03/2020 00:13	WG1469806
trans-1,4-Dichloro-2-butene	U		46.7	500	100	05/03/2020 00:13	WG1469806
2,2-Dichloropropane	U		16.1	50.0	100	05/03/2020 00:13	WG1469806
Di-isopropyl ether	U		10.5	50.0	100	05/03/2020 00:13	WG1469806
Ethylbenzene	U		13.7	50.0	100	05/03/2020 00:13	WG1469806
Hexachloro-1,3-butadiene	U		33.7	100	100	05/03/2020 00:13	WG1469806
2-Hexanone	U		78.7	500	100	05/03/2020 00:13	WG1469806
n-Hexane	U		74.9	500	100	05/03/2020 00:13	WG1469806
Iodomethane	U UJ	J0	55.4	500	100	05/03/2020 00:13	WG1469806
Isopropylbenzene	U		10.5	50.0	100	05/03/2020 00:13	WG1469806
p-Isopropyltoluene	U		12.0	50.0	100	05/03/2020 00:13	WG1469806
2-Butanone (MEK)	U		119	500	100	05/03/2020 00:13	WG1469806
Methylene Chloride	U UJ	J0	43.0	250	100	05/03/2020 00:13	WG1469806
4-Methyl-2-pentanone (MIBK)	U		47.8	500	100	05/03/2020 00:13	WG1469806
Methyl tert-butyl ether	U		10.1	50.0	100	05/03/2020 00:13	WG1469806
Naphthalene	U		17.4	250	100	05/03/2020 00:13	WG1469806
n-Propylbenzene	U		9.93	50.0	100	05/03/2020 00:13	WG1469806
Styrene	U		11.8	50.0	100	05/03/2020 00:13	WG1469806
1,1,1,2-Tetrachloroethane	U		14.7	50.0	100	05/03/2020 00:13	WG1469806
1,1,2,2-Tetrachloroethane	U		13.3	50.0	100	05/03/2020 00:13	WG1469806
1,1,2-Trichlorotrifluoroethane	U		18.0	50.0	100	05/03/2020 00:13	WG1469806
Tetrachloroethene	U		30.0	50.0	100	05/03/2020 00:13	WG1469806
Toluene	U		27.8	50.0	100	05/03/2020 00:13	WG1469806
1,2,3-Trichlorobenzene	U		16.4	50.0	100	05/03/2020 00:13	WG1469806
1,2,4-Trichlorobenzene	U		48.1	100	100	05/03/2020 00:13	WG1469806
1,1,1-Trichloroethane	U		14.9	50.0	100	05/03/2020 00:13	WG1469806
1,1,2-Trichloroethane	U		15.8	50.0	100	05/03/2020 00:13	WG1469806
Trichloroethene	661		19.0	50.0	100	05/03/2020 00:13	WG1469806
Trichlorofluoromethane	U		16.0	250	100	05/03/2020 00:13	WG1469806
1,2,3-Trichloropropane	U		23.7	250	100	05/03/2020 00:13	WG1469806
1,2,4-Trimethylbenzene	U		32.2	50.0	100	05/03/2020 00:13	WG1469806
1,2,3-Trimethylbenzene	U		10.4	50.0	100	05/03/2020 00:13	WG1469806
1,3,5-Trimethylbenzene	U		10.4	50.0	100	05/03/2020 00:13	WG1469806
Vinyl acetate	U		69.2	500	100	05/03/2020 00:13	WG1469806
Vinyl chloride	280		23.4	50.0	100	05/03/2020 00:13	WG1469806
Xylenes, Total	U		17.4	150	100	05/03/2020 00:13	WG1469806
(S) Toluene-d8	*108*			*80.0-120*		*05/03/2020 00:13*	WG1469806
(S) 4-Bromofluorobenzene	*105*			*77.0-126*		*05/03/2020 00:13*	WG1469806
(S) 1,2-Dichloroethane-d4	*112*			*70.0-130*		*05/03/2020 00:13*	WG1469806

JC 5/27/2020

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch

Sample Narrative:

L1213621-05 WG1469806: Target compounds too high to run at a lower dilution.

JC 5/27/2020

Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	404000		8450	20000	1	05/05/2020 10:26	WG1469123

Sample Narrative:

L1213621-06 WG1469123: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	19700		379	1000	1	05/01/2020 01:27	WG1468704
Nitrate	U		48.0	100	1	05/01/2020 01:27	WG1468704
Sulfate	29800		594	5000	1	05/01/2020 01:27	WG1468704

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	5000		102	1000	1	05/02/2020 01:35	WG1469258

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	5090		48.9	100	1	05/06/2020 09:06	WG1469555
Manganese	2750		1.32	5.00	1	05/06/2020 09:06	WG1469555

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	757		0.287	0.678	1	05/06/2020 11:19	WG1470548
Ethane	U		0.296	1.29	1	05/06/2020 11:19	WG1470548
Ethene	U		0.422	1.27	1	05/06/2020 11:19	WG1470548

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U		11.3	25.0	1	05/03/2020 00:32	WG1469806
Acrylonitrile	U		0.671	5.00	1	05/03/2020 00:32	WG1469806
Benzene	U		0.0941	0.500	1	05/03/2020 00:32	WG1469806
Bromobenzene	U		0.118	0.500	1	05/03/2020 00:32	WG1469806
Bromodichloromethane	U		0.136	0.500	1	05/03/2020 00:32	WG1469806
Bromochloromethane	U		0.128	0.500	1	05/03/2020 00:32	WG1469806
Bromoform	U		0.129	0.500	1	05/03/2020 00:32	WG1469806
Bromomethane	U		0.605	2.50	1	05/03/2020 00:32	WG1469806
n-Butylbenzene	U		0.157	0.500	1	05/03/2020 00:32	WG1469806
sec-Butylbenzene	U		0.125	0.500	1	05/03/2020 00:32	WG1469806
tert-Butylbenzene	U		0.127	0.500	1	05/03/2020 00:32	WG1469806
Carbon disulfide	U	UJ J0	0.0962	0.500	1	05/03/2020 00:32	WG1469806
Carbon tetrachloride	U		0.128	0.500	1	05/03/2020 00:32	WG1469806
Chlorobenzene	U		0.117	0.500	1	05/03/2020 00:32	WG1469806
Chlorodibromomethane	U		0.140	0.500	1	05/03/2020 00:32	WG1469806
Chloroethane	U		0.192	2.50	1	05/03/2020 00:32	WG1469806
Chloroform	U		0.111	0.500	1	05/03/2020 00:32	WG1469806
Chloromethane	U		0.960	1.25	1	05/03/2020 00:32	WG1469806
2-Chlorotoluene	U		0.106	0.500	1	05/03/2020 00:32	WG1469806
4-Chlorotoluene	U		0.114	0.500	1	05/03/2020 00:32	WG1469806

JC 5/20/2020

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,2-Dibromo-3-Chloropropane	U		0.276	2.50	1	05/03/2020 00:32	WG1469806
1,2-Dibromoethane	U		0.126	0.500	1	05/03/2020 00:32	WG1469806
Dibromomethane	U		0.122	0.500	1	05/03/2020 00:32	WG1469806
1,2-Dichlorobenzene	U		0.107	0.500	1	05/03/2020 00:32	WG1469806
1,3-Dichlorobenzene	U		0.299	0.500	1	05/03/2020 00:32	WG1469806
1,4-Dichlorobenzene	U		0.120	0.500	1	05/03/2020 00:32	WG1469806
Dichlorodifluoromethane	U		0.374	2.50	1	05/03/2020 00:32	WG1469806
1,1-Dichloroethane	U		0.100	0.500	1	05/03/2020 00:32	WG1469806
1,2-Dichloroethane	U		0.0819	0.500	1	05/03/2020 00:32	WG1469806
1,1-Dichloroethene	U		0.188	0.500	1	05/03/2020 00:32	WG1469806
cis-1,2-Dichloroethene	U		0.126	0.500	1	05/03/2020 00:32	WG1469806
trans-1,2-Dichloroethene	U		0.149	0.500	1	05/03/2020 00:32	WG1469806
1,2-Dichloropropane	U		0.149	0.500	1	05/03/2020 00:32	WG1469806
1,1-Dichloropropene	U		0.142	0.500	1	05/03/2020 00:32	WG1469806
1,3-Dichloropropane	U		0.109	1.00	1	05/03/2020 00:32	WG1469806
cis-1,3-Dichloropropene	U		0.111	0.500	1	05/03/2020 00:32	WG1469806
trans-1,3-Dichloropropene	U		0.118	0.500	1	05/03/2020 00:32	WG1469806
trans-1,4-Dichloro-2-butene	U		0.467	5.00	1	05/03/2020 00:32	WG1469806
2,2-Dichloropropane	U		0.161	0.500	1	05/03/2020 00:32	WG1469806
Di-isopropyl ether	U		0.105	0.500	1	05/03/2020 00:32	WG1469806
Ethylbenzene	0.161	J	0.137	0.500	1	05/03/2020 00:32	WG1469806
Hexachloro-1,3-butadiene	U		0.337	1.00	1	05/03/2020 00:32	WG1469806
2-Hexanone	U		0.787	5.00	1	05/03/2020 00:32	WG1469806
n-Hexane	U		0.749	5.00	1	05/03/2020 00:32	WG1469806
Iodomethane	U	UJ J0	0.554	5.00	1	05/03/2020 00:32	WG1469806
Isopropylbenzene	U		0.105	0.500	1	05/03/2020 00:32	WG1469806
p-Isopropyltoluene	U		0.120	0.500	1	05/03/2020 00:32	WG1469806
2-Butanone (MEK)	U		1.19	5.00	1	05/03/2020 00:32	WG1469806
Methylene Chloride	U	UJ J0	0.430	2.50	1	05/03/2020 00:32	WG1469806
4-Methyl-2-pentanone (MIBK)	U		0.478	5.00	1	05/03/2020 00:32	WG1469806
Methyl tert-butyl ether	U		0.101	0.500	1	05/03/2020 00:32	WG1469806
Naphthalene	U		0.174	2.50	1	05/03/2020 00:32	WG1469806
n-Propylbenzene	U		0.0993	0.500	1	05/03/2020 00:32	WG1469806
Styrene	U		0.118	0.500	1	05/03/2020 00:32	WG1469806
1,1,1,2-Tetrachloroethane	U		0.147	0.500	1	05/03/2020 00:32	WG1469806
1,1,2,2-Tetrachloroethane	U		0.133	0.500	1	05/03/2020 00:32	WG1469806
1,1,2-Trichlorotrifluoroethane	U		0.180	0.500	1	05/03/2020 00:32	WG1469806
Tetrachloroethene	U		0.300	0.500	1	05/03/2020 00:32	WG1469806
Toluene	1.06		0.278	0.500	1	05/03/2020 00:32	WG1469806
1,2,3-Trichlorobenzene	U		0.164	0.500	1	05/03/2020 00:32	WG1469806
1,2,4-Trichlorobenzene	U		0.481	1.00	1	05/03/2020 00:32	WG1469806
1,1,1-Trichloroethane	U		0.149	0.500	1	05/03/2020 00:32	WG1469806
1,1,2-Trichloroethane	U		0.158	0.500	1	05/03/2020 00:32	WG1469806
Trichloroethene	U		0.190	0.500	1	05/03/2020 00:32	WG1469806
Trichlorofluoromethane	U		0.160	2.50	1	05/03/2020 00:32	WG1469806
1,2,3-Trichloropropane	U		0.237	2.50	1	05/03/2020 00:32	WG1469806
1,2,4-Trimethylbenzene	U		0.322	0.500	1	05/03/2020 00:32	WG1469806
1,2,3-Trimethylbenzene	U		0.104	0.500	1	05/03/2020 00:32	WG1469806
1,3,5-Trimethylbenzene	U		0.104	0.500	1	05/03/2020 00:32	WG1469806
Vinyl acetate	U		0.692	5.00	1	05/03/2020 00:32	WG1469806
Vinyl chloride	U		0.234	0.500	1	05/03/2020 00:32	WG1469806
Xylenes, Total	0.938	J	0.174	1.50	1	05/03/2020 00:32	WG1469806
(S) Toluene-d8	*107*			*80.0-120*		*05/03/2020 00:32*	WG1469806
(S) 4-Bromofluorobenzene	*101*			*77.0-126*		*05/03/2020 00:32*	WG1469806
(S) 1,2-Dichloroethane-d4	*111*			*70.0-130*		*05/03/2020 00:32*	WG1469806

JC 5/20/2020

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	622000		8450	20000	1	05/05/2020 10:34	WG1469123

Sample Narrative:

L1213621-07 WG1469123: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	18500		379	1000	1	05/01/2020 01:45	WG1468704
Nitrate	U		48.0	100	1	05/01/2020 01:45	WG1468704
Sulfate	1880	J	594	5000	1	05/01/2020 01:45	WG1468704

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	4630		102	1000	1	05/02/2020 01:53	WG1469258

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	19900		48.9	100	1	05/06/2020 09:42	WG1469555
Manganese	906		1.32	5.00	1	05/06/2020 09:42	WG1469555

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	56.8		0.287	0.678	1	05/06/2020 11:22	WG1470548
Ethane	U		0.296	1.29	1	05/06/2020 11:22	WG1470548
Ethene	U		0.422	1.27	1	05/06/2020 11:22	WG1470548

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U		11.3	25.0	1	05/03/2020 00:51	WG1469806
Acrylonitrile	U		0.671	5.00	1	05/03/2020 00:51	WG1469806
Benzene	2.22		0.0941	0.500	1	05/03/2020 00:51	WG1469806
Bromobenzene	U		0.118	0.500	1	05/03/2020 00:51	WG1469806
Bromodichloromethane	U		0.136	0.500	1	05/03/2020 00:51	WG1469806
Bromochloromethane	U		0.128	0.500	1	05/03/2020 00:51	WG1469806
Bromoform	U		0.129	0.500	1	05/03/2020 00:51	WG1469806
Bromomethane	U		0.605	2.50	1	05/03/2020 00:51	WG1469806
n-Butylbenzene	U		0.157	0.500	1	05/03/2020 00:51	WG1469806
sec-Butylbenzene	U		0.125	0.500	1	05/03/2020 00:51	WG1469806
tert-Butylbenzene	U		0.127	0.500	1	05/03/2020 00:51	WG1469806
Carbon disulfide	U	UJ J0	0.0962	0.500	1	05/03/2020 00:51	WG1469806
Carbon tetrachloride	U		0.128	0.500	1	05/03/2020 00:51	WG1469806
Chlorobenzene	U		0.117	0.500	1	05/03/2020 00:51	WG1469806
Chlorodibromomethane	U		0.140	0.500	1	05/03/2020 00:51	WG1469806
Chloroethane	U		0.192	2.50	1	05/03/2020 00:51	WG1469806
Chloroform	U		0.111	0.500	1	05/03/2020 00:51	WG1469806
Chloromethane	U		0.960	1.25	1	05/03/2020 00:51	WG1469806
2-Chlorotoluene	U		0.106	0.500	1	05/03/2020 00:51	WG1469806
4-Chlorotoluene	U		0.114	0.500	1	05/03/2020 00:51	WG1469806

JC 5/20/2020

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,2-Dibromo-3-Chloropropane	U		0.276	2.50	1	05/03/2020 00:51	WG1469806
1,2-Dibromoethane	U		0.126	0.500	1	05/03/2020 00:51	WG1469806
Dibromomethane	U		0.122	0.500	1	05/03/2020 00:51	WG1469806
1,2-Dichlorobenzene	U		0.107	0.500	1	05/03/2020 00:51	WG1469806
1,3-Dichlorobenzene	U		0.299	0.500	1	05/03/2020 00:51	WG1469806
1,4-Dichlorobenzene	U		0.120	0.500	1	05/03/2020 00:51	WG1469806
Dichlorodifluoromethane	U		0.374	2.50	1	05/03/2020 00:51	WG1469806
1,1-Dichloroethane	U		0.100	0.500	1	05/03/2020 00:51	WG1469806
1,2-Dichloroethane	U		0.0819	0.500	1	05/03/2020 00:51	WG1469806
1,1-Dichloroethene	U		0.188	0.500	1	05/03/2020 00:51	WG1469806
cis-1,2-Dichloroethene	4.49		0.126	0.500	1	05/03/2020 00:51	WG1469806
trans-1,2-Dichloroethene	U		0.149	0.500	1	05/03/2020 00:51	WG1469806
1,2-Dichloropropane	U		0.149	0.500	1	05/03/2020 00:51	WG1469806
1,1-Dichloropropene	U		0.142	0.500	1	05/03/2020 00:51	WG1469806
1,3-Dichloropropane	U		0.109	1.00	1	05/03/2020 00:51	WG1469806
cis-1,3-Dichloropropene	U		0.111	0.500	1	05/03/2020 00:51	WG1469806
trans-1,3-Dichloropropene	U		0.118	0.500	1	05/03/2020 00:51	WG1469806
trans-1,4-Dichloro-2-butene	U		0.467	5.00	1	05/03/2020 00:51	WG1469806
2,2-Dichloropropane	U		0.161	0.500	1	05/03/2020 00:51	WG1469806
Di-isopropyl ether	U		0.105	0.500	1	05/03/2020 00:51	WG1469806
Ethylbenzene	U		0.137	0.500	1	05/03/2020 00:51	WG1469806
Hexachloro-1,3-butadiene	U		0.337	1.00	1	05/03/2020 00:51	WG1469806
2-Hexanone	U		0.787	5.00	1	05/03/2020 00:51	WG1469806
n-Hexane	U		0.749	5.00	1	05/03/2020 00:51	WG1469806
Iodomethane	U UJ	J0	0.554	5.00	1	05/03/2020 00:51	WG1469806
Isopropylbenzene	U		0.105	0.500	1	05/03/2020 00:51	WG1469806
p-Isopropyltoluene	U		0.120	0.500	1	05/03/2020 00:51	WG1469806
2-Butanone (MEK)	U		1.19	5.00	1	05/03/2020 00:51	WG1469806
Methylene Chloride	U UJ	J0	0.430	2.50	1	05/03/2020 00:51	WG1469806
4-Methyl-2-pentanone (MIBK)	U		0.478	5.00	1	05/03/2020 00:51	WG1469806
Methyl tert-butyl ether	U		0.101	0.500	1	05/03/2020 00:51	WG1469806
Naphthalene	U		0.174	2.50	1	05/03/2020 00:51	WG1469806
n-Propylbenzene	U		0.0993	0.500	1	05/03/2020 00:51	WG1469806
Styrene	U		0.118	0.500	1	05/03/2020 00:51	WG1469806
1,1,1,2-Tetrachloroethane	U		0.147	0.500	1	05/03/2020 00:51	WG1469806
1,1,2,2-Tetrachloroethane	U		0.133	0.500	1	05/03/2020 00:51	WG1469806
1,1,2-Trichlorotrifluoroethane	U		0.180	0.500	1	05/03/2020 00:51	WG1469806
Tetrachloroethene	U		0.300	0.500	1	05/03/2020 00:51	WG1469806
Toluene	U		0.278	0.500	1	05/03/2020 00:51	WG1469806
1,2,3-Trichlorobenzene	U		0.164	0.500	1	05/03/2020 00:51	WG1469806
1,2,4-Trichlorobenzene	U		0.481	1.00	1	05/03/2020 00:51	WG1469806
1,1,1-Trichloroethane	U		0.149	0.500	1	05/03/2020 00:51	WG1469806
1,1,2-Trichloroethane	U		0.158	0.500	1	05/03/2020 00:51	WG1469806
Trichloroethene	U		0.190	0.500	1	05/03/2020 00:51	WG1469806
Trichlorofluoromethane	U		0.160	2.50	1	05/03/2020 00:51	WG1469806
1,2,3-Trichloropropane	U		0.237	2.50	1	05/03/2020 00:51	WG1469806
1,2,4-Trimethylbenzene	U		0.322	0.500	1	05/03/2020 00:51	WG1469806
1,2,3-Trimethylbenzene	U		0.104	0.500	1	05/03/2020 00:51	WG1469806
1,3,5-Trimethylbenzene	U		0.104	0.500	1	05/03/2020 00:51	WG1469806
Vinyl acetate	U		0.692	5.00	1	05/03/2020 00:51	WG1469806
Vinyl chloride	67.8		0.234	0.500	1	05/03/2020 00:51	WG1469806
Xylenes, Total	U		0.174	1.50	1	05/03/2020 00:51	WG1469806
(S) Toluene-d8	*106*			*80.0-120*		*05/03/2020 00:51*	WG1469806
(S) 4-Bromofluorobenzene	*101*			*77.0-126*		*05/03/2020 00:51*	WG1469806
(S) 1,2-Dichloroethane-d4	*112*			*70.0-130*		*05/03/2020 00:51*	WG1469806

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Wet Chemistry by Method 2320 B-2011

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Alkalinity	375000		8450	20000	1	05/05/2020 10:41	WG1469123

Sample Narrative:

L1213621-08 WG1469123: Endpoint pH 4.5

Wet Chemistry by Method 9056A

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Chloride	13100		379	1000	1	05/01/2020 02:21	WG1468704
Nitrate	U		48.0	100	1	05/01/2020 02:21	WG1468704
Sulfate	U		594	5000	1	05/01/2020 02:21	WG1468704

Wet Chemistry by Method 9060A

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
TOC (Total Organic Carbon)	5070		102	1000	1	05/05/2020 22:13	WG1470661

Metals (ICPMS) by Method 6020B

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Iron	416		48.9	100	1	05/06/2020 09:45	WG1469555
Manganese	4190		1.32	5.00	1	05/06/2020 09:45	WG1469555

Volatile Organic Compounds (GC) by Method RSK175

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Methane	11800		2.87	6.78	10	05/07/2020 09:45	WG1471907
Ethane	U		0.296	1.29	1	05/06/2020 11:25	WG1470548
Ethene	U		0.422	1.27	1	05/06/2020 11:25	WG1470548

Volatile Organic Compounds (GC/MS) by Method 8260D

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Acetone	U		11.3	25.0	1	05/03/2020 01:10	WG1469806
Acrylonitrile	U		0.671	5.00	1	05/03/2020 01:10	WG1469806
Benzene	U		0.0941	0.500	1	05/03/2020 01:10	WG1469806
Bromobenzene	U		0.118	0.500	1	05/03/2020 01:10	WG1469806
Bromodichloromethane	U		0.136	0.500	1	05/03/2020 01:10	WG1469806
Bromochloromethane	U		0.128	0.500	1	05/03/2020 01:10	WG1469806
Bromoform	U		0.129	0.500	1	05/03/2020 01:10	WG1469806
Bromomethane	U		0.605	2.50	1	05/03/2020 01:10	WG1469806
n-Butylbenzene	U		0.157	0.500	1	05/03/2020 01:10	WG1469806
sec-Butylbenzene	U		0.125	0.500	1	05/03/2020 01:10	WG1469806
tert-Butylbenzene	U		0.127	0.500	1	05/03/2020 01:10	WG1469806
Carbon disulfide	U	UJ J0	0.0962	0.500	1	05/03/2020 01:10	WG1469806
Carbon tetrachloride	U		0.128	0.500	1	05/03/2020 01:10	WG1469806
Chlorobenzene	U		0.117	0.500	1	05/03/2020 01:10	WG1469806
Chlorodibromomethane	U		0.140	0.500	1	05/03/2020 01:10	WG1469806
Chloroethane	U		0.192	2.50	1	05/03/2020 01:10	WG1469806
Chloroform	U		0.111	0.500	1	05/03/2020 01:10	WG1469806
Chloromethane	U		0.960	1.25	1	05/03/2020 01:10	WG1469806
2-Chlorotoluene	U		0.106	0.500	1	05/03/2020 01:10	WG1469806
4-Chlorotoluene	U		0.114	0.500	1	05/03/2020 01:10	WG1469806

JC 5/20/2020

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,2-Dibromo-3-Chloropropane	U		0.276	2.50	1	05/03/2020 01:10	WG1469806
1,2-Dibromoethane	U		0.126	0.500	1	05/03/2020 01:10	WG1469806
Dibromomethane	U		0.122	0.500	1	05/03/2020 01:10	WG1469806
1,2-Dichlorobenzene	U		0.107	0.500	1	05/03/2020 01:10	WG1469806
1,3-Dichlorobenzene	U		0.299	0.500	1	05/03/2020 01:10	WG1469806
1,4-Dichlorobenzene	U		0.120	0.500	1	05/03/2020 01:10	WG1469806
Dichlorodifluoromethane	U		0.374	2.50	1	05/03/2020 01:10	WG1469806
1,1-Dichloroethane	U		0.100	0.500	1	05/03/2020 01:10	WG1469806
1,2-Dichloroethane	U		0.0819	0.500	1	05/03/2020 01:10	WG1469806
1,1-Dichloroethene	U		0.188	0.500	1	05/03/2020 01:10	WG1469806
cis-1,2-Dichloroethene	13.9		0.126	0.500	1	05/03/2020 01:10	WG1469806
trans-1,2-Dichloroethene	U		0.149	0.500	1	05/03/2020 01:10	WG1469806
1,2-Dichloropropane	U		0.149	0.500	1	05/03/2020 01:10	WG1469806
1,1-Dichloropropene	U		0.142	0.500	1	05/03/2020 01:10	WG1469806
1,3-Dichloropropane	U		0.109	1.00	1	05/03/2020 01:10	WG1469806
cis-1,3-Dichloropropene	U		0.111	0.500	1	05/03/2020 01:10	WG1469806
trans-1,3-Dichloropropene	U		0.118	0.500	1	05/03/2020 01:10	WG1469806
trans-1,4-Dichloro-2-butene	U		0.467	5.00	1	05/03/2020 01:10	WG1469806
2,2-Dichloropropane	U		0.161	0.500	1	05/03/2020 01:10	WG1469806
Di-isopropyl ether	U		0.105	0.500	1	05/03/2020 01:10	WG1469806
Ethylbenzene	U		0.137	0.500	1	05/03/2020 01:10	WG1469806
Hexachloro-1,3-butadiene	U		0.337	1.00	1	05/03/2020 01:10	WG1469806
2-Hexanone	U		0.787	5.00	1	05/03/2020 01:10	WG1469806
n-Hexane	U		0.749	5.00	1	05/03/2020 01:10	WG1469806
Iodomethane	U	UJ J0	0.554	5.00	1	05/03/2020 01:10	WG1469806
Isopropylbenzene	U		0.105	0.500	1	05/03/2020 01:10	WG1469806
p-Isopropyltoluene	U		0.120	0.500	1	05/03/2020 01:10	WG1469806
2-Butanone (MEK)	U		1.19	5.00	1	05/03/2020 01:10	WG1469806
Methylene Chloride	U	UJ J0	0.430	2.50	1	05/03/2020 01:10	WG1469806
4-Methyl-2-pentanone (MIBK)	U		0.478	5.00	1	05/03/2020 01:10	WG1469806
Methyl tert-butyl ether	U		0.101	0.500	1	05/03/2020 01:10	WG1469806
Naphthalene	U		0.174	2.50	1	05/03/2020 01:10	WG1469806
n-Propylbenzene	U		0.0993	0.500	1	05/03/2020 01:10	WG1469806
Styrene	U		0.118	0.500	1	05/03/2020 01:10	WG1469806
1,1,1,2-Tetrachloroethane	U		0.147	0.500	1	05/03/2020 01:10	WG1469806
1,1,2,2-Tetrachloroethane	U		0.133	0.500	1	05/03/2020 01:10	WG1469806
1,1,2-Trichlorotrifluoroethane	U		0.180	0.500	1	05/03/2020 01:10	WG1469806
Tetrachloroethene	U		0.300	0.500	1	05/03/2020 01:10	WG1469806
Toluene	0.954		0.278	0.500	1	05/03/2020 01:10	WG1469806
1,2,3-Trichlorobenzene	U		0.164	0.500	1	05/03/2020 01:10	WG1469806
1,2,4-Trichlorobenzene	U		0.481	1.00	1	05/03/2020 01:10	WG1469806
1,1,1-Trichloroethane	U		0.149	0.500	1	05/03/2020 01:10	WG1469806
1,1,2-Trichloroethane	U		0.158	0.500	1	05/03/2020 01:10	WG1469806
Trichloroethene	U		0.190	0.500	1	05/03/2020 01:10	WG1469806
Trichlorofluoromethane	U		0.160	2.50	1	05/03/2020 01:10	WG1469806
1,2,3-Trichloropropane	U		0.237	2.50	1	05/03/2020 01:10	WG1469806
1,2,4-Trimethylbenzene	U		0.322	0.500	1	05/03/2020 01:10	WG1469806
1,2,3-Trimethylbenzene	U		0.104	0.500	1	05/03/2020 01:10	WG1469806
1,3,5-Trimethylbenzene	U		0.104	0.500	1	05/03/2020 01:10	WG1469806
Vinyl acetate	U		0.692	5.00	1	05/03/2020 01:10	WG1469806
Vinyl chloride	0.309	J	0.234	0.500	1	05/03/2020 01:10	WG1469806
Xylenes, Total	0.726	J	0.174	1.50	1	05/03/2020 01:10	WG1469806
(S) Toluene-d8	*107*			*80.0-120*		*05/03/2020 01:10*	WG1469806
(S) 4-Bromofluorobenzene	*103*			*77.0-126*		*05/03/2020 01:10*	WG1469806
(S) 1,2-Dichloroethane-d4	*113*			*70.0-130*		*05/03/2020 01:10*	WG1469806

JC 5/20/2020

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	358000		8450	20000	1	05/05/2020 10:48	WG1469123

Sample Narrative:

L1213621-09 WG1469123: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	23400		379	1000	1	05/01/2020 02:39	WG1468704
Nitrate	U		48.0	100	1	05/01/2020 02:39	WG1468704
Sulfate	U		594	5000	1	05/01/2020 02:39	WG1468704

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	6530		102	1000	1	05/05/2020 23:20	WG1470661

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	6830		48.9	100	1	05/06/2020 09:49	WG1469555
Manganese	811		1.32	5.00	1	05/06/2020 09:49	WG1469555

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	6140		0.287	0.678	1	05/06/2020 11:28	WG1470548
Ethane	U		0.296	1.29	1	05/06/2020 11:28	WG1470548
Ethene	U		0.422	1.27	1	05/06/2020 11:28	WG1470548

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U		11.3	25.0	1	05/03/2020 01:29	WG1469806
Acrylonitrile	U		0.671	5.00	1	05/03/2020 01:29	WG1469806
Benzene	U		0.0941	0.500	1	05/03/2020 01:29	WG1469806
Bromobenzene	U		0.118	0.500	1	05/03/2020 01:29	WG1469806
Bromodichloromethane	U		0.136	0.500	1	05/03/2020 01:29	WG1469806
Bromochloromethane	U		0.128	0.500	1	05/03/2020 01:29	WG1469806
Bromoform	U		0.129	0.500	1	05/03/2020 01:29	WG1469806
Bromomethane	U		0.605	2.50	1	05/03/2020 01:29	WG1469806
n-Butylbenzene	U		0.157	0.500	1	05/03/2020 01:29	WG1469806
sec-Butylbenzene	U		0.125	0.500	1	05/03/2020 01:29	WG1469806
tert-Butylbenzene	U		0.127	0.500	1	05/03/2020 01:29	WG1469806
Carbon disulfide	U UJ	J0	0.0962	0.500	1	05/03/2020 01:29	WG1469806
Carbon tetrachloride	U		0.128	0.500	1	05/03/2020 01:29	WG1469806
Chlorobenzene	U		0.117	0.500	1	05/03/2020 01:29	WG1469806
Chlorodibromomethane	U		0.140	0.500	1	05/03/2020 01:29	WG1469806
Chloroethane	U		0.192	2.50	1	05/03/2020 01:29	WG1469806
Chloroform	U		0.111	0.500	1	05/03/2020 01:29	WG1469806
Chloromethane	U		0.960	1.25	1	05/03/2020 01:29	WG1469806
2-Chlorotoluene	U		0.106	0.500	1	05/03/2020 01:29	WG1469806
4-Chlorotoluene	U		0.114	0.500	1	05/03/2020 01:29	WG1469806

JC 5/20/2020

Volatile Organic Compounds (GC/MS) by Method 8260D

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
1,2-Dibromo-3-Chloropropane	U		0.276	2.50	1	05/03/2020 01:29	WG1469806
1,2-Dibromoethane	U		0.126	0.500	1	05/03/2020 01:29	WG1469806
Dibromomethane	U		0.122	0.500	1	05/03/2020 01:29	WG1469806
1,2-Dichlorobenzene	U		0.107	0.500	1	05/03/2020 01:29	WG1469806
1,3-Dichlorobenzene	U		0.299	0.500	1	05/03/2020 01:29	WG1469806
1,4-Dichlorobenzene	U		0.120	0.500	1	05/03/2020 01:29	WG1469806
Dichlorodifluoromethane	U		0.374	2.50	1	05/03/2020 01:29	WG1469806
1,1-Dichloroethane	U		0.100	0.500	1	05/03/2020 01:29	WG1469806
1,2-Dichloroethane	U		0.0819	0.500	1	05/03/2020 01:29	WG1469806
1,1-Dichloroethene	U		0.188	0.500	1	05/03/2020 01:29	WG1469806
cis-1,2-Dichloroethene	U		0.126	0.500	1	05/03/2020 01:29	WG1469806
trans-1,2-Dichloroethene	U		0.149	0.500	1	05/03/2020 01:29	WG1469806
1,2-Dichloropropane	U		0.149	0.500	1	05/03/2020 01:29	WG1469806
1,1-Dichloropropene	U		0.142	0.500	1	05/03/2020 01:29	WG1469806
1,3-Dichloropropane	U		0.109	1.00	1	05/03/2020 01:29	WG1469806
cis-1,3-Dichloropropene	U		0.111	0.500	1	05/03/2020 01:29	WG1469806
trans-1,3-Dichloropropene	U		0.118	0.500	1	05/03/2020 01:29	WG1469806
trans-1,4-Dichloro-2-butene	U		0.467	5.00	1	05/03/2020 01:29	WG1469806
2,2-Dichloropropane	U		0.161	0.500	1	05/03/2020 01:29	WG1469806
Di-isopropyl ether	U		0.105	0.500	1	05/03/2020 01:29	WG1469806
Ethylbenzene	U		0.137	0.500	1	05/03/2020 01:29	WG1469806
Hexachloro-1,3-butadiene	U		0.337	1.00	1	05/03/2020 01:29	WG1469806
2-Hexanone	U		0.787	5.00	1	05/03/2020 01:29	WG1469806
n-Hexane	U		0.749	5.00	1	05/03/2020 01:29	WG1469806
Iodomethane	U UJ	J0	0.554	5.00	1	05/03/2020 01:29	WG1469806
Isopropylbenzene	U		0.105	0.500	1	05/03/2020 01:29	WG1469806
p-Isopropyltoluene	U		0.120	0.500	1	05/03/2020 01:29	WG1469806
2-Butanone (MEK)	U		1.19	5.00	1	05/03/2020 01:29	WG1469806
Methylene Chloride	U UJ	J0	0.430	2.50	1	05/03/2020 01:29	WG1469806
4-Methyl-2-pentanone (MIBK)	U		0.478	5.00	1	05/03/2020 01:29	WG1469806
Methyl tert-butyl ether	U		0.101	0.500	1	05/03/2020 01:29	WG1469806
Naphthalene	U		0.174	2.50	1	05/03/2020 01:29	WG1469806
n-Propylbenzene	U		0.0993	0.500	1	05/03/2020 01:29	WG1469806
Styrene	U		0.118	0.500	1	05/03/2020 01:29	WG1469806
1,1,1,2-Tetrachloroethane	U		0.147	0.500	1	05/03/2020 01:29	WG1469806
1,1,2,2-Tetrachloroethane	U		0.133	0.500	1	05/03/2020 01:29	WG1469806
1,1,2-Trichlorotrifluoroethane	U		0.180	0.500	1	05/03/2020 01:29	WG1469806
Tetrachloroethene	U		0.300	0.500	1	05/03/2020 01:29	WG1469806
Toluene	U		0.278	0.500	1	05/03/2020 01:29	WG1469806
1,2,3-Trichlorobenzene	U		0.164	0.500	1	05/03/2020 01:29	WG1469806
1,2,4-Trichlorobenzene	U		0.481	1.00	1	05/03/2020 01:29	WG1469806
1,1,1-Trichloroethane	U		0.149	0.500	1	05/03/2020 01:29	WG1469806
1,1,2-Trichloroethane	U		0.158	0.500	1	05/03/2020 01:29	WG1469806
Trichloroethene	U		0.190	0.500	1	05/03/2020 01:29	WG1469806
Trichlorofluoromethane	U		0.160	2.50	1	05/03/2020 01:29	WG1469806
1,2,3-Trichloropropane	U		0.237	2.50	1	05/03/2020 01:29	WG1469806
1,2,4-Trimethylbenzene	U		0.322	0.500	1	05/03/2020 01:29	WG1469806
1,2,3-Trimethylbenzene	U		0.104	0.500	1	05/03/2020 01:29	WG1469806
1,3,5-Trimethylbenzene	U		0.104	0.500	1	05/03/2020 01:29	WG1469806
Vinyl acetate	U		0.692	5.00	1	05/03/2020 01:29	WG1469806
Vinyl chloride	U		0.234	0.500	1	05/03/2020 01:29	WG1469806
Xylenes, Total	U		0.174	1.50	1	05/03/2020 01:29	WG1469806
(S) Toluene-d8	*107*			*80.0-120*		*05/03/2020 01:29*	WG1469806
(S) 4-Bromofluorobenzene	*100*			*77.0-126*		*05/03/2020 01:29*	WG1469806
(S) 1,2-Dichloroethane-d4	*112*			*70.0-130*		*05/03/2020 01:29*	WG1469806

JC 5/20/2020

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	370000		8450	20000	1	05/05/2020 10:56	WG1469123

Sample Narrative:

L1213621-10 WG1469123: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	33900		379	1000	1	05/01/2020 03:33	WG1468704
Nitrate	U		48.0	100	1	05/01/2020 03:33	WG1468704
Sulfate	22400		594	5000	1	05/01/2020 03:33	WG1468704

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	3470	~~B~~	102	1000	1	05/05/2020 23:37	WG1470661

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	8660		48.9	100	1	05/06/2020 09:52	WG1469555
Manganese	1010		1.32	5.00	1	05/06/2020 09:52	WG1469555

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	1150	Z, J+	31.6	100	1	05/04/2020 17:04	WG1470018
(S) a,a,a-Trifluorotoluene(FID)	*98.1*			*78.0-120*		*05/04/2020 17:04*	WG1470018

Sample Narrative:

L1213621-10 WG1470018: No discernable petroleum pattern

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	3780		0.287	0.678	1	05/06/2020 11:31	WG1470548
Ethane	U		0.296	1.29	1	05/06/2020 11:31	WG1470548
Ethene	468		0.422	1.27	1	05/06/2020 11:31	WG1470548

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U		282	625	25	05/03/2020 01:48	WG1469806
Acrylonitrile	U		16.8	125	25	05/03/2020 01:48	WG1469806
Benzene	U		2.35	12.5	25	05/03/2020 01:48	WG1469806
Bromobenzene	U		2.95	12.5	25	05/03/2020 01:48	WG1469806
Bromodichloromethane	U		3.40	12.5	25	05/03/2020 01:48	WG1469806
Bromochloromethane	U		3.20	12.5	25	05/03/2020 01:48	WG1469806
Bromoform	U		3.22	12.5	25	05/03/2020 01:48	WG1469806
Bromomethane	U		15.1	62.5	25	05/03/2020 01:48	WG1469806
n-Butylbenzene	U		3.93	12.5	25	05/03/2020 01:48	WG1469806
sec-Butylbenzene	U		3.13	12.5	25	05/03/2020 01:48	WG1469806

JC 5/20/2020

MW-147-042920
Collected date/time: 04/29/20 14:55

SAMPLE RESULTS - 10

L1213621

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
tert-Butylbenzene	U		3.18	12.5	25	05/03/2020 01:48	WG1469806
Carbon disulfide	U	UJ J0	2.41	12.5	25	05/03/2020 01:48	WG1469806
Carbon tetrachloride	U		3.20	12.5	25	05/03/2020 01:48	WG1469806
Chlorobenzene	U		2.93	12.5	25	05/03/2020 01:48	WG1469806
Chlorodibromomethane	U		3.50	12.5	25	05/03/2020 01:48	WG1469806
Chloroethane	U		4.80	62.5	25	05/03/2020 01:48	WG1469806
Chloroform	U		2.78	12.5	25	05/03/2020 01:48	WG1469806
Chloromethane	U		24.0	31.3	25	05/03/2020 01:48	WG1469806
2-Chlorotoluene	U		2.65	12.5	25	05/03/2020 01:48	WG1469806
4-Chlorotoluene	U		2.85	12.5	25	05/03/2020 01:48	WG1469806
1,2-Dibromo-3-Chloropropane	U		6.90	62.5	25	05/03/2020 01:48	WG1469806
1,2-Dibromoethane	U		3.15	12.5	25	05/03/2020 01:48	WG1469806
Dibromomethane	U		3.05	12.5	25	05/03/2020 01:48	WG1469806
1,2-Dichlorobenzene	U		2.68	12.5	25	05/03/2020 01:48	WG1469806
1,3-Dichlorobenzene	U		7.48	12.5	25	05/03/2020 01:48	WG1469806
1,4-Dichlorobenzene	U		3.00	12.5	25	05/03/2020 01:48	WG1469806
Dichlorodifluoromethane	U		9.35	62.5	25	05/03/2020 01:48	WG1469806
1,1-Dichloroethane	U		2.50	12.5	25	05/03/2020 01:48	WG1469806
1,2-Dichloroethane	U		2.05	12.5	25	05/03/2020 01:48	WG1469806
1,1-Dichloroethene	U		4.70	12.5	25	05/03/2020 01:48	WG1469806
cis-1,2-Dichloroethene	2410		3.15	12.5	25	05/03/2020 01:48	WG1469806
trans-1,2-Dichloroethene	3.90	J	3.73	12.5	25	05/03/2020 01:48	WG1469806
1,2-Dichloropropane	U		3.73	12.5	25	05/03/2020 01:48	WG1469806
1,1-Dichloropropene	U		3.55	12.5	25	05/03/2020 01:48	WG1469806
1,3-Dichloropropane	U		2.73	25.0	25	05/03/2020 01:48	WG1469806
cis-1,3-Dichloropropene	U		2.78	12.5	25	05/03/2020 01:48	WG1469806
trans-1,3-Dichloropropene	U		2.95	12.5	25	05/03/2020 01:48	WG1469806
trans-1,4-Dichloro-2-butene	U		11.7	125	25	05/03/2020 01:48	WG1469806
2,2-Dichloropropane	U		4.03	12.5	25	05/03/2020 01:48	WG1469806
Di-isopropyl ether	U		2.63	12.5	25	05/03/2020 01:48	WG1469806
Ethylbenzene	U		3.43	12.5	25	05/03/2020 01:48	WG1469806
Hexachloro-1,3-butadiene	U		8.43	25.0	25	05/03/2020 01:48	WG1469806
2-Hexanone	U		19.7	125	25	05/03/2020 01:48	WG1469806
n-Hexane	U		18.7	125	25	05/03/2020 01:48	WG1469806
Iodomethane	U	UJ J0	13.9	125	25	05/03/2020 01:48	WG1469806
Isopropylbenzene	U		2.63	12.5	25	05/03/2020 01:48	WG1469806
p-Isopropyltoluene	U		3.00	12.5	25	05/03/2020 01:48	WG1469806
2-Butanone (MEK)	U		29.8	125	25	05/03/2020 01:48	WG1469806
Methylene Chloride	U	UJ J0	10.7	62.5	25	05/03/2020 01:48	WG1469806
4-Methyl-2-pentanone (MIBK)	U		12.0	125	25	05/03/2020 01:48	WG1469806
Methyl tert-butyl ether	U		2.53	12.5	25	05/03/2020 01:48	WG1469806
Naphthalene	U		4.35	62.5	25	05/03/2020 01:48	WG1469806
n-Propylbenzene	U		2.48	12.5	25	05/03/2020 01:48	WG1469806
Styrene	U		2.95	12.5	25	05/03/2020 01:48	WG1469806
1,1,1,2-Tetrachloroethane	U		3.68	12.5	25	05/03/2020 01:48	WG1469806
1,1,2,2-Tetrachloroethane	U		3.33	12.5	25	05/03/2020 01:48	WG1469806
1,1,2-Trichlorotrifluoroethane	U		4.50	12.5	25	05/03/2020 01:48	WG1469806
Tetrachloroethene	U		7.50	12.5	25	05/03/2020 01:48	WG1469806
Toluene	U		6.95	12.5	25	05/03/2020 01:48	WG1469806
1,2,3-Trichlorobenzene	U		4.10	12.5	25	05/03/2020 01:48	WG1469806
1,2,4-Trichlorobenzene	U		12.0	25.0	25	05/03/2020 01:48	WG1469806
1,1,1-Trichloroethane	U		3.73	12.5	25	05/03/2020 01:48	WG1469806
1,1,2-Trichloroethane	U		3.95	12.5	25	05/03/2020 01:48	WG1469806
Trichloroethene	5.10	J	4.75	12.5	25	05/03/2020 01:48	WG1469806
Trichlorofluoromethane	U		4.00	62.5	25	05/03/2020 01:48	WG1469806
1,2,3-Trichloropropane	U		5.93	62.5	25	05/03/2020 01:48	WG1469806

JC 5/20/2020

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,2,4-Trimethylbenzene	U		8.05	12.5	25	05/03/2020 01:48	WG1469806
1,2,3-Trimethylbenzene	U		2.60	12.5	25	05/03/2020 01:48	WG1469806
1,3,5-Trimethylbenzene	U		2.60	12.5	25	05/03/2020 01:48	WG1469806
Vinyl acetate	U		17.3	125	25	05/03/2020 01:48	WG1469806
Vinyl chloride	3470		5.85	12.5	25	05/03/2020 01:48	WG1469806
Xylenes, Total	U		4.35	37.5	25	05/03/2020 01:48	WG1469806
(S) Toluene-d8	*107*			*80.0-120*		*05/03/2020 01:48*	WG1469806
(S) 4-Bromofluorobenzene	*103*			*77.0-126*		*05/03/2020 01:48*	WG1469806
(S) 1,2-Dichloroethane-d4	*113*			*70.0-130*		*05/03/2020 01:48*	WG1469806

JC 5/20/2020

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	383000		8450	20000	1	05/03/2020 10:46	WG1469125

Sample Narrative:

L1214057-01 WG1469125: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	40900		379	1000	1	05/02/2020 01:16	WG1469118
Nitrate	U		48.0	100	1	05/02/2020 01:16	WG1469118
Sulfate	13700		594	5000	1	05/02/2020 01:16	WG1469118

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	3550		102	1000	1	05/08/2020 00:56	WG1471458

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	2910		48.9	100	1	05/06/2020 20:23	WG1469558
Manganese	1100	~~V~~	1.32	5.00	1	05/06/2020 20:23	WG1469558

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	1080	Z, J+	31.6	100	1	05/06/2020 05:53	WG1470453
(S) a,a,a-Trifluorotoluene(FID)	*98.2*			*78.0-120*		*05/06/2020 05:53*	WG1470453

Sample Narrative:

L1214057-01 WG1470453: No discernable petroleum pattern

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	5020		0.287	0.678	1	05/07/2020 13:00	WG1471909
Ethane	U		0.296	1.29	1	05/07/2020 13:00	WG1471909
Ethene	511		0.422	1.27	1	05/07/2020 13:00	WG1471909

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U	~~J4~~	1130	2500	100	05/05/2020 00:13	WG1470473
Acrylonitrile	U		67.1	500	100	05/05/2020 00:13	WG1470473
Benzene	U		9.41	50.0	100	05/05/2020 00:13	WG1470473
Bromobenzene	U		11.8	50.0	100	05/05/2020 00:13	WG1470473
Bromodichloromethane	U		13.6	50.0	100	05/05/2020 00:13	WG1470473
Bromochloromethane	U		12.8	50.0	100	05/05/2020 00:13	WG1470473
Bromoform	U		12.9	50.0	100	05/05/2020 00:13	WG1470473
Bromomethane	U		60.5	250	100	05/05/2020 00:13	WG1470473
n-Butylbenzene	U		15.7	50.0	100	05/05/2020 00:13	WG1470473
sec-Butylbenzene	U		12.5	50.0	100	05/05/2020 00:13	WG1470473

JC 5/20/2020

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
tert-Butylbenzene	U		12.7	50.0	100	05/05/2020 00:13	WG1470473
Carbon disulfide	U UJ	J0	9.62	50.0	100	05/05/2020 00:13	WG1470473
Carbon tetrachloride	U		12.8	50.0	100	05/05/2020 00:13	WG1470473
Chlorobenzene	U		11.7	50.0	100	05/05/2020 00:13	WG1470473
Chlorodibromomethane	U		14.0	50.0	100	05/05/2020 00:13	WG1470473
Chloroethane	U		19.2	250	100	05/05/2020 00:13	WG1470473
Chloroform	U		11.1	50.0	100	05/05/2020 00:13	WG1470473
Chloromethane	U		96.0	125	100	05/05/2020 00:13	WG1470473
2-Chlorotoluene	U		10.6	50.0	100	05/05/2020 00:13	WG1470473
4-Chlorotoluene	U		11.4	50.0	100	05/05/2020 00:13	WG1470473
1,2-Dibromo-3-Chloropropane	U		27.6	250	100	05/05/2020 00:13	WG1470473
1,2-Dibromoethane	U		12.6	50.0	100	05/05/2020 00:13	WG1470473
Dibromomethane	U		12.2	50.0	100	05/05/2020 00:13	WG1470473
1,2-Dichlorobenzene	U		10.7	50.0	100	05/05/2020 00:13	WG1470473
1,3-Dichlorobenzene	U		29.9	50.0	100	05/05/2020 00:13	WG1470473
1,4-Dichlorobenzene	U		12.0	50.0	100	05/05/2020 00:13	WG1470473
Dichlorodifluoromethane	U		37.4	250	100	05/05/2020 00:13	WG1470473
1,1-Dichloroethane	U		10.0	50.0	100	05/05/2020 00:13	WG1470473
1,2-Dichloroethane	U		8.19	50.0	100	05/05/2020 00:13	WG1470473
1,1-Dichloroethene	U		18.8	50.0	100	05/05/2020 00:13	WG1470473
cis-1,2-Dichloroethene	2100		12.6	50.0	100	05/05/2020 00:13	WG1470473
trans-1,2-Dichloroethene	U		14.9	50.0	100	05/05/2020 00:13	WG1470473
1,2-Dichloropropane	U		14.9	50.0	100	05/05/2020 00:13	WG1470473
1,1-Dichloropropene	U		14.2	50.0	100	05/05/2020 00:13	WG1470473
1,3-Dichloropropane	U		10.9	100	100	05/05/2020 00:13	WG1470473
cis-1,3-Dichloropropene	U		11.1	50.0	100	05/05/2020 00:13	WG1470473
trans-1,3-Dichloropropene	U		11.8	50.0	100	05/05/2020 00:13	WG1470473
trans-1,4-Dichloro-2-butene	U		46.7	500	100	05/05/2020 00:13	WG1470473
2,2-Dichloropropane	U		16.1	50.0	100	05/05/2020 00:13	WG1470473
Di-isopropyl ether	U		10.5	50.0	100	05/05/2020 00:13	WG1470473
Ethylbenzene	U		13.7	50.0	100	05/05/2020 00:13	WG1470473
Hexachloro-1,3-butadiene	U		33.7	100	100	05/05/2020 00:13	WG1470473
2-Hexanone	U		78.7	500	100	05/05/2020 00:13	WG1470473
n-Hexane	U		74.9	500	100	05/05/2020 00:13	WG1470473
Iodomethane	U		55.4	500	100	05/05/2020 00:13	WG1470473
Isopropylbenzene	U		10.5	50.0	100	05/05/2020 00:13	WG1470473
p-Isopropyltoluene	U		12.0	50.0	100	05/05/2020 00:13	WG1470473
2-Butanone (MEK)	U		119	500	100	05/05/2020 00:13	WG1470473
Methylene Chloride	U		43.0	250	100	05/05/2020 00:13	WG1470473
4-Methyl-2-pentanone (MIBK)	U		47.8	500	100	05/05/2020 00:13	WG1470473
Methyl tert-butyl ether	U		10.1	50.0	100	05/05/2020 00:13	WG1470473
Naphthalene	U		17.4	250	100	05/05/2020 00:13	WG1470473
n-Propylbenzene	U		9.93	50.0	100	05/05/2020 00:13	WG1470473
Styrene	U		11.8	50.0	100	05/05/2020 00:13	WG1470473
1,1,1,2-Tetrachloroethane	U		14.7	50.0	100	05/05/2020 00:13	WG1470473
1,1,2,2-Tetrachloroethane	U		13.3	50.0	100	05/05/2020 00:13	WG1470473
1,1,2-Trichlorotrifluoroethane	U		18.0	50.0	100	05/05/2020 00:13	WG1470473
Tetrachloroethene	U		30.0	50.0	100	05/05/2020 00:13	WG1470473
Toluene	U		27.8	50.0	100	05/05/2020 00:13	WG1470473
1,2,3-Trichlorobenzene	U		16.4	50.0	100	05/05/2020 00:13	WG1470473
1,2,4-Trichlorobenzene	U		48.1	100	100	05/05/2020 00:13	WG1470473
1,1,1-Trichloroethane	U		14.9	50.0	100	05/05/2020 00:13	WG1470473
1,1,2-Trichloroethane	U		15.8	50.0	100	05/05/2020 00:13	WG1470473
Trichloroethene	U		19.0	50.0	100	05/05/2020 00:13	WG1470473
Trichlorofluoromethane	U		16.0	250	100	05/05/2020 00:13	WG1470473
1,2,3-Trichloropropane	U		23.7	250	100	05/05/2020 00:13	WG1470473

JC 5/20/2020

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Volatile Organic Compounds (GC/MS) by Method 8260D

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
1,2,4-Trimethylbenzene	U		32.2	50.0	100	05/05/2020 00:13	WG1470473
1,2,3-Trimethylbenzene	U		10.4	50.0	100	05/05/2020 00:13	WG1470473
1,3,5-Trimethylbenzene	U		10.4	50.0	100	05/05/2020 00:13	WG1470473
Vinyl acetate	U		69.2	500	100	05/05/2020 00:13	WG1470473
Vinyl chloride	6040		23.4	50.0	100	05/05/2020 00:13	WG1470473
Xylenes, Total	U		17.4	150	100	05/05/2020 00:13	WG1470473
(S) Toluene-d8	*109*			*80.0-120*		*05/05/2020 00:13*	WG1470473
(S) 4-Bromofluorobenzene	*103*			*77.0-126*		*05/05/2020 00:13*	WG1470473
(S) 1,2-Dichloroethane-d4	*110*			*70.0-130*		*05/05/2020 00:13*	WG1470473

JC 5/20/2020

Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	234000		8450	20000	1	05/03/2020 10:56	WG1469125

Sample Narrative:

L1214057-02 WG1469125: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	22300		379	1000	1	05/02/2020 01:34	WG1469118
Nitrate	3090		48.0	100	1	05/02/2020 01:34	WG1469118
Sulfate	74600		594	5000	1	05/02/2020 01:34	WG1469118

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	1380	~~B~~	102	1000	1	05/08/2020 01:18	WG1471458

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	1530		48.9	100	1	05/06/2020 20:40	WG1469558
Manganese	360		1.32	5.00	1	05/06/2020 20:40	WG1469558

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	47.5	•U ~~BJ~~	31.6	100	1	05/06/2020 06:15	WG1470453
(S) a,a,a-Trifluorotoluene(FID)	*98.6*			*78.0-120*		*05/06/2020 06:15*	WG1470453

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	U		0.287	0.678	1	05/07/2020 13:03	WG1471909
Ethane	U		0.296	1.29	1	05/07/2020 13:03	WG1471909
Ethene	U		0.422	1.27	1	05/07/2020 13:03	WG1471909

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U	~~J4~~	11.3	25.0	1	05/05/2020 00:32	WG1470473
Acrylonitrile	U		0.671	5.00	1	05/05/2020 00:32	WG1470473
Benzene	U		0.0941	0.500	1	05/05/2020 00:32	WG1470473
Bromobenzene	U		0.118	0.500	1	05/05/2020 00:32	WG1470473
Bromodichloromethane	U		0.136	0.500	1	05/05/2020 00:32	WG1470473
Bromochloromethane	U		0.128	0.500	1	05/05/2020 00:32	WG1470473
Bromoform	U		0.129	0.500	1	05/05/2020 00:32	WG1470473
Bromomethane	U		0.605	2.50	1	05/05/2020 00:32	WG1470473
n-Butylbenzene	U		0.157	0.500	1	05/05/2020 00:32	WG1470473
sec-Butylbenzene	U		0.125	0.500	1	05/05/2020 00:32	WG1470473
tert-Butylbenzene	U		0.127	0.500	1	05/05/2020 00:32	WG1470473
Carbon disulfide	U	UJ J0	0.0962	0.500	1	05/05/2020 00:32	WG1470473
Carbon tetrachloride	U		0.128	0.500	1	05/05/2020 00:32	WG1470473

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SAMPLE RESULTS - 02

L1214057

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chlorobenzene	U		0.117	0.500	1	05/05/2020 00:32	WG1470473
Chlorodibromomethane	U		0.140	0.500	1	05/05/2020 00:32	WG1470473
Chloroethane	U		0.192	2.50	1	05/05/2020 00:32	WG1470473
Chloroform	U		0.111	0.500	1	05/05/2020 00:32	WG1470473
Chloromethane	U		0.960	1.25	1	05/05/2020 00:32	WG1470473
2-Chlorotoluene	U		0.106	0.500	1	05/05/2020 00:32	WG1470473
4-Chlorotoluene	U		0.114	0.500	1	05/05/2020 00:32	WG1470473
1,2-Dibromo-3-Chloropropane	U		0.276	2.50	1	05/05/2020 00:32	WG1470473
1,2-Dibromoethane	U		0.126	0.500	1	05/05/2020 00:32	WG1470473
Dibromomethane	U		0.122	0.500	1	05/05/2020 00:32	WG1470473
1,2-Dichlorobenzene	U		0.107	0.500	1	05/05/2020 00:32	WG1470473
1,3-Dichlorobenzene	U		0.299	0.500	1	05/05/2020 00:32	WG1470473
1,4-Dichlorobenzene	U		0.120	0.500	1	05/05/2020 00:32	WG1470473
Dichlorodifluoromethane	U		0.374	2.50	1	05/05/2020 00:32	WG1470473
1,1-Dichloroethane	U		0.100	0.500	1	05/05/2020 00:32	WG1470473
1,2-Dichloroethane	U		0.0819	0.500	1	05/05/2020 00:32	WG1470473
1,1-Dichloroethene	U		0.188	0.500	1	05/05/2020 00:32	WG1470473
cis-1,2-Dichloroethene	2.58		0.126	0.500	1	05/05/2020 00:32	WG1470473
trans-1,2-Dichloroethene	U		0.149	0.500	1	05/05/2020 00:32	WG1470473
1,2-Dichloropropane	U		0.149	0.500	1	05/05/2020 00:32	WG1470473
1,1-Dichloropropene	U		0.142	0.500	1	05/05/2020 00:32	WG1470473
1,3-Dichloropropane	U		0.109	1.00	1	05/05/2020 00:32	WG1470473
cis-1,3-Dichloropropene	U		0.111	0.500	1	05/05/2020 00:32	WG1470473
trans-1,3-Dichloropropene	U		0.118	0.500	1	05/05/2020 00:32	WG1470473
trans-1,4-Dichloro-2-butene	U		0.467	5.00	1	05/05/2020 00:32	WG1470473
2,2-Dichloropropane	U		0.161	0.500	1	05/05/2020 00:32	WG1470473
Di-isopropyl ether	U		0.105	0.500	1	05/05/2020 00:32	WG1470473
Ethylbenzene	U		0.137	0.500	1	05/05/2020 00:32	WG1470473
Hexachloro-1,3-butadiene	U		0.337	1.00	1	05/05/2020 00:32	WG1470473
2-Hexanone	U		0.787	5.00	1	05/05/2020 00:32	WG1470473
n-Hexane	U		0.749	5.00	1	05/05/2020 00:32	WG1470473
Iodomethane	U		0.554	5.00	1	05/05/2020 00:32	WG1470473
Isopropylbenzene	U		0.105	0.500	1	05/05/2020 00:32	WG1470473
p-Isopropyltoluene	U		0.120	0.500	1	05/05/2020 00:32	WG1470473
2-Butanone (MEK)	U		1.19	5.00	1	05/05/2020 00:32	WG1470473
Methylene Chloride	U		0.430	2.50	1	05/05/2020 00:32	WG1470473
4-Methyl-2-pentanone (MIBK)	U		0.478	5.00	1	05/05/2020 00:32	WG1470473
Methyl tert-butyl ether	U		0.101	0.500	1	05/05/2020 00:32	WG1470473
Naphthalene	U		0.174	2.50	1	05/05/2020 00:32	WG1470473
n-Propylbenzene	U		0.0993	0.500	1	05/05/2020 00:32	WG1470473
Styrene	U		0.118	0.500	1	05/05/2020 00:32	WG1470473
1,1,1,2-Tetrachloroethane	U		0.147	0.500	1	05/05/2020 00:32	WG1470473
1,1,2,2-Tetrachloroethane	U		0.133	0.500	1	05/05/2020 00:32	WG1470473
1,1,2-Trichlorotrifluoroethane	U		0.180	0.500	1	05/05/2020 00:32	WG1470473
Tetrachloroethene	12.1		0.300	0.500	1	05/05/2020 00:32	WG1470473
Toluene	U		0.278	0.500	1	05/05/2020 00:32	WG1470473
1,2,3-Trichlorobenzene	U		0.164	0.500	1	05/05/2020 00:32	WG1470473
1,2,4-Trichlorobenzene	U		0.481	1.00	1	05/05/2020 00:32	WG1470473
1,1,1-Trichloroethane	U		0.149	0.500	1	05/05/2020 00:32	WG1470473
1,1,2-Trichloroethane	U		0.158	0.500	1	05/05/2020 00:32	WG1470473
Trichloroethene	1.06		0.190	0.500	1	05/05/2020 00:32	WG1470473
Trichlorofluoromethane	U		0.160	2.50	1	05/05/2020 00:32	WG1470473
1,2,3-Trichloropropane	U		0.237	2.50	1	05/05/2020 00:32	WG1470473
1,2,4-Trimethylbenzene	U		0.322	0.500	1	05/05/2020 00:32	WG1470473
1,2,3-Trimethylbenzene	U		0.104	0.500	1	05/05/2020 00:32	WG1470473
1,3,5-Trimethylbenzene	U		0.104	0.500	1	05/05/2020 00:32	WG1470473

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Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Vinyl acetate	U		0.692	5.00	1	05/05/2020 00:32	WG1470473
Vinyl chloride	U		0.234	0.500	1	05/05/2020 00:32	WG1470473
Xylenes, Total	U		0.174	1.50	1	05/05/2020 00:32	WG1470473
(S) Toluene-d8	*107*			*80.0-120*		*05/05/2020 00:32*	WG1470473
(S) 4-Bromofluorobenzene	*104*			*77.0-126*		*05/05/2020 00:32*	WG1470473
(S) 1,2-Dichloroethane-d4	*115*			*70.0-130*		*05/05/2020 00:32*	WG1470473

JC 5/20/2020

Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	140000		8450	20000	1	05/03/2020 11:19	WG1469125

Sample Narrative:

L1214057-03 WG1469125: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	7300		379	1000	1	05/02/2020 01:52	WG1469118
Nitrate	U		48.0	100	1	05/02/2020 01:52	WG1469118
Sulfate	6230		594	5000	1	05/02/2020 01:52	WG1469118

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	843	~~B J~~	102	1000	1	05/06/2020 20:37	WG1471459

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	7790		48.9	100	1	05/06/2020 20:43	WG1469558
Manganese	420		1.32	5.00	1	05/06/2020 20:43	WG1469558

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	38.2	U ~~B J~~	31.6	100	1	05/06/2020 06:36	WG1470453
(S) a,a,a-Trifluorotoluene(FID)	*98.5*			*78.0-120*		*05/06/2020 06:36*	WG1470453

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	U		0.287	0.678	1	05/07/2020 13:06	WG1471909
Ethane	U		0.296	1.29	1	05/07/2020 13:06	WG1471909
Ethene	U		0.422	1.27	1	05/07/2020 13:06	WG1471909

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U	~~J4~~	11.3	25.0	1	05/05/2020 00:51	WG1470473
Acrylonitrile	U		0.671	5.00	1	05/05/2020 00:51	WG1470473
Benzene	U		0.0941	0.500	1	05/05/2020 00:51	WG1470473
Bromobenzene	U		0.118	0.500	1	05/05/2020 00:51	WG1470473
Bromodichloromethane	U		0.136	0.500	1	05/05/2020 00:51	WG1470473
Bromochloromethane	U		0.128	0.500	1	05/05/2020 00:51	WG1470473
Bromoform	U		0.129	0.500	1	05/05/2020 00:51	WG1470473
Bromomethane	U		0.605	2.50	1	05/05/2020 00:51	WG1470473
n-Butylbenzene	U		0.157	0.500	1	05/05/2020 00:51	WG1470473
sec-Butylbenzene	U		0.125	0.500	1	05/05/2020 00:51	WG1470473
tert-Butylbenzene	U		0.127	0.500	1	05/05/2020 00:51	WG1470473
Carbon disulfide	U	UJ J0	0.0962	0.500	1	05/05/2020 00:51	WG1470473
Carbon tetrachloride	U		0.128	0.500	1	05/05/2020 00:51	WG1470473

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Volatile Organic Compounds (GC/MS) by Method 8260D

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Chlorobenzene	U		0.117	0.500	1	05/05/2020 00:51	WG1470473
Chlorodibromomethane	U		0.140	0.500	1	05/05/2020 00:51	WG1470473
Chloroethane	U		0.192	2.50	1	05/05/2020 00:51	WG1470473
Chloroform	U		0.111	0.500	1	05/05/2020 00:51	WG1470473
Chloromethane	U		0.960	1.25	1	05/05/2020 00:51	WG1470473
2-Chlorotoluene	U		0.106	0.500	1	05/05/2020 00:51	WG1470473
4-Chlorotoluene	U		0.114	0.500	1	05/05/2020 00:51	WG1470473
1,2-Dibromo-3-Chloropropane	U		0.276	2.50	1	05/05/2020 00:51	WG1470473
1,2-Dibromoethane	U		0.126	0.500	1	05/05/2020 00:51	WG1470473
Dibromomethane	U		0.122	0.500	1	05/05/2020 00:51	WG1470473
1,2-Dichlorobenzene	U		0.107	0.500	1	05/05/2020 00:51	WG1470473
1,3-Dichlorobenzene	U		0.299	0.500	1	05/05/2020 00:51	WG1470473
1,4-Dichlorobenzene	U		0.120	0.500	1	05/05/2020 00:51	WG1470473
Dichlorodifluoromethane	U		0.374	2.50	1	05/05/2020 00:51	WG1470473
1,1-Dichloroethane	U		0.100	0.500	1	05/05/2020 00:51	WG1470473
1,2-Dichloroethane	U		0.0819	0.500	1	05/05/2020 00:51	WG1470473
1,1-Dichloroethene	U		0.188	0.500	1	05/05/2020 00:51	WG1470473
cis-1,2-Dichloroethene	U		0.126	0.500	1	05/05/2020 00:51	WG1470473
trans-1,2-Dichloroethene	U		0.149	0.500	1	05/05/2020 00:51	WG1470473
1,2-Dichloropropane	U		0.149	0.500	1	05/05/2020 00:51	WG1470473
1,1-Dichloropropene	U		0.142	0.500	1	05/05/2020 00:51	WG1470473
1,3-Dichloropropane	U		0.109	1.00	1	05/05/2020 00:51	WG1470473
cis-1,3-Dichloropropene	U		0.111	0.500	1	05/05/2020 00:51	WG1470473
trans-1,3-Dichloropropene	U		0.118	0.500	1	05/05/2020 00:51	WG1470473
trans-1,4-Dichloro-2-butene	U		0.467	5.00	1	05/05/2020 00:51	WG1470473
2,2-Dichloropropane	U		0.161	0.500	1	05/05/2020 00:51	WG1470473
Di-isopropyl ether	U		0.105	0.500	1	05/05/2020 00:51	WG1470473
Ethylbenzene	U		0.137	0.500	1	05/05/2020 00:51	WG1470473
Hexachloro-1,3-butadiene	U		0.337	1.00	1	05/05/2020 00:51	WG1470473
2-Hexanone	U		0.787	5.00	1	05/05/2020 00:51	WG1470473
n-Hexane	U		0.749	5.00	1	05/05/2020 00:51	WG1470473
Iodomethane	U		0.554	5.00	1	05/05/2020 00:51	WG1470473
Isopropylbenzene	U		0.105	0.500	1	05/05/2020 00:51	WG1470473
p-Isopropyltoluene	U		0.120	0.500	1	05/05/2020 00:51	WG1470473
2-Butanone (MEK)	U		1.19	5.00	1	05/05/2020 00:51	WG1470473
Methylene Chloride	U		0.430	2.50	1	05/05/2020 00:51	WG1470473
4-Methyl-2-pentanone (MIBK)	U		0.478	5.00	1	05/05/2020 00:51	WG1470473
Methyl tert-butyl ether	U		0.101	0.500	1	05/05/2020 00:51	WG1470473
Naphthalene	U		0.174	2.50	1	05/05/2020 00:51	WG1470473
n-Propylbenzene	U		0.0993	0.500	1	05/05/2020 00:51	WG1470473
Styrene	U		0.118	0.500	1	05/05/2020 00:51	WG1470473
1,1,1,2-Tetrachloroethane	U		0.147	0.500	1	05/05/2020 00:51	WG1470473
1,1,2,2-Tetrachloroethane	U		0.133	0.500	1	05/05/2020 00:51	WG1470473
1,1,2-Trichlorotrifluoroethane	U		0.180	0.500	1	05/05/2020 00:51	WG1470473
Tetrachloroethene	U		0.300	0.500	1	05/05/2020 00:51	WG1470473
Toluene	U		0.278	0.500	1	05/05/2020 00:51	WG1470473
1,2,3-Trichlorobenzene	U		0.164	0.500	1	05/05/2020 00:51	WG1470473
1,2,4-Trichlorobenzene	U		0.481	1.00	1	05/05/2020 00:51	WG1470473
1,1,1-Trichloroethane	U		0.149	0.500	1	05/05/2020 00:51	WG1470473
1,1,2-Trichloroethane	U		0.158	0.500	1	05/05/2020 00:51	WG1470473
Trichloroethene	U		0.190	0.500	1	05/05/2020 00:51	WG1470473
Trichlorofluoromethane	U		0.160	2.50	1	05/05/2020 00:51	WG1470473
1,2,3-Trichloropropane	U		0.237	2.50	1	05/05/2020 00:51	WG1470473
1,2,4-Trimethylbenzene	U		0.322	0.500	1	05/05/2020 00:51	WG1470473
1,2,3-Trimethylbenzene	U		0.104	0.500	1	05/05/2020 00:51	WG1470473
1,3,5-Trimethylbenzene	U		0.104	0.500	1	05/05/2020 00:51	WG1470473

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Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Vinyl acetate	U		0.692	5.00	1	05/05/2020 00:51	WG1470473
Vinyl chloride	U		0.234	0.500	1	05/05/2020 00:51	WG1470473
Xylenes, Total	U		0.174	1.50	1	05/05/2020 00:51	WG1470473
(S) Toluene-d8	*107*			*80.0-120*		*05/05/2020 00:51*	WG1470473
(S) 4-Bromofluorobenzene	*101*			*77.0-126*		*05/05/2020 00:51*	WG1470473
(S) 1,2-Dichloroethane-d4	*114*			*70.0-130*		*05/05/2020 00:51*	WG1470473

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Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	160000		8450	20000	1	05/03/2020 11:30	WG1469125

Sample Narrative:

L1214057-04 WG1469125: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	16500		379	1000	1	05/02/2020 02:10	WG1469118
Nitrate	U		48.0	100	1	05/02/2020 02:10	WG1469118
Sulfate	149000		5940	50000	10	05/02/2020 02:28	WG1469118

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	2840		102	1000	1	05/06/2020 20:58	WG1471459

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	30300		48.9	100	1	05/06/2020 20:55	WG1469558
Manganese	774		1.32	5.00	1	05/06/2020 20:55	WG1469558

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	36.8	U ~~B J~~	31.6	100	1	05/06/2020 06:57	WG1470453
(S) a,a,a-Trifluorotoluene(FID)	*98.5*			*78.0-120*		*05/06/2020 06:57*	WG1470453

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	1270		0.287	0.678	1	05/07/2020 13:08	WG1471909
Ethane	U		0.296	1.29	1	05/07/2020 13:08	WG1471909
Ethene	U		0.422	1.27	1	05/07/2020 13:08	WG1471909

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch	
Acetone	U	~~J4~~	11.3	25.0	1	05/05/2020 01:11	WG1470473	
Acrylonitrile	U		0.671	5.00	1	05/05/2020 01:11	WG1470473	
Benzene	U		0.0941	0.500	1	05/05/2020 01:11	WG1470473	
Bromobenzene	U		0.118	0.500	1	05/05/2020 01:11	WG1470473	
Bromodichloromethane	U		0.136	0.500	1	05/05/2020 01:11	WG1470473	
Bromochloromethane	U		0.128	0.500	1	05/05/2020 01:11	WG1470473	
Bromoform	U		0.129	0.500	1	05/05/2020 01:11	WG1470473	
Bromomethane	U		0.605	2.50	1	05/05/2020 01:11	WG1470473	
n-Butylbenzene	U		0.157	0.500	1	05/05/2020 01:11	WG1470473	
sec-Butylbenzene	U		0.125	0.500	1	05/05/2020 01:11	WG1470473	
tert-Butylbenzene	U		0.127	0.500	1	05/05/2020 01:11	WG1470473	
Carbon disulfide	U	UJ J0	0.0962	0.500	1	05/05/2020 01:11	WG1470473	JC 5/20/2020
Carbon tetrachloride	U		0.128	0.500	1	05/05/2020 01:11	WG1470473	

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chlorobenzene	U		0.117	0.500	1	05/05/2020 01:11	WG1470473
Chlorodibromomethane	U		0.140	0.500	1	05/05/2020 01:11	WG1470473
Chloroethane	U		0.192	2.50	1	05/05/2020 01:11	WG1470473
Chloroform	U		0.111	0.500	1	05/05/2020 01:11	WG1470473
Chloromethane	U		0.960	1.25	1	05/05/2020 01:11	WG1470473
2-Chlorotoluene	U		0.106	0.500	1	05/05/2020 01:11	WG1470473
4-Chlorotoluene	U		0.114	0.500	1	05/05/2020 01:11	WG1470473
1,2-Dibromo-3-Chloropropane	U		0.276	2.50	1	05/05/2020 01:11	WG1470473
1,2-Dibromoethane	U		0.126	0.500	1	05/05/2020 01:11	WG1470473
Dibromomethane	U		0.122	0.500	1	05/05/2020 01:11	WG1470473
1,2-Dichlorobenzene	U		0.107	0.500	1	05/05/2020 01:11	WG1470473
1,3-Dichlorobenzene	U		0.299	0.500	1	05/05/2020 01:11	WG1470473
1,4-Dichlorobenzene	U		0.120	0.500	1	05/05/2020 01:11	WG1470473
Dichlorodifluoromethane	U		0.374	2.50	1	05/05/2020 01:11	WG1470473
1,1-Dichloroethane	U		0.100	0.500	1	05/05/2020 01:11	WG1470473
1,2-Dichloroethane	U		0.0819	0.500	1	05/05/2020 01:11	WG1470473
1,1-Dichloroethene	U		0.188	0.500	1	05/05/2020 01:11	WG1470473
cis-1,2-Dichloroethene	U		0.126	0.500	1	05/05/2020 01:11	WG1470473
trans-1,2-Dichloroethene	U		0.149	0.500	1	05/05/2020 01:11	WG1470473
1,2-Dichloropropane	U		0.149	0.500	1	05/05/2020 01:11	WG1470473
1,1-Dichloropropene	U		0.142	0.500	1	05/05/2020 01:11	WG1470473
1,3-Dichloropropane	U		0.109	1.00	1	05/05/2020 01:11	WG1470473
cis-1,3-Dichloropropene	U		0.111	0.500	1	05/05/2020 01:11	WG1470473
trans-1,3-Dichloropropene	U		0.118	0.500	1	05/05/2020 01:11	WG1470473
trans-1,4-Dichloro-2-butene	U		0.467	5.00	1	05/05/2020 01:11	WG1470473
2,2-Dichloropropane	U		0.161	0.500	1	05/05/2020 01:11	WG1470473
Di-isopropyl ether	U		0.105	0.500	1	05/05/2020 01:11	WG1470473
Ethylbenzene	U		0.137	0.500	1	05/05/2020 01:11	WG1470473
Hexachloro-1,3-butadiene	U		0.337	1.00	1	05/05/2020 01:11	WG1470473
2-Hexanone	U		0.787	5.00	1	05/05/2020 01:11	WG1470473
n-Hexane	U		0.749	5.00	1	05/05/2020 01:11	WG1470473
Iodomethane	U		0.554	5.00	1	05/05/2020 01:11	WG1470473
Isopropylbenzene	U		0.105	0.500	1	05/05/2020 01:11	WG1470473
p-Isopropyltoluene	U		0.120	0.500	1	05/05/2020 01:11	WG1470473
2-Butanone (MEK)	U		1.19	5.00	1	05/05/2020 01:11	WG1470473
Methylene Chloride	U		0.430	2.50	1	05/05/2020 01:11	WG1470473
4-Methyl-2-pentanone (MIBK)	U		0.478	5.00	1	05/05/2020 01:11	WG1470473
Methyl tert-butyl ether	U		0.101	0.500	1	05/05/2020 01:11	WG1470473
Naphthalene	U		0.174	2.50	1	05/05/2020 01:11	WG1470473
n-Propylbenzene	U		0.0993	0.500	1	05/05/2020 01:11	WG1470473
Styrene	U		0.118	0.500	1	05/05/2020 01:11	WG1470473
1,1,1,2-Tetrachloroethane	U		0.147	0.500	1	05/05/2020 01:11	WG1470473
1,1,2,2-Tetrachloroethane	U		0.133	0.500	1	05/05/2020 01:11	WG1470473
1,1,2-Trichlorotrifluoroethane	U		0.180	0.500	1	05/05/2020 01:11	WG1470473
Tetrachloroethene	U		0.300	0.500	1	05/05/2020 01:11	WG1470473
Toluene	U		0.278	0.500	1	05/05/2020 01:11	WG1470473
1,2,3-Trichlorobenzene	U		0.164	0.500	1	05/05/2020 01:11	WG1470473
1,2,4-Trichlorobenzene	U		0.481	1.00	1	05/05/2020 01:11	WG1470473
1,1,1-Trichloroethane	U		0.149	0.500	1	05/05/2020 01:11	WG1470473
1,1,2-Trichloroethane	U		0.158	0.500	1	05/05/2020 01:11	WG1470473
Trichloroethene	U		0.190	0.500	1	05/05/2020 01:11	WG1470473
Trichlorofluoromethane	U		0.160	2.50	1	05/05/2020 01:11	WG1470473
1,2,3-Trichloropropane	U		0.237	2.50	1	05/05/2020 01:11	WG1470473
1,2,4-Trimethylbenzene	U		0.322	0.500	1	05/05/2020 01:11	WG1470473
1,2,3-Trimethylbenzene	U		0.104	0.500	1	05/05/2020 01:11	WG1470473
1,3,5-Trimethylbenzene	U		0.104	0.500	1	05/05/2020 01:11	WG1470473

JC 5/20/2020

Volatile Organic Compounds (GC/MS) by Method 8260D

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Vinyl acetate	U		0.692	5.00	1	05/05/2020 01:11	WG1470473
Vinyl chloride	U		0.234	0.500	1	05/05/2020 01:11	WG1470473
Xylenes, Total	U		0.174	1.50	1	05/05/2020 01:11	WG1470473
(S) Toluene-d8	*107*			*80.0-120*		*05/05/2020 01:11*	WG1470473
(S) 4-Bromofluorobenzene	*102*			*77.0-126*		*05/05/2020 01:11*	WG1470473
(S) 1,2-Dichloroethane-d4	*116*			*70.0-130*		*05/05/2020 01:11*	WG1470473

JC 5/20/2020

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	223000		8450	20000	1	05/04/2020 02:03	WG1469873

Sample Narrative:

L1214418-01 WG1469873: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	12300		379	1000	1	05/02/2020 16:29	WG1469630
Nitrate	U		48.0	100	1	05/02/2020 16:29	WG1469630
Sulfate	11300		594	5000	1	05/02/2020 16:29	WG1469630

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	3460		102	1000	1	05/07/2020 04:30	WG1471459

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	2550		48.9	100	1	05/08/2020 16:35	WG1472548
Manganese	276		1.32	5.00	1	05/08/2020 16:35	WG1472548

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	76.0 U	~~B J~~	31.6	100	1	05/08/2020 06:14	WG1472292
(S) a,a,a-Trifluorotoluene(FID)	*93.5*			*78.0-120*		*05/08/2020 06:14*	WG1472292

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	598		0.287	0.678	1	05/08/2020 13:25	WG1472631
Ethane	U		0.296	1.29	1	05/08/2020 13:25	WG1472631
Ethene	U		0.422	1.27	1	05/08/2020 13:25	WG1472631

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U		11.3	25.0	1	05/06/2020 15:37	WG1471403
Acrylonitrile	U		0.671	5.00	1	05/06/2020 15:37	WG1471403
Benzene	0.104	J	0.0941	0.500	1	05/06/2020 15:37	WG1471403
Bromobenzene	U		0.118	0.500	1	05/06/2020 15:37	WG1471403
Bromodichloromethane	U		0.136	0.500	1	05/06/2020 15:37	WG1471403
Bromochloromethane	U		0.128	0.500	1	05/06/2020 15:37	WG1471403
Bromoform	U		0.129	0.500	1	05/06/2020 15:37	WG1471403
Bromomethane	U		0.605	2.50	1	05/06/2020 15:37	WG1471403
n-Butylbenzene	U		0.157	0.500	1	05/06/2020 15:37	WG1471403
sec-Butylbenzene	U		0.125	0.500	1	05/06/2020 15:37	WG1471403
tert-Butylbenzene	U		0.127	0.500	1	05/06/2020 15:37	WG1471403
Carbon disulfide	0.244	J	0.0962	0.500	1	05/06/2020 15:37	WG1471403
Carbon tetrachloride	U		0.128	0.500	1	05/06/2020 15:37	WG1471403

JC 5/20/2020

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Volatile Organic Compounds (GC/MS) by Method 8260D

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Chlorobenzene	U		0.117	0.500	1	05/06/2020 15:37	WG1471403
Chlorodibromomethane	U		0.140	0.500	1	05/06/2020 15:37	WG1471403
Chloroethane	U		0.192	2.50	1	05/06/2020 15:37	WG1471403
Chloroform	U		0.111	0.500	1	05/06/2020 15:37	WG1471403
Chloromethane	U		0.960	1.25	1	05/06/2020 15:37	WG1471403
2-Chlorotoluene	U		0.106	0.500	1	05/06/2020 15:37	WG1471403
4-Chlorotoluene	U		0.114	0.500	1	05/06/2020 15:37	WG1471403
1,2-Dibromo-3-Chloropropane	U		0.276	2.50	1	05/06/2020 15:37	WG1471403
1,2-Dibromoethane	U		0.126	0.500	1	05/06/2020 15:37	WG1471403
Dibromomethane	U		0.122	0.500	1	05/06/2020 15:37	WG1471403
1,2-Dichlorobenzene	U		0.107	0.500	1	05/06/2020 15:37	WG1471403
1,3-Dichlorobenzene	U		0.299	0.500	1	05/06/2020 15:37	WG1471403
1,4-Dichlorobenzene	U		0.120	0.500	1	05/06/2020 15:37	WG1471403
Dichlorodifluoromethane	U		0.374	2.50	1	05/06/2020 15:37	WG1471403
1,1-Dichloroethane	U		0.100	0.500	1	05/06/2020 15:37	WG1471403
1,2-Dichloroethane	U		0.0819	0.500	1	05/06/2020 15:37	WG1471403
1,1-Dichloroethene	U		0.188	0.500	1	05/06/2020 15:37	WG1471403
cis-1,2-Dichloroethene	U		0.126	0.500	1	05/06/2020 15:37	WG1471403
trans-1,2-Dichloroethene	U		0.149	0.500	1	05/06/2020 15:37	WG1471403
1,2-Dichloropropane	U		0.149	0.500	1	05/06/2020 15:37	WG1471403
1,1-Dichloropropene	U		0.142	0.500	1	05/06/2020 15:37	WG1471403
1,3-Dichloropropane	U		0.109	1.00	1	05/06/2020 15:37	WG1471403
cis-1,3-Dichloropropene	U		0.111	0.500	1	05/06/2020 15:37	WG1471403
trans-1,3-Dichloropropene	U		0.118	0.500	1	05/06/2020 15:37	WG1471403
trans-1,4-Dichloro-2-butene	U		0.467	5.00	1	05/06/2020 15:37	WG1471403
2,2-Dichloropropane	U		0.161	0.500	1	05/06/2020 15:37	WG1471403
Di-isopropyl ether	U		0.105	0.500	1	05/06/2020 15:37	WG1471403
Ethylbenzene	0.161	J	0.137	0.500	1	05/06/2020 15:37	WG1471403
Hexachloro-1,3-butadiene	U		0.337	1.00	1	05/06/2020 15:37	WG1471403
2-Hexanone	U		0.787	5.00	1	05/06/2020 15:37	WG1471403
n-Hexane	U		0.749	5.00	1	05/06/2020 15:37	WG1471403
Iodomethane	U		0.554	5.00	1	05/06/2020 15:37	WG1471403
Isopropylbenzene	U		0.105	0.500	1	05/06/2020 15:37	WG1471403
p-Isopropyltoluene	U		0.120	0.500	1	05/06/2020 15:37	WG1471403
2-Butanone (MEK)	U		1.19	5.00	1	05/06/2020 15:37	WG1471403
Methylene Chloride	U		0.430	2.50	1	05/06/2020 15:37	WG1471403
4-Methyl-2-pentanone (MIBK)	U		0.478	5.00	1	05/06/2020 15:37	WG1471403
Methyl tert-butyl ether	U		0.101	0.500	1	05/06/2020 15:37	WG1471403
Naphthalene	0.339 J	J J0	0.174	2.50	1	05/06/2020 15:37	WG1471403
n-Propylbenzene	U		0.0993	0.500	1	05/06/2020 15:37	WG1471403
Styrene	U		0.118	0.500	1	05/06/2020 15:37	WG1471403
1,1,1,2-Tetrachloroethane	U		0.147	0.500	1	05/06/2020 15:37	WG1471403
1,1,2,2-Tetrachloroethane	U		0.133	0.500	1	05/06/2020 15:37	WG1471403
1,1,2-Trichlorotrifluoroethane	U		0.180	0.500	1	05/06/2020 15:37	WG1471403
Tetrachloroethene	U		0.300	0.500	1	05/06/2020 15:37	WG1471403
Toluene	0.827		0.278	0.500	1	05/06/2020 15:37	WG1471403
1,2,3-Trichlorobenzene	U		0.164	0.500	1	05/06/2020 15:37	WG1471403
1,2,4-Trichlorobenzene	U		0.481	1.00	1	05/06/2020 15:37	WG1471403
1,1,1-Trichloroethane	U		0.149	0.500	1	05/06/2020 15:37	WG1471403
1,1,2-Trichloroethane	U		0.158	0.500	1	05/06/2020 15:37	WG1471403
Trichloroethene	U		0.190	0.500	1	05/06/2020 15:37	WG1471403
Trichlorofluoromethane	U		0.160	2.50	1	05/06/2020 15:37	WG1471403
1,2,3-Trichloropropane	U		0.237	2.50	1	05/06/2020 15:37	WG1471403
1,2,4-Trimethylbenzene	U		0.322	0.500	1	05/06/2020 15:37	WG1471403
1,2,3-Trimethylbenzene	U		0.104	0.500	1	05/06/2020 15:37	WG1471403
1,3,5-Trimethylbenzene	U		0.104	0.500	1	05/06/2020 15:37	WG1471403

JC 5/20/2020

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Vinyl acetate	U		0.692	5.00	1	05/06/2020 15:37	WG1471403
Vinyl chloride	U		0.234	0.500	1	05/06/2020 15:37	WG1471403
Xylenes, Total	0.712	J	0.174	1.50	1	05/06/2020 15:37	WG1471403
(S) Toluene-d8	*110*			*80.0-120*		*05/06/2020 15:37*	WG1471403
(S) 4-Bromofluorobenzene	*104*			*77.0-126*		*05/06/2020 15:37*	WG1471403
(S) 1,2-Dichloroethane-d4	*93.8*			*70.0-130*		*05/06/2020 15:37*	WG1471403

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

JC 5/20/2020

Wet Chemistry by Method 2320 B-2011

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Alkalinity	198000		8450	20000	1	05/04/2020 02:27	WG1469873

Sample Narrative:

L1214418-02 WG1469873: Endpoint pH 4.5

Wet Chemistry by Method 9056A

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Chloride	11300		379	1000	1	05/02/2020 16:44	WG1469630
Nitrate	U		48.0	100	1	05/02/2020 16:44	WG1469630
Sulfate	13800		594	5000	1	05/02/2020 16:44	WG1469630

Wet Chemistry by Method 9060A

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
TOC (Total Organic Carbon)	1790	~~B~~	102	1000	1	05/08/2020 00:23	WG1472044

Metals (ICPMS) by Method 6020B

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Iron	802		48.9	100	1	05/08/2020 16:38	WG1472548
Manganese	310		1.32	5.00	1	05/08/2020 16:38	WG1472548

Volatile Organic Compounds (GC) by Method NWTPHGX

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Gasoline Range Organics-NWTPH	83.5	U ~~B J~~	31.6	100	1	05/08/2020 06:36	WG1472292
(S) a,a,a-Trifluorotoluene(FID)	*93.9*			*78.0-120*		*05/08/2020 06:36*	WG1472292

Volatile Organic Compounds (GC) by Method RSK175

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Methane	28.8		0.287	0.678	1	05/08/2020 13:28	WG1472631
Ethane	U		0.296	1.29	1	05/08/2020 13:28	WG1472631
Ethene	U		0.422	1.27	1	05/08/2020 13:28	WG1472631

Volatile Organic Compounds (GC/MS) by Method 8260D

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Acetone	U		11.3	25.0	1	05/06/2020 15:58	WG1471403
Acrylonitrile	U		0.671	5.00	1	05/06/2020 15:58	WG1471403
Benzene	U		0.0941	0.500	1	05/06/2020 15:58	WG1471403
Bromobenzene	U		0.118	0.500	1	05/06/2020 15:58	WG1471403
Bromodichloromethane	U		0.136	0.500	1	05/06/2020 15:58	WG1471403
Bromochloromethane	U		0.128	0.500	1	05/06/2020 15:58	WG1471403
Bromoform	U		0.129	0.500	1	05/06/2020 15:58	WG1471403
Bromomethane	U		0.605	2.50	1	05/06/2020 15:58	WG1471403
n-Butylbenzene	U		0.157	0.500	1	05/06/2020 15:58	WG1471403
sec-Butylbenzene	U		0.125	0.500	1	05/06/2020 15:58	WG1471403
tert-Butylbenzene	U		0.127	0.500	1	05/06/2020 15:58	WG1471403
Carbon disulfide	U		0.0962	0.500	1	05/06/2020 15:58	WG1471403
Carbon tetrachloride	U		0.128	0.500	1	05/06/2020 15:58	WG1471403

JC 5/20/2020

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chlorobenzene	U		0.117	0.500	1	05/06/2020 15:58	WG1471403
Chlorodibromomethane	U		0.140	0.500	1	05/06/2020 15:58	WG1471403
Chloroethane	U		0.192	2.50	1	05/06/2020 15:58	WG1471403
Chloroform	U		0.111	0.500	1	05/06/2020 15:58	WG1471403
Chloromethane	U		0.960	1.25	1	05/06/2020 15:58	WG1471403
2-Chlorotoluene	U		0.106	0.500	1	05/06/2020 15:58	WG1471403
4-Chlorotoluene	U		0.114	0.500	1	05/06/2020 15:58	WG1471403
1,2-Dibromo-3-Chloropropane	U		0.276	2.50	1	05/06/2020 15:58	WG1471403
1,2-Dibromoethane	U		0.126	0.500	1	05/06/2020 15:58	WG1471403
Dibromomethane	U		0.122	0.500	1	05/06/2020 15:58	WG1471403
1,2-Dichlorobenzene	U		0.107	0.500	1	05/06/2020 15:58	WG1471403
1,3-Dichlorobenzene	U		0.299	0.500	1	05/06/2020 15:58	WG1471403
1,4-Dichlorobenzene	U		0.120	0.500	1	05/06/2020 15:58	WG1471403
Dichlorodifluoromethane	U		0.374	2.50	1	05/06/2020 15:58	WG1471403
1,1-Dichloroethane	U		0.100	0.500	1	05/06/2020 15:58	WG1471403
1,2-Dichloroethane	U		0.0819	0.500	1	05/06/2020 15:58	WG1471403
1,1-Dichloroethene	U		0.188	0.500	1	05/06/2020 15:58	WG1471403
cis-1,2-Dichloroethene	U		0.126	0.500	1	05/06/2020 15:58	WG1471403
trans-1,2-Dichloroethene	U		0.149	0.500	1	05/06/2020 15:58	WG1471403
1,2-Dichloropropane	U		0.149	0.500	1	05/06/2020 15:58	WG1471403
1,1-Dichloropropene	U		0.142	0.500	1	05/06/2020 15:58	WG1471403
1,3-Dichloropropane	U		0.109	1.00	1	05/06/2020 15:58	WG1471403
cis-1,3-Dichloropropene	U		0.111	0.500	1	05/06/2020 15:58	WG1471403
trans-1,3-Dichloropropene	U		0.118	0.500	1	05/06/2020 15:58	WG1471403
trans-1,4-Dichloro-2-butene	U		0.467	5.00	1	05/06/2020 15:58	WG1471403
2,2-Dichloropropane	U		0.161	0.500	1	05/06/2020 15:58	WG1471403
Di-isopropyl ether	U		0.105	0.500	1	05/06/2020 15:58	WG1471403
Ethylbenzene	U		0.137	0.500	1	05/06/2020 15:58	WG1471403
Hexachloro-1,3-butadiene	U		0.337	1.00	1	05/06/2020 15:58	WG1471403
2-Hexanone	U		0.787	5.00	1	05/06/2020 15:58	WG1471403
n-Hexane	U		0.749	5.00	1	05/06/2020 15:58	WG1471403
Iodomethane	U		0.554	5.00	1	05/06/2020 15:58	WG1471403
Isopropylbenzene	U		0.105	0.500	1	05/06/2020 15:58	WG1471403
p-Isopropyltoluene	U		0.120	0.500	1	05/06/2020 15:58	WG1471403
2-Butanone (MEK)	U		1.19	5.00	1	05/06/2020 15:58	WG1471403
Methylene Chloride	U		0.430	2.50	1	05/06/2020 15:58	WG1471403
4-Methyl-2-pentanone (MIBK)	U		0.478	5.00	1	05/06/2020 15:58	WG1471403
Methyl tert-butyl ether	U		0.101	0.500	1	05/06/2020 15:58	WG1471403
Naphthalene	U UJ	J0	0.174	2.50	1	05/06/2020 15:58	WG1471403
n-Propylbenzene	U		0.0993	0.500	1	05/06/2020 15:58	WG1471403
Styrene	U		0.118	0.500	1	05/06/2020 15:58	WG1471403
1,1,1,2-Tetrachloroethane	U		0.147	0.500	1	05/06/2020 15:58	WG1471403
1,1,2,2-Tetrachloroethane	U		0.133	0.500	1	05/06/2020 15:58	WG1471403
1,1,2-Trichlorotrifluoroethane	U		0.180	0.500	1	05/06/2020 15:58	WG1471403
Tetrachloroethene	U		0.300	0.500	1	05/06/2020 15:58	WG1471403
Toluene	0.831		0.278	0.500	1	05/06/2020 15:58	WG1471403
1,2,3-Trichlorobenzene	U		0.164	0.500	1	05/06/2020 15:58	WG1471403
1,2,4-Trichlorobenzene	U		0.481	1.00	1	05/06/2020 15:58	WG1471403
1,1,1-Trichloroethane	U		0.149	0.500	1	05/06/2020 15:58	WG1471403
1,1,2-Trichloroethane	U		0.158	0.500	1	05/06/2020 15:58	WG1471403
Trichloroethene	U		0.190	0.500	1	05/06/2020 15:58	WG1471403
Trichlorofluoromethane	U		0.160	2.50	1	05/06/2020 15:58	WG1471403
1,2,3-Trichloropropane	U		0.237	2.50	1	05/06/2020 15:58	WG1471403
1,2,4-Trimethylbenzene	U		0.322	0.500	1	05/06/2020 15:58	WG1471403
1,2,3-Trimethylbenzene	U		0.104	0.500	1	05/06/2020 15:58	WG1471403
1,3,5-Trimethylbenzene	U		0.104	0.500	1	05/06/2020 15:58	WG1471403

JC 5/20/2020

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Vinyl acetate	U		0.692	5.00	1	05/06/2020 15:58	WG1471403
Vinyl chloride	U		0.234	0.500	1	05/06/2020 15:58	WG1471403
Xylenes, Total	0.684	J	0.174	1.50	1	05/06/2020 15:58	WG1471403
(S) Toluene-d8	*106*			*80.0-120*		*05/06/2020 15:58*	WG1471403
(S) 4-Bromofluorobenzene	*100*			*77.0-126*		*05/06/2020 15:58*	WG1471403
(S) 1,2-Dichloroethane-d4	*95.9*			*70.0-130*		*05/06/2020 15:58*	WG1471403

JC 5/20/2020

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	366000		8450	20000	1	05/04/2020 02:37	WG1469873

Sample Narrative:

L1214418-03 WG1469873: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	38700		379	1000	1	05/02/2020 16:58	WG1469630
Nitrate	U		48.0	100	1	05/02/2020 16:58	WG1469630
Sulfate	U		594	5000	1	05/02/2020 16:58	WG1469630

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	9210		102	1000	1	05/08/2020 00:39	WG1472044

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	717		48.9	100	1	05/08/2020 16:41	WG1472548
Manganese	187		1.32	5.00	1	05/08/2020 16:41	WG1472548

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	68.3 U	~~B J~~	31.6	100	1	05/08/2020 06:58	WG1472292
(S) a,a,a-Trifluorotoluene(FID)	*93.5*			*78.0-120*		*05/08/2020 06:58*	WG1472292

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	5780		0.287	0.678	1	05/08/2020 13:30	WG1472631
Ethane	62.9		0.296	1.29	1	05/08/2020 13:30	WG1472631
Ethene	U		0.422	1.27	1	05/08/2020 13:30	WG1472631

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U		11.3	25.0	1	05/06/2020 16:18	WG1471403
Acrylonitrile	U		0.671	5.00	1	05/06/2020 16:18	WG1471403
Benzene	0.0967	J	0.0941	0.500	1	05/06/2020 16:18	WG1471403
Bromobenzene	U		0.118	0.500	1	05/06/2020 16:18	WG1471403
Bromodichloromethane	U		0.136	0.500	1	05/06/2020 16:18	WG1471403
Bromochloromethane	U		0.128	0.500	1	05/06/2020 16:18	WG1471403
Bromoform	U		0.129	0.500	1	05/06/2020 16:18	WG1471403
Bromomethane	U		0.605	2.50	1	05/06/2020 16:18	WG1471403
n-Butylbenzene	U		0.157	0.500	1	05/06/2020 16:18	WG1471403
sec-Butylbenzene	U		0.125	0.500	1	05/06/2020 16:18	WG1471403
tert-Butylbenzene	U		0.127	0.500	1	05/06/2020 16:18	WG1471403
Carbon disulfide	0.738		0.0962	0.500	1	05/06/2020 16:18	WG1471403
Carbon tetrachloride	U		0.128	0.500	1	05/06/2020 16:18	WG1471403

JC 5/20/2020

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chlorobenzene	U		0.117	0.500	1	05/06/2020 16:18	WG1471403
Chlorodibromomethane	U		0.140	0.500	1	05/06/2020 16:18	WG1471403
Chloroethane	U		0.192	2.50	1	05/06/2020 16:18	WG1471403
Chloroform	U		0.111	0.500	1	05/06/2020 16:18	WG1471403
Chloromethane	U		0.960	1.25	1	05/06/2020 16:18	WG1471403
2-Chlorotoluene	U		0.106	0.500	1	05/06/2020 16:18	WG1471403
4-Chlorotoluene	U		0.114	0.500	1	05/06/2020 16:18	WG1471403
1,2-Dibromo-3-Chloropropane	U		0.276	2.50	1	05/06/2020 16:18	WG1471403
1,2-Dibromoethane	U		0.126	0.500	1	05/06/2020 16:18	WG1471403
Dibromomethane	U		0.122	0.500	1	05/06/2020 16:18	WG1471403
1,2-Dichlorobenzene	U		0.107	0.500	1	05/06/2020 16:18	WG1471403
1,3-Dichlorobenzene	U		0.299	0.500	1	05/06/2020 16:18	WG1471403
1,4-Dichlorobenzene	U		0.120	0.500	1	05/06/2020 16:18	WG1471403
Dichlorodifluoromethane	U		0.374	2.50	1	05/06/2020 16:18	WG1471403
1,1-Dichloroethane	U		0.100	0.500	1	05/06/2020 16:18	WG1471403
1,2-Dichloroethane	U		0.0819	0.500	1	05/06/2020 16:18	WG1471403
1,1-Dichloroethene	U		0.188	0.500	1	05/06/2020 16:18	WG1471403
cis-1,2-Dichloroethene	0.715		0.126	0.500	1	05/06/2020 16:18	WG1471403
trans-1,2-Dichloroethene	U		0.149	0.500	1	05/06/2020 16:18	WG1471403
1,2-Dichloropropane	U		0.149	0.500	1	05/06/2020 16:18	WG1471403
1,1-Dichloropropene	U		0.142	0.500	1	05/06/2020 16:18	WG1471403
1,3-Dichloropropane	U		0.109	1.00	1	05/06/2020 16:18	WG1471403
cis-1,3-Dichloropropene	U		0.111	0.500	1	05/06/2020 16:18	WG1471403
trans-1,3-Dichloropropene	U		0.118	0.500	1	05/06/2020 16:18	WG1471403
trans-1,4-Dichloro-2-butene	U		0.467	5.00	1	05/06/2020 16:18	WG1471403
2,2-Dichloropropane	U		0.161	0.500	1	05/06/2020 16:18	WG1471403
Di-isopropyl ether	U		0.105	0.500	1	05/06/2020 16:18	WG1471403
Ethylbenzene	U		0.137	0.500	1	05/06/2020 16:18	WG1471403
Hexachloro-1,3-butadiene	U		0.337	1.00	1	05/06/2020 16:18	WG1471403
2-Hexanone	U		0.787	5.00	1	05/06/2020 16:18	WG1471403
n-Hexane	U		0.749	5.00	1	05/06/2020 16:18	WG1471403
Iodomethane	U		0.554	5.00	1	05/06/2020 16:18	WG1471403
Isopropylbenzene	U		0.105	0.500	1	05/06/2020 16:18	WG1471403
p-Isopropyltoluene	U		0.120	0.500	1	05/06/2020 16:18	WG1471403
2-Butanone (MEK)	U		1.19	5.00	1	05/06/2020 16:18	WG1471403
Methylene Chloride	U		0.430	2.50	1	05/06/2020 16:18	WG1471403
4-Methyl-2-pentanone (MIBK)	U		0.478	5.00	1	05/06/2020 16:18	WG1471403
Methyl tert-butyl ether	U		0.101	0.500	1	05/06/2020 16:18	WG1471403
Naphthalene	U UJ	J0	0.174	2.50	1	05/06/2020 16:18	WG1471403
n-Propylbenzene	U		0.0993	0.500	1	05/06/2020 16:18	WG1471403
Styrene	U		0.118	0.500	1	05/06/2020 16:18	WG1471403
1,1,1,2-Tetrachloroethane	U		0.147	0.500	1	05/06/2020 16:18	WG1471403
1,1,2,2-Tetrachloroethane	U		0.133	0.500	1	05/06/2020 16:18	WG1471403
1,1,2-Trichlorotrifluoroethane	U		0.180	0.500	1	05/06/2020 16:18	WG1471403
Tetrachloroethene	U		0.300	0.500	1	05/06/2020 16:18	WG1471403
Toluene	0.693		0.278	0.500	1	05/06/2020 16:18	WG1471403
1,2,3-Trichlorobenzene	U		0.164	0.500	1	05/06/2020 16:18	WG1471403
1,2,4-Trichlorobenzene	U		0.481	1.00	1	05/06/2020 16:18	WG1471403
1,1,1-Trichloroethane	U		0.149	0.500	1	05/06/2020 16:18	WG1471403
1,1,2-Trichloroethane	U		0.158	0.500	1	05/06/2020 16:18	WG1471403
Trichloroethene	U		0.190	0.500	1	05/06/2020 16:18	WG1471403
Trichlorofluoromethane	U		0.160	2.50	1	05/06/2020 16:18	WG1471403
1,2,3-Trichloropropane	U		0.237	2.50	1	05/06/2020 16:18	WG1471403
1,2,4-Trimethylbenzene	U		0.322	0.500	1	05/06/2020 16:18	WG1471403
1,2,3-Trimethylbenzene	U		0.104	0.500	1	05/06/2020 16:18	WG1471403
1,3,5-Trimethylbenzene	U		0.104	0.500	1	05/06/2020 16:18	WG1471403

JC 5/20/2020

MW-167-050120

Collected date/time: 05/01/20 12:20

SAMPLE RESULTS - 03

L1214418

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Vinyl acetate	U		0.692	5.00	1	05/06/2020 16:18	WG1471403
Vinyl chloride	0.641		0.234	0.500	1	05/06/2020 16:18	WG1471403
Xylenes, Total	0.629	J	0.174	1.50	1	05/06/2020 16:18	WG1471403
(S) Toluene-d8	*110*			*80.0-120*		*05/06/2020 16:18*	WG1471403
(S) 4-Bromofluorobenzene	*102*			*77.0-126*		*05/06/2020 16:18*	WG1471403
(S) 1,2-Dichloroethane-d4	*96.6*			*70.0-130*		*05/06/2020 16:18*	WG1471403

JC 5/20/2020

Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	199000		8450	20000	1	05/04/2020 02:48	WG1469873

Sample Narrative:

L1214418-04 WG1469873: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	16200		379	1000	1	05/02/2020 17:56	WG1469630
Nitrate	U		48.0	100	1	05/02/2020 17:56	WG1469630
Sulfate	U		594	5000	1	05/02/2020 17:56	WG1469630

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	8710		102	1000	1	05/08/2020 00:54	WG1472044

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	1400		48.9	100	1	05/08/2020 16:58	WG1472548
Manganese	53.1		1.32	5.00	1	05/08/2020 16:58	WG1472548

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	65.8 U	~~B J~~	31.6	100	1	05/08/2020 07:20	WG1472292
(S) a,a,a-Trifluorotoluene(FID)	*93.8*			*78.0-120*		*05/08/2020 07:20*	WG1472292

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	4030		0.287	0.678	1	05/08/2020 13:33	WG1472631
Ethane	U		0.296	1.29	1	05/08/2020 13:33	WG1472631
Ethene	U		0.422	1.27	1	05/08/2020 13:33	WG1472631

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U		11.3	25.0	1	05/06/2020 16:39	WG1471403
Acrylonitrile	U		0.671	5.00	1	05/06/2020 16:39	WG1471403
Benzene	0.137	J	0.0941	0.500	1	05/06/2020 16:39	WG1471403
Bromobenzene	U		0.118	0.500	1	05/06/2020 16:39	WG1471403
Bromodichloromethane	U		0.136	0.500	1	05/06/2020 16:39	WG1471403
Bromochloromethane	U		0.128	0.500	1	05/06/2020 16:39	WG1471403
Bromoform	U		0.129	0.500	1	05/06/2020 16:39	WG1471403
Bromomethane	U		0.605	2.50	1	05/06/2020 16:39	WG1471403
n-Butylbenzene	U		0.157	0.500	1	05/06/2020 16:39	WG1471403
sec-Butylbenzene	U		0.125	0.500	1	05/06/2020 16:39	WG1471403
tert-Butylbenzene	U		0.127	0.500	1	05/06/2020 16:39	WG1471403
Carbon disulfide	0.338	J	0.0962	0.500	1	05/06/2020 16:39	WG1471403
Carbon tetrachloride	U		0.128	0.500	1	05/06/2020 16:39	WG1471403

JC 5/20/2020

MW-175-050120

Collected date/time: 05/01/20 12:25

SAMPLE RESULTS - 04

L1214418

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chlorobenzene	U		0.117	0.500	1	05/06/2020 16:39	WG1471403
Chlorodibromomethane	U		0.140	0.500	1	05/06/2020 16:39	WG1471403
Chloroethane	U		0.192	2.50	1	05/06/2020 16:39	WG1471403
Chloroform	U		0.111	0.500	1	05/06/2020 16:39	WG1471403
Chloromethane	U		0.960	1.25	1	05/06/2020 16:39	WG1471403
2-Chlorotoluene	U		0.106	0.500	1	05/06/2020 16:39	WG1471403
4-Chlorotoluene	U		0.114	0.500	1	05/06/2020 16:39	WG1471403
1,2-Dibromo-3-Chloropropane	U		0.276	2.50	1	05/06/2020 16:39	WG1471403
1,2-Dibromoethane	U		0.126	0.500	1	05/06/2020 16:39	WG1471403
Dibromomethane	U		0.122	0.500	1	05/06/2020 16:39	WG1471403
1,2-Dichlorobenzene	U		0.107	0.500	1	05/06/2020 16:39	WG1471403
1,3-Dichlorobenzene	U		0.299	0.500	1	05/06/2020 16:39	WG1471403
1,4-Dichlorobenzene	U		0.120	0.500	1	05/06/2020 16:39	WG1471403
Dichlorodifluoromethane	U		0.374	2.50	1	05/06/2020 16:39	WG1471403
1,1-Dichloroethane	U		0.100	0.500	1	05/06/2020 16:39	WG1471403
1,2-Dichloroethane	U		0.0819	0.500	1	05/06/2020 16:39	WG1471403
1,1-Dichloroethene	U		0.188	0.500	1	05/06/2020 16:39	WG1471403
cis-1,2-Dichloroethene	0.478	J	0.126	0.500	1	05/06/2020 16:39	WG1471403
trans-1,2-Dichloroethene	0.188	J	0.149	0.500	1	05/06/2020 16:39	WG1471403
1,2-Dichloropropane	U		0.149	0.500	1	05/06/2020 16:39	WG1471403
1,1-Dichloropropene	U		0.142	0.500	1	05/06/2020 16:39	WG1471403
1,3-Dichloropropane	U		0.109	1.00	1	05/06/2020 16:39	WG1471403
cis-1,3-Dichloropropene	U		0.111	0.500	1	05/06/2020 16:39	WG1471403
trans-1,3-Dichloropropene	U		0.118	0.500	1	05/06/2020 16:39	WG1471403
trans-1,4-Dichloro-2-butene	U		0.467	5.00	1	05/06/2020 16:39	WG1471403
2,2-Dichloropropane	U		0.161	0.500	1	05/06/2020 16:39	WG1471403
Di-isopropyl ether	U		0.105	0.500	1	05/06/2020 16:39	WG1471403
Ethylbenzene	0.186	J	0.137	0.500	1	05/06/2020 16:39	WG1471403
Hexachloro-1,3-butadiene	U		0.337	1.00	1	05/06/2020 16:39	WG1471403
2-Hexanone	U		0.787	5.00	1	05/06/2020 16:39	WG1471403
n-Hexane	U		0.749	5.00	1	05/06/2020 16:39	WG1471403
Iodomethane	U		0.554	5.00	1	05/06/2020 16:39	WG1471403
Isopropylbenzene	U		0.105	0.500	1	05/06/2020 16:39	WG1471403
p-Isopropyltoluene	U		0.120	0.500	1	05/06/2020 16:39	WG1471403
2-Butanone (MEK)	U		1.19	5.00	1	05/06/2020 16:39	WG1471403
Methylene Chloride	U		0.430	2.50	1	05/06/2020 16:39	WG1471403
4-Methyl-2-pentanone (MIBK)	U		0.478	5.00	1	05/06/2020 16:39	WG1471403
Methyl tert-butyl ether	U		0.101	0.500	1	05/06/2020 16:39	WG1471403
Naphthalene	U UJ	J0	0.174	2.50	1	05/06/2020 16:39	WG1471403
n-Propylbenzene	U		0.0993	0.500	1	05/06/2020 16:39	WG1471403
Styrene	U		0.118	0.500	1	05/06/2020 16:39	WG1471403
1,1,1,2-Tetrachloroethane	U		0.147	0.500	1	05/06/2020 16:39	WG1471403
1,1,2,2-Tetrachloroethane	U		0.133	0.500	1	05/06/2020 16:39	WG1471403
1,1,2-Trichlorotrifluoroethane	U		0.180	0.500	1	05/06/2020 16:39	WG1471403
Tetrachloroethene	U		0.300	0.500	1	05/06/2020 16:39	WG1471403
Toluene	0.950		0.278	0.500	1	05/06/2020 16:39	WG1471403
1,2,3-Trichlorobenzene	U		0.164	0.500	1	05/06/2020 16:39	WG1471403
1,2,4-Trichlorobenzene	U		0.481	1.00	1	05/06/2020 16:39	WG1471403
1,1,1-Trichloroethane	U		0.149	0.500	1	05/06/2020 16:39	WG1471403
1,1,2-Trichloroethane	U		0.158	0.500	1	05/06/2020 16:39	WG1471403
Trichloroethene	U		0.190	0.500	1	05/06/2020 16:39	WG1471403
Trichlorofluoromethane	U		0.160	2.50	1	05/06/2020 16:39	WG1471403
1,2,3-Trichloropropane	U		0.237	2.50	1	05/06/2020 16:39	WG1471403
1,2,4-Trimethylbenzene	U		0.322	0.500	1	05/06/2020 16:39	WG1471403
1,2,3-Trimethylbenzene	U		0.104	0.500	1	05/06/2020 16:39	WG1471403
1,3,5-Trimethylbenzene	U		0.104	0.500	1	05/06/2020 16:39	WG1471403

JC 5/20/2020

MW-175-050120

Collected date/time: 05/01/20 12:25

SAMPLE RESULTS - 04

L1214418

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Vinyl acetate	U		0.692	5.00	1	05/06/2020 16:39	WG1471403
Vinyl chloride	5.75		0.234	0.500	1	05/06/2020 16:39	WG1471403
Xylenes, Total	0.971	J	0.174	1.50	1	05/06/2020 16:39	WG1471403
(S) Toluene-d8	*110*			*80.0-120*		*05/06/2020 16:39*	WG1471403
(S) 4-Bromofluorobenzene	*107*			*77.0-126*		*05/06/2020 16:39*	WG1471403
(S) 1,2-Dichloroethane-d4	*96.7*			*70.0-130*		*05/06/2020 16:39*	WG1471403

JC 5/20/2020

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Wet Chemistry by Method 2320 B-2011

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Alkalinity	293000		8450	20000	1	05/04/2020 02:59	WG1469873

Sample Narrative:

L1214418-05 WG1469873: Endpoint pH 4.5

Wet Chemistry by Method 9056A

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Chloride	17400		379	1000	1	05/02/2020 18:24	WG1469630
Nitrate	U		48.0	100	1	05/02/2020 18:24	WG1469630
Sulfate	54100		594	5000	1	05/02/2020 18:24	WG1469630

Wet Chemistry by Method 9060A

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
TOC (Total Organic Carbon)	2900		102	1000	1	05/08/2020 01:08	WG1472044

Metals (ICPMS) by Method 6020B

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Iron	1310		48.9	100	1	05/08/2020 17:01	WG1472548
Manganese	721		1.32	5.00	1	05/08/2020 17:01	WG1472548

Volatile Organic Compounds (GC) by Method RSK175

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Methane	73.7		0.287	0.678	1	05/08/2020 13:35	WG1472631
Ethane	U		0.296	1.29	1	05/08/2020 13:35	WG1472631
Ethene	U		0.422	1.27	1	05/08/2020 13:35	WG1472631

Volatile Organic Compounds (GC/MS) by Method 8260D

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Acetone	U		11.3	25.0	1	05/06/2020 16:59	WG1471403
Acrylonitrile	U		0.671	5.00	1	05/06/2020 16:59	WG1471403
Benzene	0.113	J	0.0941	0.500	1	05/06/2020 16:59	WG1471403
Bromobenzene	U		0.118	0.500	1	05/06/2020 16:59	WG1471403
Bromodichloromethane	U		0.136	0.500	1	05/06/2020 16:59	WG1471403
Bromochloromethane	U		0.128	0.500	1	05/06/2020 16:59	WG1471403
Bromoform	U		0.129	0.500	1	05/06/2020 16:59	WG1471403
Bromomethane	U		0.605	2.50	1	05/06/2020 16:59	WG1471403
n-Butylbenzene	U		0.157	0.500	1	05/06/2020 16:59	WG1471403
sec-Butylbenzene	U		0.125	0.500	1	05/06/2020 16:59	WG1471403
tert-Butylbenzene	U		0.127	0.500	1	05/06/2020 16:59	WG1471403
Carbon disulfide	U		0.0962	0.500	1	05/06/2020 16:59	WG1471403
Carbon tetrachloride	U		0.128	0.500	1	05/06/2020 16:59	WG1471403
Chlorobenzene	U		0.117	0.500	1	05/06/2020 16:59	WG1471403
Chlorodibromomethane	U		0.140	0.500	1	05/06/2020 16:59	WG1471403
Chloroethane	U		0.192	2.50	1	05/06/2020 16:59	WG1471403
Chloroform	U		0.111	0.500	1	05/06/2020 16:59	WG1471403
Chloromethane	U		0.960	1.25	1	05/06/2020 16:59	WG1471403
2-Chlorotoluene	U		0.106	0.500	1	05/06/2020 16:59	WG1471403
4-Chlorotoluene	U		0.114	0.500	1	05/06/2020 16:59	WG1471403

JC 5/20/2020

MW-335-050120
Collected date/time: 05/01/20 13:00

SAMPLE RESULTS - 05

L1214418

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,2-Dibromo-3-Chloropropane	U		0.276	2.50	1	05/06/2020 16:59	WG1471403
1,2-Dibromoethane	U		0.126	0.500	1	05/06/2020 16:59	WG1471403
Dibromomethane	U		0.122	0.500	1	05/06/2020 16:59	WG1471403
1,2-Dichlorobenzene	U		0.107	0.500	1	05/06/2020 16:59	WG1471403
1,3-Dichlorobenzene	U		0.299	0.500	1	05/06/2020 16:59	WG1471403
1,4-Dichlorobenzene	U		0.120	0.500	1	05/06/2020 16:59	WG1471403
Dichlorodifluoromethane	U		0.374	2.50	1	05/06/2020 16:59	WG1471403
1,1-Dichloroethane	U		0.100	0.500	1	05/06/2020 16:59	WG1471403
1,2-Dichloroethane	U		0.0819	0.500	1	05/06/2020 16:59	WG1471403
1,1-Dichloroethene	0.726		0.188	0.500	1	05/06/2020 16:59	WG1471403
cis-1,2-Dichloroethene	138		0.126	0.500	1	05/06/2020 16:59	WG1471403
trans-1,2-Dichloroethene	1.11		0.149	0.500	1	05/06/2020 16:59	WG1471403
1,2-Dichloropropane	U		0.149	0.500	1	05/06/2020 16:59	WG1471403
1,1-Dichloropropene	U		0.142	0.500	1	05/06/2020 16:59	WG1471403
1,3-Dichloropropane	U		0.109	1.00	1	05/06/2020 16:59	WG1471403
cis-1,3-Dichloropropene	U		0.111	0.500	1	05/06/2020 16:59	WG1471403
trans-1,3-Dichloropropene	U		0.118	0.500	1	05/06/2020 16:59	WG1471403
trans-1,4-Dichloro-2-butene	U		0.467	5.00	1	05/06/2020 16:59	WG1471403
2,2-Dichloropropane	U		0.161	0.500	1	05/06/2020 16:59	WG1471403
Di-isopropyl ether	U		0.105	0.500	1	05/06/2020 16:59	WG1471403
Ethylbenzene	U		0.137	0.500	1	05/06/2020 16:59	WG1471403
Hexachloro-1,3-butadiene	U		0.337	1.00	1	05/06/2020 16:59	WG1471403
2-Hexanone	U		0.787	5.00	1	05/06/2020 16:59	WG1471403
n-Hexane	U		0.749	5.00	1	05/06/2020 16:59	WG1471403
Iodomethane	U		0.554	5.00	1	05/06/2020 16:59	WG1471403
Isopropylbenzene	U		0.105	0.500	1	05/06/2020 16:59	WG1471403
p-Isopropyltoluene	U		0.120	0.500	1	05/06/2020 16:59	WG1471403
2-Butanone (MEK)	U		1.19	5.00	1	05/06/2020 16:59	WG1471403
Methylene Chloride	U		0.430	2.50	1	05/06/2020 16:59	WG1471403
4-Methyl-2-pentanone (MIBK)	U		0.478	5.00	1	05/06/2020 16:59	WG1471403
Methyl tert-butyl ether	U		0.101	0.500	1	05/06/2020 16:59	WG1471403
Naphthalene	U UJ	J0	0.174	2.50	1	05/06/2020 16:59	WG1471403
n-Propylbenzene	U		0.0993	0.500	1	05/06/2020 16:59	WG1471403
Styrene	U		0.118	0.500	1	05/06/2020 16:59	WG1471403
1,1,1,2-Tetrachloroethane	U		0.147	0.500	1	05/06/2020 16:59	WG1471403
1,1,2,2-Tetrachloroethane	U		0.133	0.500	1	05/06/2020 16:59	WG1471403
1,1,2-Trichlorotrifluoroethane	U		0.180	0.500	1	05/06/2020 16:59	WG1471403
Tetrachloroethene	295		3.00	5.00	10	05/11/2020 14:43	WG1473988
Toluene	U		0.278	0.500	1	05/06/2020 16:59	WG1471403
1,2,3-Trichlorobenzene	U		0.164	0.500	1	05/06/2020 16:59	WG1471403
1,2,4-Trichlorobenzene	U		0.481	1.00	1	05/06/2020 16:59	WG1471403
1,1,1-Trichloroethane	U		0.149	0.500	1	05/06/2020 16:59	WG1471403
1,1,2-Trichloroethane	U		0.158	0.500	1	05/06/2020 16:59	WG1471403
Trichloroethene	294		1.90	5.00	10	05/11/2020 14:43	WG1473988
Trichlorofluoromethane	U		0.160	2.50	1	05/06/2020 16:59	WG1471403
1,2,3-Trichloropropane	U		0.237	2.50	1	05/06/2020 16:59	WG1471403
1,2,4-Trimethylbenzene	U		0.322	0.500	1	05/06/2020 16:59	WG1471403
1,2,3-Trimethylbenzene	U		0.104	0.500	1	05/06/2020 16:59	WG1471403
1,3,5-Trimethylbenzene	U		0.104	0.500	1	05/06/2020 16:59	WG1471403
Vinyl acetate	U		0.692	5.00	1	05/06/2020 16:59	WG1471403
Vinyl chloride	U		0.234	0.500	1	05/06/2020 16:59	WG1471403
Xylenes, Total	U		0.174	1.50	1	05/06/2020 16:59	WG1471403
(S) Toluene-d8	*109*			*80.0-120*		*05/06/2020 16:59*	WG1471403
(S) Toluene-d8	*107*			*80.0-120*		*05/11/2020 14:43*	WG1473988
(S) 4-Bromofluorobenzene	*99.6*			*77.0-126*		*05/06/2020 16:59*	WG1471403
(S) 4-Bromofluorobenzene	*95.6*			*77.0-126*		*05/11/2020 14:43*	WG1473988

JC 5/20/2020

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
(S) 1,2-Dichloroethane-d4	*92.3*			*70.0-130*		*05/06/2020 16:59*	WG1471403
(S) 1,2-Dichloroethane-d4	*111*			*70.0-130*		*05/11/2020 14:43*	WG1473988

JC 5/20/2020

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	1350000		8450	20000	1	05/04/2020 03:08	WG1469873

Sample Narrative:

L1214418-06 WG1469873: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	84800		379	1000	1	05/02/2020 18:39	WG1469630
Nitrate	U		48.0	100	1	05/02/2020 18:39	WG1469630
Sulfate	1720	J	594	5000	1	05/02/2020 18:39	WG1469630

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	100000		204	2000	2	05/08/2020 01:59	WG1472044

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	50700		48.9	100	1	05/08/2020 17:05	WG1472548
Manganese	7360		1.32	5.00	1	05/08/2020 17:05	WG1472548

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	74.3 U	~~B J~~	31.6	100	1	05/08/2020 07:42	WG1472292
(S) a,a,a-Trifluorotoluene(FID)	*93.2*			*78.0-120*		*05/08/2020 07:42*	WG1472292

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	2590		0.287	0.678	1	05/08/2020 13:37	WG1472631
Ethane	84.5		0.296	1.29	1	05/08/2020 13:37	WG1472631
Ethene	U		0.422	1.27	1	05/08/2020 13:37	WG1472631

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U		11.3	25.0	1	05/06/2020 17:20	WG1471403
Acrylonitrile	U		0.671	5.00	1	05/06/2020 17:20	WG1471403
Benzene	0.162	J	0.0941	0.500	1	05/06/2020 17:20	WG1471403
Bromobenzene	U		0.118	0.500	1	05/06/2020 17:20	WG1471403
Bromodichloromethane	U		0.136	0.500	1	05/06/2020 17:20	WG1471403
Bromochloromethane	U		0.128	0.500	1	05/06/2020 17:20	WG1471403
Bromoform	U		0.129	0.500	1	05/06/2020 17:20	WG1471403
Bromomethane	U		0.605	2.50	1	05/06/2020 17:20	WG1471403
n-Butylbenzene	U		0.157	0.500	1	05/06/2020 17:20	WG1471403
sec-Butylbenzene	U		0.125	0.500	1	05/06/2020 17:20	WG1471403
tert-Butylbenzene	U		0.127	0.500	1	05/06/2020 17:20	WG1471403
Carbon disulfide	U		0.0962	0.500	1	05/06/2020 17:20	WG1471403
Carbon tetrachloride	U		0.128	0.500	1	05/06/2020 17:20	WG1471403

JC 5/20/2020

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chlorobenzene	U		0.117	0.500	1	05/06/2020 17:20	WG1471403
Chlorodibromomethane	U		0.140	0.500	1	05/06/2020 17:20	WG1471403
Chloroethane	U		0.192	2.50	1	05/06/2020 17:20	WG1471403
Chloroform	U		0.111	0.500	1	05/06/2020 17:20	WG1471403
Chloromethane	U		0.960	1.25	1	05/06/2020 17:20	WG1471403
2-Chlorotoluene	U		0.106	0.500	1	05/06/2020 17:20	WG1471403
4-Chlorotoluene	U		0.114	0.500	1	05/06/2020 17:20	WG1471403
1,2-Dibromo-3-Chloropropane	U		0.276	2.50	1	05/06/2020 17:20	WG1471403
1,2-Dibromoethane	U		0.126	0.500	1	05/06/2020 17:20	WG1471403
Dibromomethane	U		0.122	0.500	1	05/06/2020 17:20	WG1471403
1,2-Dichlorobenzene	U		0.107	0.500	1	05/06/2020 17:20	WG1471403
1,3-Dichlorobenzene	U		0.299	0.500	1	05/06/2020 17:20	WG1471403
1,4-Dichlorobenzene	U		0.120	0.500	1	05/06/2020 17:20	WG1471403
Dichlorodifluoromethane	U		0.374	2.50	1	05/06/2020 17:20	WG1471403
1,1-Dichloroethane	U		0.100	0.500	1	05/06/2020 17:20	WG1471403
1,2-Dichloroethane	U		0.0819	0.500	1	05/06/2020 17:20	WG1471403
1,1-Dichloroethene	U		0.188	0.500	1	05/06/2020 17:20	WG1471403
cis-1,2-Dichloroethene	61.4		0.126	0.500	1	05/06/2020 17:20	WG1471403
trans-1,2-Dichloroethene	2.19		0.149	0.500	1	05/06/2020 17:20	WG1471403
1,2-Dichloropropane	U		0.149	0.500	1	05/06/2020 17:20	WG1471403
1,1-Dichloropropene	U		0.142	0.500	1	05/06/2020 17:20	WG1471403
1,3-Dichloropropane	U		0.109	1.00	1	05/06/2020 17:20	WG1471403
cis-1,3-Dichloropropene	U		0.111	0.500	1	05/06/2020 17:20	WG1471403
trans-1,3-Dichloropropene	U		0.118	0.500	1	05/06/2020 17:20	WG1471403
trans-1,4-Dichloro-2-butene	U		0.467	5.00	1	05/06/2020 17:20	WG1471403
2,2-Dichloropropane	U		0.161	0.500	1	05/06/2020 17:20	WG1471403
Di-isopropyl ether	U		0.105	0.500	1	05/06/2020 17:20	WG1471403
Ethylbenzene	U		0.137	0.500	1	05/06/2020 17:20	WG1471403
Hexachloro-1,3-butadiene	U		0.337	1.00	1	05/06/2020 17:20	WG1471403
2-Hexanone	U		0.787	5.00	1	05/06/2020 17:20	WG1471403
n-Hexane	U		0.749	5.00	1	05/06/2020 17:20	WG1471403
Iodomethane	U		0.554	5.00	1	05/06/2020 17:20	WG1471403
Isopropylbenzene	U		0.105	0.500	1	05/06/2020 17:20	WG1471403
p-Isopropyltoluene	U		0.120	0.500	1	05/06/2020 17:20	WG1471403
2-Butanone (MEK)	23.5		1.19	5.00	1	05/06/2020 17:20	WG1471403
Methylene Chloride	U		0.430	2.50	1	05/06/2020 17:20	WG1471403
4-Methyl-2-pentanone (MIBK)	U		0.478	5.00	1	05/06/2020 17:20	WG1471403
Methyl tert-butyl ether	U		0.101	0.500	1	05/06/2020 17:20	WG1471403
Naphthalene	U UJ	J0	0.174	2.50	1	05/06/2020 17:20	WG1471403
n-Propylbenzene	U		0.0993	0.500	1	05/06/2020 17:20	WG1471403
Styrene	U		0.118	0.500	1	05/06/2020 17:20	WG1471403
1,1,1,2-Tetrachloroethane	U		0.147	0.500	1	05/06/2020 17:20	WG1471403
1,1,2,2-Tetrachloroethane	U		0.133	0.500	1	05/06/2020 17:20	WG1471403
1,1,2-Trichlorotrifluoroethane	U		0.180	0.500	1	05/06/2020 17:20	WG1471403
Tetrachloroethene	0.423	J	0.300	0.500	1	05/06/2020 17:20	WG1471403
Toluene	0.311	J	0.278	0.500	1	05/06/2020 17:20	WG1471403
1,2,3-Trichlorobenzene	U		0.164	0.500	1	05/06/2020 17:20	WG1471403
1,2,4-Trichlorobenzene	U		0.481	1.00	1	05/06/2020 17:20	WG1471403
1,1,1-Trichloroethane	U		0.149	0.500	1	05/06/2020 17:20	WG1471403
1,1,2-Trichloroethane	U		0.158	0.500	1	05/06/2020 17:20	WG1471403
Trichloroethene	0.353	J	0.190	0.500	1	05/06/2020 17:20	WG1471403
Trichlorofluoromethane	U		0.160	2.50	1	05/06/2020 17:20	WG1471403
1,2,3-Trichloropropane	U		0.237	2.50	1	05/06/2020 17:20	WG1471403
1,2,4-Trimethylbenzene	U		0.322	0.500	1	05/06/2020 17:20	WG1471403
1,2,3-Trimethylbenzene	U		0.104	0.500	1	05/06/2020 17:20	WG1471403
1,3,5-Trimethylbenzene	U		0.104	0.500	1	05/06/2020 17:20	WG1471403

JC 5/20/2020

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Vinyl acetate	U		0.692	5.00	1	05/06/2020 17:20	WG1471403
Vinyl chloride	24.3		0.234	0.500	1	05/06/2020 17:20	WG1471403
Xylenes, Total	U		0.174	1.50	1	05/06/2020 17:20	WG1471403
(S) Toluene-d8	*110*			*80.0-120*		*05/06/2020 17:20*	WG1471403
(S) 4-Bromofluorobenzene	*102*			*77.0-126*		*05/06/2020 17:20*	WG1471403
(S) 1,2-Dichloroethane-d4	*94.8*			*70.0-130*		*05/06/2020 17:20*	WG1471403

JC 5/20/2020

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	409000		8450	20000	1	05/04/2020 03:46	WG1469873

Sample Narrative:

L1214418-07 WG1469873: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	30300		379	1000	1	05/02/2020 19:08	WG1469630
Nitrate	U		48.0	100	1	05/02/2020 19:08	WG1469630
Sulfate	1790	J	594	5000	1	05/02/2020 19:08	WG1469630

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	4700		102	1000	1	05/08/2020 03:15	WG1472044

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	18100		48.9	100	1	05/08/2020 17:08	WG1472548
Manganese	800		1.32	5.00	1	05/08/2020 17:08	WG1472548

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	51.1 U	~~B J~~	31.6	100	1	05/08/2020 08:04	WG1472292
(S) a,a,a-Trifluorotoluene(FID)	*93.8*			*78.0-120*		*05/08/2020 08:04*	WG1472292

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	16800		2.87	6.78	10	05/11/2020 10:53	WG1473785
Ethane	86.5		0.296	1.29	1	05/08/2020 13:43	WG1472631
Ethene	U		0.422	1.27	1	05/08/2020 13:43	WG1472631

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U		11.3	25.0	1	05/06/2020 17:40	WG1471403
Acrylonitrile	U		0.671	5.00	1	05/06/2020 17:40	WG1471403
Benzene	U		0.0941	0.500	1	05/06/2020 17:40	WG1471403
Bromobenzene	U		0.118	0.500	1	05/06/2020 17:40	WG1471403
Bromodichloromethane	U		0.136	0.500	1	05/06/2020 17:40	WG1471403
Bromochloromethane	U		0.128	0.500	1	05/06/2020 17:40	WG1471403
Bromoform	U		0.129	0.500	1	05/06/2020 17:40	WG1471403
Bromomethane	U		0.605	2.50	1	05/06/2020 17:40	WG1471403
n-Butylbenzene	U		0.157	0.500	1	05/06/2020 17:40	WG1471403
sec-Butylbenzene	U		0.125	0.500	1	05/06/2020 17:40	WG1471403
tert-Butylbenzene	U		0.127	0.500	1	05/06/2020 17:40	WG1471403
Carbon disulfide	0.149	J	0.0962	0.500	1	05/06/2020 17:40	WG1471403
Carbon tetrachloride	U		0.128	0.500	1	05/06/2020 17:40	WG1471403

JC 5/20/2020

MW-174-050120

Collected date/time: 05/01/20 13:50

SAMPLE RESULTS - 07

L1214418

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chlorobenzene	U		0.117	0.500	1	05/06/2020 17:40	WG1471403
Chlorodibromomethane	U		0.140	0.500	1	05/06/2020 17:40	WG1471403
Chloroethane	U		0.192	2.50	1	05/06/2020 17:40	WG1471403
Chloroform	U		0.111	0.500	1	05/06/2020 17:40	WG1471403
Chloromethane	U		0.960	1.25	1	05/06/2020 17:40	WG1471403
2-Chlorotoluene	U		0.106	0.500	1	05/06/2020 17:40	WG1471403
4-Chlorotoluene	U		0.114	0.500	1	05/06/2020 17:40	WG1471403
1,2-Dibromo-3-Chloropropane	U		0.276	2.50	1	05/06/2020 17:40	WG1471403
1,2-Dibromoethane	U		0.126	0.500	1	05/06/2020 17:40	WG1471403
Dibromomethane	U		0.122	0.500	1	05/06/2020 17:40	WG1471403
1,2-Dichlorobenzene	U		0.107	0.500	1	05/06/2020 17:40	WG1471403
1,3-Dichlorobenzene	U		0.299	0.500	1	05/06/2020 17:40	WG1471403
1,4-Dichlorobenzene	U		0.120	0.500	1	05/06/2020 17:40	WG1471403
Dichlorodifluoromethane	U		0.374	2.50	1	05/06/2020 17:40	WG1471403
1,1-Dichloroethane	U		0.100	0.500	1	05/06/2020 17:40	WG1471403
1,2-Dichloroethane	U		0.0819	0.500	1	05/06/2020 17:40	WG1471403
1,1-Dichloroethene	U		0.188	0.500	1	05/06/2020 17:40	WG1471403
cis-1,2-Dichloroethene	0.877		0.126	0.500	1	05/06/2020 17:40	WG1471403
trans-1,2-Dichloroethene	0.653		0.149	0.500	1	05/06/2020 17:40	WG1471403
1,2-Dichloropropane	U		0.149	0.500	1	05/06/2020 17:40	WG1471403
1,1-Dichloropropene	U		0.142	0.500	1	05/06/2020 17:40	WG1471403
1,3-Dichloropropane	U		0.109	1.00	1	05/06/2020 17:40	WG1471403
cis-1,3-Dichloropropene	U		0.111	0.500	1	05/06/2020 17:40	WG1471403
trans-1,3-Dichloropropene	U		0.118	0.500	1	05/06/2020 17:40	WG1471403
trans-1,4-Dichloro-2-butene	U		0.467	5.00	1	05/06/2020 17:40	WG1471403
2,2-Dichloropropane	U		0.161	0.500	1	05/06/2020 17:40	WG1471403
Di-isopropyl ether	U		0.105	0.500	1	05/06/2020 17:40	WG1471403
Ethylbenzene	U		0.137	0.500	1	05/06/2020 17:40	WG1471403
Hexachloro-1,3-butadiene	U		0.337	1.00	1	05/06/2020 17:40	WG1471403
2-Hexanone	U		0.787	5.00	1	05/06/2020 17:40	WG1471403
n-Hexane	U		0.749	5.00	1	05/06/2020 17:40	WG1471403
Iodomethane	U		0.554	5.00	1	05/06/2020 17:40	WG1471403
Isopropylbenzene	U		0.105	0.500	1	05/06/2020 17:40	WG1471403
p-Isopropyltoluene	U		0.120	0.500	1	05/06/2020 17:40	WG1471403
2-Butanone (MEK)	U		1.19	5.00	1	05/06/2020 17:40	WG1471403
Methylene Chloride	U		0.430	2.50	1	05/06/2020 17:40	WG1471403
4-Methyl-2-pentanone (MIBK)	U		0.478	5.00	1	05/06/2020 17:40	WG1471403
Methyl tert-butyl ether	U		0.101	0.500	1	05/06/2020 17:40	WG1471403
Naphthalene	U UJ	J0	0.174	2.50	1	05/06/2020 17:40	WG1471403
n-Propylbenzene	U		0.0993	0.500	1	05/06/2020 17:40	WG1471403
Styrene	U		0.118	0.500	1	05/06/2020 17:40	WG1471403
1,1,1,2-Tetrachloroethane	U		0.147	0.500	1	05/06/2020 17:40	WG1471403
1,1,2,2-Tetrachloroethane	U		0.133	0.500	1	05/06/2020 17:40	WG1471403
1,1,2-Trichlorotrifluoroethane	U		0.180	0.500	1	05/06/2020 17:40	WG1471403
Tetrachloroethene	U		0.300	0.500	1	05/06/2020 17:40	WG1471403
Toluene	0.701		0.278	0.500	1	05/06/2020 17:40	WG1471403
1,2,3-Trichlorobenzene	U		0.164	0.500	1	05/06/2020 17:40	WG1471403
1,2,4-Trichlorobenzene	U		0.481	1.00	1	05/06/2020 17:40	WG1471403
1,1,1-Trichloroethane	U		0.149	0.500	1	05/06/2020 17:40	WG1471403
1,1,2-Trichloroethane	U		0.158	0.500	1	05/06/2020 17:40	WG1471403
Trichloroethene	U		0.190	0.500	1	05/06/2020 17:40	WG1471403
Trichlorofluoromethane	U		0.160	2.50	1	05/06/2020 17:40	WG1471403
1,2,3-Trichloropropane	U		0.237	2.50	1	05/06/2020 17:40	WG1471403
1,2,4-Trimethylbenzene	U		0.322	0.500	1	05/06/2020 17:40	WG1471403
1,2,3-Trimethylbenzene	U		0.104	0.500	1	05/06/2020 17:40	WG1471403
1,3,5-Trimethylbenzene	U		0.104	0.500	1	05/06/2020 17:40	WG1471403

JC 5/20/2020

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Vinyl acetate	U		0.692	5.00	1	05/06/2020 17:40	WG1471403
Vinyl chloride	1.04		0.234	0.500	1	05/06/2020 17:40	WG1471403
Xylenes, Total	0.710	J	0.174	1.50	1	05/06/2020 17:40	WG1471403
(S) Toluene-d8	*110*			*80.0-120*		*05/06/2020 17:40*	WG1471403
(S) 4-Bromofluorobenzene	*102*			*77.0-126*		*05/06/2020 17:40*	WG1471403
(S) 1,2-Dichloroethane-d4	*97.7*			*70.0-130*		*05/06/2020 17:40*	WG1471403

JC 5/20/2020

Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	893000		8450	20000	1	05/04/2020 03:56	WG1469873

Sample Narrative:

L1214418-08 WG1469873: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	87300		379	1000	1	05/02/2020 19:22	WG1469630
Nitrate	U		48.0	100	1	05/02/2020 19:22	WG1469630
Sulfate	U		594	5000	1	05/02/2020 19:22	WG1469630

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	45500		204	2000	2	05/08/2020 03:52	WG1472044

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	34300		48.9	100	1	05/08/2020 17:11	WG1472548
Manganese	1920		1.32	5.00	1	05/08/2020 17:11	WG1472548

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	49.1 U	~~B J~~	31.6	100	1	05/08/2020 08:26	WG1472292
(S) a,a,a-Trifluorotoluene(FID)	*93.0*			*78.0-120*		*05/08/2020 08:26*	WG1472292

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	19200		2.87	6.78	10	05/11/2020 10:56	WG1473785
Ethane	608		0.296	1.29	1	05/08/2020 13:47	WG1472631
Ethene	162		0.422	1.27	1	05/08/2020 13:47	WG1472631

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U		11.3	25.0	1	05/06/2020 18:00	WG1471403
Acrylonitrile	U		0.671	5.00	1	05/06/2020 18:00	WG1471403
Benzene	U		0.0941	0.500	1	05/06/2020 18:00	WG1471403
Bromobenzene	U		0.118	0.500	1	05/06/2020 18:00	WG1471403
Bromodichloromethane	U		0.136	0.500	1	05/06/2020 18:00	WG1471403
Bromochloromethane	U		0.128	0.500	1	05/06/2020 18:00	WG1471403
Bromoform	U		0.129	0.500	1	05/06/2020 18:00	WG1471403
Bromomethane	U		0.605	2.50	1	05/06/2020 18:00	WG1471403
n-Butylbenzene	U		0.157	0.500	1	05/06/2020 18:00	WG1471403
sec-Butylbenzene	U		0.125	0.500	1	05/06/2020 18:00	WG1471403
tert-Butylbenzene	U		0.127	0.500	1	05/06/2020 18:00	WG1471403
Carbon disulfide	0.0963	J	0.0962	0.500	1	05/06/2020 18:00	WG1471403
Carbon tetrachloride	U		0.128	0.500	1	05/06/2020 18:00	WG1471403

JC 5/20/2020

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chlorobenzene	U		0.117	0.500	1	05/06/2020 18:00	WG1471403
Chlorodibromomethane	U		0.140	0.500	1	05/06/2020 18:00	WG1471403
Chloroethane	U		0.192	2.50	1	05/06/2020 18:00	WG1471403
Chloroform	U		0.111	0.500	1	05/06/2020 18:00	WG1471403
Chloromethane	U		0.960	1.25	1	05/06/2020 18:00	WG1471403
2-Chlorotoluene	U		0.106	0.500	1	05/06/2020 18:00	WG1471403
4-Chlorotoluene	U		0.114	0.500	1	05/06/2020 18:00	WG1471403
1,2-Dibromo-3-Chloropropane	U		0.276	2.50	1	05/06/2020 18:00	WG1471403
1,2-Dibromoethane	U		0.126	0.500	1	05/06/2020 18:00	WG1471403
Dibromomethane	U		0.122	0.500	1	05/06/2020 18:00	WG1471403
1,2-Dichlorobenzene	U		0.107	0.500	1	05/06/2020 18:00	WG1471403
1,3-Dichlorobenzene	U		0.299	0.500	1	05/06/2020 18:00	WG1471403
1,4-Dichlorobenzene	U		0.120	0.500	1	05/06/2020 18:00	WG1471403
Dichlorodifluoromethane	U		0.374	2.50	1	05/06/2020 18:00	WG1471403
1,1-Dichloroethane	U		0.100	0.500	1	05/06/2020 18:00	WG1471403
1,2-Dichloroethane	U		0.0819	0.500	1	05/06/2020 18:00	WG1471403
1,1-Dichloroethene	U		0.188	0.500	1	05/06/2020 18:00	WG1471403
cis-1,2-Dichloroethene	20.4		0.126	0.500	1	05/06/2020 18:00	WG1471403
trans-1,2-Dichloroethene	2.03		0.149	0.500	1	05/06/2020 18:00	WG1471403
1,2-Dichloropropane	U		0.149	0.500	1	05/06/2020 18:00	WG1471403
1,1-Dichloropropene	U		0.142	0.500	1	05/06/2020 18:00	WG1471403
1,3-Dichloropropane	U		0.109	1.00	1	05/06/2020 18:00	WG1471403
cis-1,3-Dichloropropene	U		0.111	0.500	1	05/06/2020 18:00	WG1471403
trans-1,3-Dichloropropene	U		0.118	0.500	1	05/06/2020 18:00	WG1471403
trans-1,4-Dichloro-2-butene	U		0.467	5.00	1	05/06/2020 18:00	WG1471403
2,2-Dichloropropane	U		0.161	0.500	1	05/06/2020 18:00	WG1471403
Di-isopropyl ether	U		0.105	0.500	1	05/06/2020 18:00	WG1471403
Ethylbenzene	U		0.137	0.500	1	05/06/2020 18:00	WG1471403
Hexachloro-1,3-butadiene	U		0.337	1.00	1	05/06/2020 18:00	WG1471403
2-Hexanone	U		0.787	5.00	1	05/06/2020 18:00	WG1471403
n-Hexane	U		0.749	5.00	1	05/06/2020 18:00	WG1471403
Iodomethane	U		0.554	5.00	1	05/06/2020 18:00	WG1471403
Isopropylbenzene	U		0.105	0.500	1	05/06/2020 18:00	WG1471403
p-Isopropyltoluene	U		0.120	0.500	1	05/06/2020 18:00	WG1471403
2-Butanone (MEK)	U		1.19	5.00	1	05/06/2020 18:00	WG1471403
Methylene Chloride	U		0.430	2.50	1	05/06/2020 18:00	WG1471403
4-Methyl-2-pentanone (MIBK)	U		0.478	5.00	1	05/06/2020 18:00	WG1471403
Methyl tert-butyl ether	U		0.101	0.500	1	05/06/2020 18:00	WG1471403
Naphthalene	U	UJ J0	0.174	2.50	1	05/06/2020 18:00	WG1471403
n-Propylbenzene	U		0.0993	0.500	1	05/06/2020 18:00	WG1471403
Styrene	U		0.118	0.500	1	05/06/2020 18:00	WG1471403
1,1,1,2-Tetrachloroethane	U		0.147	0.500	1	05/06/2020 18:00	WG1471403
1,1,2,2-Tetrachloroethane	U		0.133	0.500	1	05/06/2020 18:00	WG1471403
1,1,2-Trichlorotrifluoroethane	U		0.180	0.500	1	05/06/2020 18:00	WG1471403
Tetrachloroethene	U		0.300	0.500	1	05/06/2020 18:00	WG1471403
Toluene	U		0.278	0.500	1	05/06/2020 18:00	WG1471403
1,2,3-Trichlorobenzene	U		0.164	0.500	1	05/06/2020 18:00	WG1471403
1,2,4-Trichlorobenzene	U		0.481	1.00	1	05/06/2020 18:00	WG1471403
1,1,1-Trichloroethane	U		0.149	0.500	1	05/06/2020 18:00	WG1471403
1,1,2-Trichloroethane	U		0.158	0.500	1	05/06/2020 18:00	WG1471403
Trichloroethene	U		0.190	0.500	1	05/06/2020 18:00	WG1471403
Trichlorofluoromethane	U		0.160	2.50	1	05/06/2020 18:00	WG1471403
1,2,3-Trichloropropane	U		0.237	2.50	1	05/06/2020 18:00	WG1471403
1,2,4-Trimethylbenzene	U		0.322	0.500	1	05/06/2020 18:00	WG1471403
1,2,3-Trimethylbenzene	U		0.104	0.500	1	05/06/2020 18:00	WG1471403
1,3,5-Trimethylbenzene	U		0.104	0.500	1	05/06/2020 18:00	WG1471403

JC 5/20/2020

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Vinyl acetate	U		0.692	5.00	1	05/06/2020 18:00	WG1471403
Vinyl chloride	29.5		0.234	0.500	1	05/06/2020 18:00	WG1471403
Xylenes, Total	U		0.174	1.50	1	05/06/2020 18:00	WG1471403
(S) Toluene-d8	*109*			*80.0-120*		*05/06/2020 18:00*	WG1471403
(S) 4-Bromofluorobenzene	*97.4*			*77.0-126*		*05/06/2020 18:00*	WG1471403
(S) 1,2-Dichloroethane-d4	*95.1*			*70.0-130*		*05/06/2020 18:00*	WG1471403

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

JC 5/20/2020

MW-173-050120
Collected date/time: 05/01/20 15:05

SAMPLE RESULTS - 09

L1214418

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Alkalinity	484000		8450	20000	1	05/04/2020 04:07	WG1469873

Sample Narrative:

L1214418-09 WG1469873: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chloride	46600		379	1000	1	05/02/2020 19:51	WG1469630
Nitrate	U		48.0	100	1	05/02/2020 19:51	WG1469630
Sulfate	7090		594	5000	1	05/02/2020 19:51	WG1469630

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
TOC (Total Organic Carbon)	20500		102	1000	1	05/08/2020 04:13	WG1472044

Metals (ICPMS) by Method 6020B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Iron	1320		48.9	100	1	05/08/2020 17:14	WG1472548
Manganese	835		1.32	5.00	1	05/08/2020 17:14	WG1472548

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Gasoline Range Organics-NWTPH	U		31.6	100	1	05/08/2020 22:15	WG1472903
(S) a,a,a-Trifluorotoluene(FID)	*101*			*78.0-120*		*05/08/2020 22:15*	WG1472903

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Methane	17700		2.87	6.78	10	05/11/2020 10:59	WG1473785
Ethane	71.6		0.296	1.29	1	05/08/2020 13:49	WG1472631
Ethene	117		0.422	1.27	1	05/08/2020 13:49	WG1472631

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	U		11.3	25.0	1	05/06/2020 18:21	WG1471403
Acrylonitrile	U		0.671	5.00	1	05/06/2020 18:21	WG1471403
Benzene	0.139	J	0.0941	0.500	1	05/06/2020 18:21	WG1471403
Bromobenzene	U		0.118	0.500	1	05/06/2020 18:21	WG1471403
Bromodichloromethane	U		0.136	0.500	1	05/06/2020 18:21	WG1471403
Bromochloromethane	U		0.128	0.500	1	05/06/2020 18:21	WG1471403
Bromoform	U		0.129	0.500	1	05/06/2020 18:21	WG1471403
Bromomethane	U		0.605	2.50	1	05/06/2020 18:21	WG1471403
n-Butylbenzene	U		0.157	0.500	1	05/06/2020 18:21	WG1471403
sec-Butylbenzene	U		0.125	0.500	1	05/06/2020 18:21	WG1471403
tert-Butylbenzene	U		0.127	0.500	1	05/06/2020 18:21	WG1471403
Carbon disulfide	0.168	J	0.0962	0.500	1	05/06/2020 18:21	WG1471403
Carbon tetrachloride	U		0.128	0.500	1	05/06/2020 18:21	WG1471403

JC 5/20/2020

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chlorobenzene	U		0.117	0.500	1	05/06/2020 18:21	WG1471403
Chlorodibromomethane	U		0.140	0.500	1	05/06/2020 18:21	WG1471403
Chloroethane	U		0.192	2.50	1	05/06/2020 18:21	WG1471403
Chloroform	U		0.111	0.500	1	05/06/2020 18:21	WG1471403
Chloromethane	U		0.960	1.25	1	05/06/2020 18:21	WG1471403
2-Chlorotoluene	U		0.106	0.500	1	05/06/2020 18:21	WG1471403
4-Chlorotoluene	U		0.114	0.500	1	05/06/2020 18:21	WG1471403
1,2-Dibromo-3-Chloropropane	U		0.276	2.50	1	05/06/2020 18:21	WG1471403
1,2-Dibromoethane	U		0.126	0.500	1	05/06/2020 18:21	WG1471403
Dibromomethane	U		0.122	0.500	1	05/06/2020 18:21	WG1471403
1,2-Dichlorobenzene	U		0.107	0.500	1	05/06/2020 18:21	WG1471403
1,3-Dichlorobenzene	U		0.299	0.500	1	05/06/2020 18:21	WG1471403
1,4-Dichlorobenzene	U		0.120	0.500	1	05/06/2020 18:21	WG1471403
Dichlorodifluoromethane	U		0.374	2.50	1	05/06/2020 18:21	WG1471403
1,1-Dichloroethane	U		0.100	0.500	1	05/06/2020 18:21	WG1471403
1,2-Dichloroethane	U		0.0819	0.500	1	05/06/2020 18:21	WG1471403
1,1-Dichloroethene	U		0.188	0.500	1	05/06/2020 18:21	WG1471403
cis-1,2-Dichloroethene	0.493	J	0.126	0.500	1	05/06/2020 18:21	WG1471403
trans-1,2-Dichloroethene	1.88		0.149	0.500	1	05/06/2020 18:21	WG1471403
1,2-Dichloropropane	U		0.149	0.500	1	05/06/2020 18:21	WG1471403
1,1-Dichloropropene	U		0.142	0.500	1	05/06/2020 18:21	WG1471403
1,3-Dichloropropane	U		0.109	1.00	1	05/06/2020 18:21	WG1471403
cis-1,3-Dichloropropene	U		0.111	0.500	1	05/06/2020 18:21	WG1471403
trans-1,3-Dichloropropene	U		0.118	0.500	1	05/06/2020 18:21	WG1471403
trans-1,4-Dichloro-2-butene	U		0.467	5.00	1	05/06/2020 18:21	WG1471403
2,2-Dichloropropane	U		0.161	0.500	1	05/06/2020 18:21	WG1471403
Di-isopropyl ether	U		0.105	0.500	1	05/06/2020 18:21	WG1471403
Ethylbenzene	U		0.137	0.500	1	05/06/2020 18:21	WG1471403
Hexachloro-1,3-butadiene	U		0.337	1.00	1	05/06/2020 18:21	WG1471403
2-Hexanone	U		0.787	5.00	1	05/06/2020 18:21	WG1471403
n-Hexane	U		0.749	5.00	1	05/06/2020 18:21	WG1471403
Iodomethane	U		0.554	5.00	1	05/06/2020 18:21	WG1471403
Isopropylbenzene	U		0.105	0.500	1	05/06/2020 18:21	WG1471403
p-Isopropyltoluene	U		0.120	0.500	1	05/06/2020 18:21	WG1471403
2-Butanone (MEK)	U		1.19	5.00	1	05/06/2020 18:21	WG1471403
Methylene Chloride	U		0.430	2.50	1	05/06/2020 18:21	WG1471403
4-Methyl-2-pentanone (MIBK)	U		0.478	5.00	1	05/06/2020 18:21	WG1471403
Methyl tert-butyl ether	U		0.101	0.500	1	05/06/2020 18:21	WG1471403
Naphthalene	U UJ	J0	0.174	2.50	1	05/06/2020 18:21	WG1471403
n-Propylbenzene	U		0.0993	0.500	1	05/06/2020 18:21	WG1471403
Styrene	U		0.118	0.500	1	05/06/2020 18:21	WG1471403
1,1,1,2-Tetrachloroethane	U		0.147	0.500	1	05/06/2020 18:21	WG1471403
1,1,2,2-Tetrachloroethane	U		0.133	0.500	1	05/06/2020 18:21	WG1471403
1,1,2-Trichlorotrifluoroethane	U		0.180	0.500	1	05/06/2020 18:21	WG1471403
Tetrachloroethene	U		0.300	0.500	1	05/06/2020 18:21	WG1471403
Toluene	U		0.278	0.500	1	05/06/2020 18:21	WG1471403
1,2,3-Trichlorobenzene	U		0.164	0.500	1	05/06/2020 18:21	WG1471403
1,2,4-Trichlorobenzene	U		0.481	1.00	1	05/06/2020 18:21	WG1471403
1,1,1-Trichloroethane	U		0.149	0.500	1	05/06/2020 18:21	WG1471403
1,1,2-Trichloroethane	U		0.158	0.500	1	05/06/2020 18:21	WG1471403
Trichloroethene	U		0.190	0.500	1	05/06/2020 18:21	WG1471403
Trichlorofluoromethane	U		0.160	2.50	1	05/06/2020 18:21	WG1471403
1,2,3-Trichloropropane	U		0.237	2.50	1	05/06/2020 18:21	WG1471403
1,2,4-Trimethylbenzene	U		0.322	0.500	1	05/06/2020 18:21	WG1471403
1,2,3-Trimethylbenzene	U		0.104	0.500	1	05/06/2020 18:21	WG1471403
1,3,5-Trimethylbenzene	U		0.104	0.500	1	05/06/2020 18:21	WG1471403

JC 5/20/2020

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Vinyl acetate	U		0.692	5.00	1	05/06/2020 18:21	WG1471403
Vinyl chloride	7.87		0.234	0.500	1	05/06/2020 18:21	WG1471403
Xylenes, Total	0.225	J	0.174	1.50	1	05/06/2020 18:21	WG1471403
(S) Toluene-d8	*107*			*80.0-120*		*05/06/2020 18:21*	WG1471403
(S) 4-Bromofluorobenzene	*101*			*77.0-126*		*05/06/2020 18:21*	WG1471403
(S) 1,2-Dichloroethane-d4	*93.8*			*70.0-130*		*05/06/2020 18:21*	WG1471403

JC 5/20/2020

MW-342-050420

Collected date/time: 05/04/20 10:50

SAMPLE RESULTS - 01

L1214811

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Wet Chemistry by Method 2320 B-2011

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Alkalinity	174000		8450	20000	1	05/06/2020 09:14	WG1470889

Sample Narrative:

L1214811-01 WG1470889: Endpoint pH 4.5

Wet Chemistry by Method 9056A

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Chloride	14200		379	1000	1	05/05/2020 12:43	WG1470645
Nitrate	351		48.0	100	1	05/05/2020 12:43	WG1470645
Sulfate	9650		594	5000	1	05/05/2020 12:43	WG1470645

Wet Chemistry by Method 9060A

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
TOC (Total Organic Carbon)	2680		102	1000	1	05/08/2020 07:04	WG1472044

Metals (ICPMS) by Method 6020B

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Iron	1130		48.9	100	1	05/08/2020 11:28	WG1470978
Manganese	438		1.32	5.00	1	05/08/2020 11:28	WG1470978

Volatile Organic Compounds (GC) by Method RSK175

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Methane	1040		0.287	0.678	1	05/11/2020 11:30	WG1473785
Ethane	U		0.296	1.29	1	05/11/2020 11:30	WG1473785
Ethene	U		0.422	1.27	1	05/11/2020 11:30	WG1473785

Volatile Organic Compounds (GC/MS) by Method 8260D

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Acetone	U		11.3	25.0	1	05/07/2020 02:43	WG1471764
Acrylonitrile	U		0.671	5.00	1	05/07/2020 02:43	WG1471764
Benzene	U		0.0941	0.500	1	05/07/2020 02:43	WG1471764
Bromobenzene	U		0.118	0.500	1	05/07/2020 02:43	WG1471764
Bromodichloromethane	U		0.136	0.500	1	05/07/2020 02:43	WG1471764
Bromochloromethane	U		0.128	0.500	1	05/07/2020 02:43	WG1471764
Bromoform	U		0.129	0.500	1	05/07/2020 02:43	WG1471764
Bromomethane	U		0.605	2.50	1	05/07/2020 02:43	WG1471764
n-Butylbenzene	U		0.157	0.500	1	05/07/2020 02:43	WG1471764
sec-Butylbenzene	U		0.125	0.500	1	05/07/2020 02:43	WG1471764
tert-Butylbenzene	U		0.127	0.500	1	05/07/2020 02:43	WG1471764
Carbon disulfide	0.643		0.0962	0.500	1	05/07/2020 02:43	WG1471764
Carbon tetrachloride	U		0.128	0.500	1	05/07/2020 02:43	WG1471764
Chlorobenzene	U		0.117	0.500	1	05/07/2020 02:43	WG1471764
Chlorodibromomethane	U		0.140	0.500	1	05/07/2020 02:43	WG1471764
Chloroethane	U		0.192	2.50	1	05/07/2020 02:43	WG1471764
Chloroform	U		0.111	0.500	1	05/07/2020 02:43	WG1471764
Chloromethane	U		0.960	1.25	1	05/07/2020 02:43	WG1471764
2-Chlorotoluene	U		0.106	0.500	1	05/07/2020 02:43	WG1471764
4-Chlorotoluene	U		0.114	0.500	1	05/07/2020 02:43	WG1471764

JC 5/20/2020

MW-342-050420

Collected date/time: 05/04/20 10:50

SAMPLE RESULTS - 01

L1214811

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,2-Dibromo-3-Chloropropane	U		0.276	2.50	1	05/07/2020 02:43	WG1471764
1,2-Dibromoethane	U		0.126	0.500	1	05/07/2020 02:43	WG1471764
Dibromomethane	U		0.122	0.500	1	05/07/2020 02:43	WG1471764
1,2-Dichlorobenzene	U		0.107	0.500	1	05/07/2020 02:43	WG1471764
1,3-Dichlorobenzene	U		0.299	0.500	1	05/07/2020 02:43	WG1471764
1,4-Dichlorobenzene	U		0.120	0.500	1	05/07/2020 02:43	WG1471764
Dichlorodifluoromethane	U		0.374	2.50	1	05/07/2020 02:43	WG1471764
1,1-Dichloroethane	U		0.100	0.500	1	05/07/2020 02:43	WG1471764
1,2-Dichloroethane	U		0.0819	0.500	1	05/07/2020 02:43	WG1471764
1,1-Dichloroethene	U		0.188	0.500	1	05/07/2020 02:43	WG1471764
cis-1,2-Dichloroethene	1.34		0.126	0.500	1	05/07/2020 02:43	WG1471764
trans-1,2-Dichloroethene	U		0.149	0.500	1	05/07/2020 02:43	WG1471764
1,2-Dichloropropane	U		0.149	0.500	1	05/07/2020 02:43	WG1471764
1,1-Dichloropropene	U		0.142	0.500	1	05/07/2020 02:43	WG1471764
1,3-Dichloropropane	U		0.109	1.00	1	05/07/2020 02:43	WG1471764
cis-1,3-Dichloropropene	U		0.111	0.500	1	05/07/2020 02:43	WG1471764
trans-1,3-Dichloropropene	U		0.118	0.500	1	05/07/2020 02:43	WG1471764
trans-1,4-Dichloro-2-butene	U UJ	J0 ~~J3~~	0.467	5.00	1	05/07/2020 02:43	WG1471764
2,2-Dichloropropane	U		0.161	0.500	1	05/07/2020 02:43	WG1471764
Di-isopropyl ether	U		0.105	0.500	1	05/07/2020 02:43	WG1471764
Ethylbenzene	U		0.137	0.500	1	05/07/2020 02:43	WG1471764
Hexachloro-1,3-butadiene	U		0.337	1.00	1	05/07/2020 02:43	WG1471764
2-Hexanone	U		0.787	5.00	1	05/07/2020 02:43	WG1471764
n-Hexane	U		0.749	5.00	1	05/07/2020 02:43	WG1471764
Iodomethane	U		0.554	5.00	1	05/07/2020 02:43	WG1471764
Isopropylbenzene	0.261	J	0.105	0.500	1	05/07/2020 02:43	WG1471764
p-Isopropyltoluene	U		0.120	0.500	1	05/07/2020 02:43	WG1471764
2-Butanone (MEK)	U UJ	J0 ~~J3~~	1.19	5.00	1	05/07/2020 02:43	WG1471764
Methylene Chloride	U		0.430	2.50	1	05/07/2020 02:43	WG1471764
4-Methyl-2-pentanone (MIBK)	U		0.478	5.00	1	05/07/2020 02:43	WG1471764
Methyl tert-butyl ether	U		0.101	0.500	1	05/07/2020 02:43	WG1471764
Naphthalene	U		0.174	2.50	1	05/07/2020 02:43	WG1471764
n-Propylbenzene	U		0.0993	0.500	1	05/07/2020 02:43	WG1471764
Styrene	U		0.118	0.500	1	05/07/2020 02:43	WG1471764
1,1,1,2-Tetrachloroethane	U		0.147	0.500	1	05/07/2020 02:43	WG1471764
1,1,2,2-Tetrachloroethane	U		0.133	0.500	1	05/07/2020 02:43	WG1471764
1,1,2-Trichlorotrifluoroethane	U		0.180	0.500	1	05/07/2020 02:43	WG1471764
Tetrachloroethene	U		0.300	0.500	1	05/07/2020 02:43	WG1471764
Toluene	0.366	J	0.278	0.500	1	05/07/2020 02:43	WG1471764
1,2,3-Trichlorobenzene	U		0.164	0.500	1	05/07/2020 02:43	WG1471764
1,2,4-Trichlorobenzene	U		0.481	1.00	1	05/07/2020 02:43	WG1471764
1,1,1-Trichloroethane	U		0.149	0.500	1	05/07/2020 02:43	WG1471764
1,1,2-Trichloroethane	U		0.158	0.500	1	05/07/2020 02:43	WG1471764
Trichloroethene	U		0.190	0.500	1	05/07/2020 02:43	WG1471764
Trichlorofluoromethane	U		0.160	2.50	1	05/07/2020 02:43	WG1471764
1,2,3-Trichloropropane	U		0.237	2.50	1	05/07/2020 02:43	WG1471764
1,2,4-Trimethylbenzene	U		0.322	0.500	1	05/07/2020 02:43	WG1471764
1,2,3-Trimethylbenzene	U		0.104	0.500	1	05/07/2020 02:43	WG1471764
1,3,5-Trimethylbenzene	U		0.104	0.500	1	05/07/2020 02:43	WG1471764
Vinyl acetate	U		0.692	5.00	1	05/07/2020 02:43	WG1471764
Vinyl chloride	1.51		0.234	0.500	1	05/07/2020 02:43	WG1471764
Xylenes, Total	U		0.174	1.50	1	05/07/2020 02:43	WG1471764
(S) Toluene-d8	*111*			*80.0-120*		*05/07/2020 02:43*	WG1471764
(S) 4-Bromofluorobenzene	*97.4*			*77.0-126*		*05/07/2020 02:43*	WG1471764
(S) 1,2-Dichloroethane-d4	*100*			*70.0-130*		*05/07/2020 02:43*	WG1471764

JC 5/20/2020

SAMPLE RESULTS - 02

Wet Chemistry by Method 2320 B-2011

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Alkalinity	695000		8450	20000	1	05/06/2020 09:38	WG1470889

Sample Narrative:

L1214811-02 WG1470889: Endpoint pH 4.5

Wet Chemistry by Method 9056A

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Chloride	108000		3790	10000	10	05/05/2020 13:47	WG1470645
Nitrate	U		48.0	100	1	05/05/2020 13:34	WG1470645
Sulfate	2930	J	594	5000	1	05/05/2020 13:34	WG1470645

Wet Chemistry by Method 9060A

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
TOC (Total Organic Carbon)	4300	~~B~~	102	1000	1	05/07/2020 14:53	WG1472048

Metals (ICPMS) by Method 6020B

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Iron	14800		48.9	100	1	05/08/2020 11:31	WG1470978
Manganese	6300		1.32	5.00	1	05/08/2020 11:31	WG1470978

Volatile Organic Compounds (GC) by Method RSK175

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Methane	70.4		0.287	0.678	1	05/11/2020 11:32	WG1473785
Ethane	U		0.296	1.29	1	05/11/2020 11:32	WG1473785
Ethene	U		0.422	1.27	1	05/11/2020 11:32	WG1473785

Volatile Organic Compounds (GC/MS) by Method 8260D

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Acetone	U		11.3	25.0	1	05/07/2020 03:03	WG1471764
Acrylonitrile	U		0.671	5.00	1	05/07/2020 03:03	WG1471764
Benzene	0.114	J	0.0941	0.500	1	05/07/2020 03:03	WG1471764
Bromobenzene	U		0.118	0.500	1	05/07/2020 03:03	WG1471764
Bromodichloromethane	U		0.136	0.500	1	05/07/2020 03:03	WG1471764
Bromochloromethane	U		0.128	0.500	1	05/07/2020 03:03	WG1471764
Bromoform	U		0.129	0.500	1	05/07/2020 03:03	WG1471764
Bromomethane	U		0.605	2.50	1	05/07/2020 03:03	WG1471764
n-Butylbenzene	U		0.157	0.500	1	05/07/2020 03:03	WG1471764
sec-Butylbenzene	U		0.125	0.500	1	05/07/2020 03:03	WG1471764
tert-Butylbenzene	U		0.127	0.500	1	05/07/2020 03:03	WG1471764
Carbon disulfide	U		0.0962	0.500	1	05/07/2020 03:03	WG1471764
Carbon tetrachloride	U		0.128	0.500	1	05/07/2020 03:03	WG1471764
Chlorobenzene	U		0.117	0.500	1	05/07/2020 03:03	WG1471764
Chlorodibromomethane	U		0.140	0.500	1	05/07/2020 03:03	WG1471764
Chloroethane	U		0.192	2.50	1	05/07/2020 03:03	WG1471764
Chloroform	U		0.111	0.500	1	05/07/2020 03:03	WG1471764
Chloromethane	U		0.960	1.25	1	05/07/2020 03:03	WG1471764
2-Chlorotoluene	U		0.106	0.500	1	05/07/2020 03:03	WG1471764
4-Chlorotoluene	U		0.114	0.500	1	05/07/2020 03:03	WG1471764

JC 5/20/2020

MW-343-050420

Collected date/time: 05/04/20 12:15

SAMPLE RESULTS - 02

L1214811

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,2-Dibromo-3-Chloropropane	U		0.276	2.50	1	05/07/2020 03:03	WG1471764
1,2-Dibromoethane	U		0.126	0.500	1	05/07/2020 03:03	WG1471764
Dibromomethane	U		0.122	0.500	1	05/07/2020 03:03	WG1471764
1,2-Dichlorobenzene	U		0.107	0.500	1	05/07/2020 03:03	WG1471764
1,3-Dichlorobenzene	U		0.299	0.500	1	05/07/2020 03:03	WG1471764
1,4-Dichlorobenzene	U		0.120	0.500	1	05/07/2020 03:03	WG1471764
Dichlorodifluoromethane	U		0.374	2.50	1	05/07/2020 03:03	WG1471764
1,1-Dichloroethane	U		0.100	0.500	1	05/07/2020 03:03	WG1471764
1,2-Dichloroethane	U		0.0819	0.500	1	05/07/2020 03:03	WG1471764
1,1-Dichloroethene	U		0.188	0.500	1	05/07/2020 03:03	WG1471764
cis-1,2-Dichloroethene	U		0.126	0.500	1	05/07/2020 03:03	WG1471764
trans-1,2-Dichloroethene	U		0.149	0.500	1	05/07/2020 03:03	WG1471764
1,2-Dichloropropane	U		0.149	0.500	1	05/07/2020 03:03	WG1471764
1,1-Dichloropropene	U		0.142	0.500	1	05/07/2020 03:03	WG1471764
1,3-Dichloropropane	U		0.109	1.00	1	05/07/2020 03:03	WG1471764
cis-1,3-Dichloropropene	U		0.111	0.500	1	05/07/2020 03:03	WG1471764
trans-1,3-Dichloropropene	U		0.118	0.500	1	05/07/2020 03:03	WG1471764
trans-1,4-Dichloro-2-butene	U	UJ J0 ~~J3~~	0.467	5.00	1	05/07/2020 03:03	WG1471764
2,2-Dichloropropane	U		0.161	0.500	1	05/07/2020 03:03	WG1471764
Di-isopropyl ether	U		0.105	0.500	1	05/07/2020 03:03	WG1471764
Ethylbenzene	U		0.137	0.500	1	05/07/2020 03:03	WG1471764
Hexachloro-1,3-butadiene	U		0.337	1.00	1	05/07/2020 03:03	WG1471764
2-Hexanone	U		0.787	5.00	1	05/07/2020 03:03	WG1471764
n-Hexane	U		0.749	5.00	1	05/07/2020 03:03	WG1471764
Iodomethane	U		0.554	5.00	1	05/07/2020 03:03	WG1471764
Isopropylbenzene	U		0.105	0.500	1	05/07/2020 03:03	WG1471764
p-Isopropyltoluene	U		0.120	0.500	1	05/07/2020 03:03	WG1471764
2-Butanone (MEK)	U	UJ J0 ~~J3~~	1.19	5.00	1	05/07/2020 03:03	WG1471764
Methylene Chloride	U		0.430	2.50	1	05/07/2020 03:03	WG1471764
4-Methyl-2-pentanone (MIBK)	U		0.478	5.00	1	05/07/2020 03:03	WG1471764
Methyl tert-butyl ether	U		0.101	0.500	1	05/07/2020 03:03	WG1471764
Naphthalene	U		0.174	2.50	1	05/07/2020 03:03	WG1471764
n-Propylbenzene	U		0.0993	0.500	1	05/07/2020 03:03	WG1471764
Styrene	U		0.118	0.500	1	05/07/2020 03:03	WG1471764
1,1,1,2-Tetrachloroethane	U		0.147	0.500	1	05/07/2020 03:03	WG1471764
1,1,2,2-Tetrachloroethane	U		0.133	0.500	1	05/07/2020 03:03	WG1471764
1,1,2-Trichlorotrifluoroethane	U		0.180	0.500	1	05/07/2020 03:03	WG1471764
Tetrachloroethene	U		0.300	0.500	1	05/07/2020 03:03	WG1471764
Toluene	0.620		0.278	0.500	1	05/07/2020 03:03	WG1471764
1,2,3-Trichlorobenzene	U		0.164	0.500	1	05/07/2020 03:03	WG1471764
1,2,4-Trichlorobenzene	U		0.481	1.00	1	05/07/2020 03:03	WG1471764
1,1,1-Trichloroethane	U		0.149	0.500	1	05/07/2020 03:03	WG1471764
1,1,2-Trichloroethane	U		0.158	0.500	1	05/07/2020 03:03	WG1471764
Trichloroethene	U		0.190	0.500	1	05/07/2020 03:03	WG1471764
Trichlorofluoromethane	U		0.160	2.50	1	05/07/2020 03:03	WG1471764
1,2,3-Trichloropropane	U		0.237	2.50	1	05/07/2020 03:03	WG1471764
1,2,4-Trimethylbenzene	U		0.322	0.500	1	05/07/2020 03:03	WG1471764
1,2,3-Trimethylbenzene	U		0.104	0.500	1	05/07/2020 03:03	WG1471764
1,3,5-Trimethylbenzene	U		0.104	0.500	1	05/07/2020 03:03	WG1471764
Vinyl acetate	U		0.692	5.00	1	05/07/2020 03:03	WG1471764
Vinyl chloride	U		0.234	0.500	1	05/07/2020 03:03	WG1471764
Xylenes, Total	0.207	J	0.174	1.50	1	05/07/2020 03:03	WG1471764
(S) Toluene-d8	*111*			*80.0-120*		*05/07/2020 03:03*	WG1471764
(S) 4-Bromofluorobenzene	*98.8*			*77.0-126*		*05/07/2020 03:03*	WG1471764
(S) 1,2-Dichloroethane-d4	*101*			*70.0-130*		*05/07/2020 03:03*	WG1471764

JC 5/20/2020

MW-332-050420
Collected date/time: 05/04/20 14:05

SAMPLE RESULTS - 03

L1214811

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Wet Chemistry by Method 2320 B-2011

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Alkalinity	252000		8450	20000	1	05/06/2020 09:49	WG1470889

Sample Narrative:

L1214811-03 WG1470889: Endpoint pH 4.5

Wet Chemistry by Method 9056A

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Chloride	66400		379	1000	1	05/05/2020 14:25	WG1470645
Nitrate	U		48.0	100	1	05/05/2020 14:25	WG1470645
Sulfate	105000		2970	25000	5	05/05/2020 14:38	WG1470645

Wet Chemistry by Method 9060A

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
TOC (Total Organic Carbon)	2170	~~B~~	102	1000	1	05/07/2020 15:10	WG1472048

Metals (ICPMS) by Method 6020B

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Iron	3290		48.9	100	1	05/08/2020 11:34	WG1470978
Manganese	2880		1.32	5.00	1	05/08/2020 11:34	WG1470978

Volatile Organic Compounds (GC) by Method RSK175

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Methane	757		0.287	0.678	1	05/11/2020 11:35	WG1473785
Ethane	U		0.296	1.29	1	05/11/2020 11:35	WG1473785
Ethene	U		0.422	1.27	1	05/11/2020 11:35	WG1473785

Volatile Organic Compounds (GC/MS) by Method 8260D

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Acetone	U		11.3	25.0	1	05/07/2020 03:24	WG1471764
Acrylonitrile	U		0.671	5.00	1	05/07/2020 03:24	WG1471764
Benzene	U		0.0941	0.500	1	05/07/2020 03:24	WG1471764
Bromobenzene	U		0.118	0.500	1	05/07/2020 03:24	WG1471764
Bromodichloromethane	U		0.136	0.500	1	05/07/2020 03:24	WG1471764
Bromochloromethane	U		0.128	0.500	1	05/07/2020 03:24	WG1471764
Bromoform	U		0.129	0.500	1	05/07/2020 03:24	WG1471764
Bromomethane	U		0.605	2.50	1	05/07/2020 03:24	WG1471764
n-Butylbenzene	U		0.157	0.500	1	05/07/2020 03:24	WG1471764
sec-Butylbenzene	U		0.125	0.500	1	05/07/2020 03:24	WG1471764
tert-Butylbenzene	U		0.127	0.500	1	05/07/2020 03:24	WG1471764
Carbon disulfide	U		0.0962	0.500	1	05/07/2020 03:24	WG1471764
Carbon tetrachloride	U		0.128	0.500	1	05/07/2020 03:24	WG1471764
Chlorobenzene	U		0.117	0.500	1	05/07/2020 03:24	WG1471764
Chlorodibromomethane	U		0.140	0.500	1	05/07/2020 03:24	WG1471764
Chloroethane	U		0.192	2.50	1	05/07/2020 03:24	WG1471764
Chloroform	U		0.111	0.500	1	05/07/2020 03:24	WG1471764
Chloromethane	U		0.960	1.25	1	05/07/2020 03:24	WG1471764
2-Chlorotoluene	U		0.106	0.500	1	05/07/2020 03:24	WG1471764
4-Chlorotoluene	U		0.114	0.500	1	05/07/2020 03:24	WG1471764

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Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,2-Dibromo-3-Chloropropane	U		0.276	2.50	1	05/07/2020 03:24	WG1471764
1,2-Dibromoethane	U		0.126	0.500	1	05/07/2020 03:24	WG1471764
Dibromomethane	U		0.122	0.500	1	05/07/2020 03:24	WG1471764
1,2-Dichlorobenzene	U		0.107	0.500	1	05/07/2020 03:24	WG1471764
1,3-Dichlorobenzene	U		0.299	0.500	1	05/07/2020 03:24	WG1471764
1,4-Dichlorobenzene	U		0.120	0.500	1	05/07/2020 03:24	WG1471764
Dichlorodifluoromethane	U		0.374	2.50	1	05/07/2020 03:24	WG1471764
1,1-Dichloroethane	U		0.100	0.500	1	05/07/2020 03:24	WG1471764
1,2-Dichloroethane	U		0.0819	0.500	1	05/07/2020 03:24	WG1471764
1,1-Dichloroethene	U		0.188	0.500	1	05/07/2020 03:24	WG1471764
cis-1,2-Dichloroethene	0.419	J	0.126	0.500	1	05/07/2020 03:24	WG1471764
trans-1,2-Dichloroethene	U		0.149	0.500	1	05/07/2020 03:24	WG1471764
1,2-Dichloropropane	U		0.149	0.500	1	05/07/2020 03:24	WG1471764
1,1-Dichloropropene	U		0.142	0.500	1	05/07/2020 03:24	WG1471764
1,3-Dichloropropane	U		0.109	1.00	1	05/07/2020 03:24	WG1471764
cis-1,3-Dichloropropene	U		0.111	0.500	1	05/07/2020 03:24	WG1471764
trans-1,3-Dichloropropene	U		0.118	0.500	1	05/07/2020 03:24	WG1471764
trans-1,4-Dichloro-2-butene	U	UJ J0 ~~J3~~	0.467	5.00	1	05/07/2020 03:24	WG1471764
2,2-Dichloropropane	U		0.161	0.500	1	05/07/2020 03:24	WG1471764
Di-isopropyl ether	U		0.105	0.500	1	05/07/2020 03:24	WG1471764
Ethylbenzene	U		0.137	0.500	1	05/07/2020 03:24	WG1471764
Hexachloro-1,3-butadiene	U		0.337	1.00	1	05/07/2020 03:24	WG1471764
2-Hexanone	U		0.787	5.00	1	05/07/2020 03:24	WG1471764
n-Hexane	U		0.749	5.00	1	05/07/2020 03:24	WG1471764
Iodomethane	U		0.554	5.00	1	05/07/2020 03:24	WG1471764
Isopropylbenzene	U		0.105	0.500	1	05/07/2020 03:24	WG1471764
p-Isopropyltoluene	U		0.120	0.500	1	05/07/2020 03:24	WG1471764
2-Butanone (MEK)	U	UJ J0 ~~J3~~	1.19	5.00	1	05/07/2020 03:24	WG1471764
Methylene Chloride	U		0.430	2.50	1	05/07/2020 03:24	WG1471764
4-Methyl-2-pentanone (MIBK)	U		0.478	5.00	1	05/07/2020 03:24	WG1471764
Methyl tert-butyl ether	U		0.101	0.500	1	05/07/2020 03:24	WG1471764
Naphthalene	U		0.174	2.50	1	05/07/2020 03:24	WG1471764
n-Propylbenzene	U		0.0993	0.500	1	05/07/2020 03:24	WG1471764
Styrene	U		0.118	0.500	1	05/07/2020 03:24	WG1471764
1,1,1,2-Tetrachloroethane	U		0.147	0.500	1	05/07/2020 03:24	WG1471764
1,1,2,2-Tetrachloroethane	U		0.133	0.500	1	05/07/2020 03:24	WG1471764
1,1,2-Trichlorotrifluoroethane	U		0.180	0.500	1	05/07/2020 03:24	WG1471764
Tetrachloroethene	U		0.300	0.500	1	05/07/2020 03:24	WG1471764
Toluene	U		0.278	0.500	1	05/07/2020 03:24	WG1471764
1,2,3-Trichlorobenzene	U		0.164	0.500	1	05/07/2020 03:24	WG1471764
1,2,4-Trichlorobenzene	U		0.481	1.00	1	05/07/2020 03:24	WG1471764
1,1,1-Trichloroethane	U		0.149	0.500	1	05/07/2020 03:24	WG1471764
1,1,2-Trichloroethane	U		0.158	0.500	1	05/07/2020 03:24	WG1471764
Trichloroethene	U		0.190	0.500	1	05/07/2020 03:24	WG1471764
Trichlorofluoromethane	U		0.160	2.50	1	05/07/2020 03:24	WG1471764
1,2,3-Trichloropropane	U		0.237	2.50	1	05/07/2020 03:24	WG1471764
1,2,4-Trimethylbenzene	U		0.322	0.500	1	05/07/2020 03:24	WG1471764
1,2,3-Trimethylbenzene	U		0.104	0.500	1	05/07/2020 03:24	WG1471764
1,3,5-Trimethylbenzene	U		0.104	0.500	1	05/07/2020 03:24	WG1471764
Vinyl acetate	U		0.692	5.00	1	05/07/2020 03:24	WG1471764
Vinyl chloride	U		0.234	0.500	1	05/07/2020 03:24	WG1471764
Xylenes, Total	U		0.174	1.50	1	05/07/2020 03:24	WG1471764
(S) Toluene-d8	*107*			*80.0-120*		*05/07/2020 03:24*	WG1471764
(S) 4-Bromofluorobenzene	*97.1*			*77.0-126*		*05/07/2020 03:24*	WG1471764
(S) 1,2-Dichloroethane-d4	*99.4*			*70.0-130*		*05/07/2020 03:24*	WG1471764

JC 5/20/2020

MEMORANDUM

TO: Project File **DATE:** May 27, 2020

FROM: Jessie Compeau

SUBJECT: Laboratory Data Validation Review

PROJECT: American Linen Data Validation

PROJECT #: 1413.001.02.501E

TASK: EIM Data Validation Level EPA2A for 2nd Quarter Monitoring – Groundwater Samples - Group 4

LAB: Pace Sample Delivery Groups (SDGs): L1215318, L1215869, L1216431, L1216893, L1217858, and L1218975

Twenty-six (26) groundwater samples (including three field duplicates), one equipment blank, and three trip blanks were collected as part of the 2nd Quarterly Monitoring Round for 2020 for the ongoing Remedial Investigation (RI) sampling at the Former American Linen Supply Site, in Seattle, Washington in May of 2020. The samples were shipped and delivered to Pace Lab Sciences (Pace) of Mount Juliet, TN for laboratory analysis. Selected samples were analyzed for the following:

- Volatile organic compounds (VOCs) by United States Environmental Protection Agency (USEPA) Method 8260D;
- Total petroleum hydrocarbons as gasoline (TPH-Gx) by NWTPH-Gx per analytical method stipulated by Washington State Department of Ecology;
- VOCs (dissolved gases – methane, ethane, and ethene) by EPA SOP RSK 175;
- Alkalinity by Method 2320 B-2011;
- Anions (chloride, nitrate, and sulfate) by USEPA Method 9056A;
- Total Organic Carbon (TOC) by USEPA Method 9060A; and
- Metals (iron and manganese) by USEPA Method 6020B.

The RI sampling was conducted in the spring of 2020. Results are reported in multiple SDGs from Pace. Pace SDGs are reviewed in groups (up to 10 SDGs) for each data validation report. Group 4 analytical results are reported in SDGs L1215318, L1215869, L1216431, L1216893, L1217858, and L1218975. The quality assurance review of the laboratory data associated with Group 4 is summarized below.

DATA QUALIFICATIONS

Guidelines established by USEPA for a limited data validation review of analytical data along with Pace control limit criteria were used to validate the data. The comments presented in this memorandum refer to the laboratory's performance in meeting the quality control criteria outlined in the USEPA Contract Laboratory Program National Functional Guidelines for

Superfund Organic Methods Data Review (USEPA, 2017) and USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Superfund Methods Data Review (USEPA, 2017). Following Guidelines, non-project-specific laboratory duplicates and matrix spike results were not evaluated as part of this data validation.

DATA VALIDATION

Completeness

All samples were collected and analyzed as requested with the following discussion:

- SDG L1215318: Sample MW123-050520 request for gasoline analysis was placed on hold per PES's May 6, 2020 request. No action is taken other than note this.

Sample Collection and Preservation

Samples were collected in laboratory-supplied sample containers preserved as appropriate for the individual analyses conducted. The samples were packed on ice in coolers and delivered by courier to the analytical laboratory. The laboratory reported that the coolers were received at a cooler temperature less than the recommended temperature preservation of 6°C. Samples were received in good condition except for issues mentioned in the Completeness section. No data were qualified based upon the sample collection and preservation information.

Holding Times

USEPA Method 8260D:
All samples were analyzed for VOCs within the EPA recommended holding time of fourteen days for preserved waters from the date of collection. All holding time criteria are met.

NWTPH-Gx Method:
All samples were analyzed within the WA State recommended holding time of fourteen days for preserved waters from the date of sample collection. All holding time criteria are met.

Dissolved Gases (Methane, Ethane, and Ethene) by RSK 175:
All samples were analyzed within the WA State recommended holding time of fourteen days for preserved waters from the date of sample collection. All holding time criteria are met.

USEPA Method 6020B:
All samples were analyzed within the USEPA recommended holding time for iron and manganese of 180 days for preserved waters from the date of sample collection. All holding time criteria are met.

General Chemistry (Alkalinity, Chloride, Sulfate, Nitrate, and TOC):
All samples were analyzed within the USEPA recommended holding time for alkalinity (14 days), chloride (28 days), sulfate (28 days), and nitrate (48 hours), and TOC (28 days) for preserved waters from the date of sample collection. All holding time criteria are met.

Initial and Continuing Calibration

Calibration data for this project are not required for this deliverable however Pace's notes indicate the following:

- Multiple SDGs - *USEPA Method 8260D:* Continuing calibration verification (CCV) issues were noted by Pace for multiple compounds associated with analytical batches in each SDG. These compounds are qualified by the laboratory "J0" to indicate that percent difference CCV is outside of laboratory acceptance criteria. **Associated sample results with laboratory qualified (J0) results are estimated and qualified (J/UJ).**

Method Blank Results

USEPA Method 8260D:
Laboratory method blanks were included with the analytical batches per method requirement. The target analytes were not detected in the method blanks at or above the reporting detection limits (RDLs) with the following discussions:

- SDG L1215318 – Analytical batch WG1472450: A low level of 1,2,3-trichlorobenzene is detected in the method blank. No action is required since 1,2,3-trichlorobenzene is not detected in the associated samples.

- SDG L1215869 – Analytical batch WG1472732: A low level of naphthalene is detected in the method blank. No action is required since naphthalene is not detected in the associated sample (equipment blank).

- SDG L1216431 – Analytical batch WG1473710: Low levels of isopropylbenzene and 1,2,3-trichlorobenzene are detected in the method blank. No action is required since isopropylbenzene and 1,2,3-trichlorobenzene are not detected in the associated samples. A low level of isopropylbenzene is detected in the associated trip blank but not action is taken on this basis since it was not detected in the associated samples.

- SDG L1218975 – Analytical batch WG1477940: Low levels of naphthalene and 1,2,3-trichlorobenzene are detected in the method blank. No action is required since these compounds are not detected in the associated samples.

NWTPH-Gx Method:
Laboratory method blanks were included with the analytical batches per method requirement. The target analyte (gasoline) was not detected in the method blanks at or above the RDLs with the following exceptions:

- SDG L1215869 – Analytical batch WG1475231: Low levels of gasoline were detected in the method and equipment blanks. **Gasoline was detected below the RDL in samples MW-930-050620 and MW106-050620. Gasoline results for samples are qualified as non-detected (U) due to blank contamination.**

- SDG L1216431 – Analytical batch WG1477085: A low level of gasoline was detected in the method blank. **Gasoline was detected below the RDL in sample MW-303-050720. Gasoline result for this sample is qualified as non-detected (U) due to blank contamination.**

- SDG L1216893 – Analytical batch WG1477292: A low level of gasoline was detected in the method blank. **Gasoline was detected below the RDL in sample MW-138-050820. Gasoline results for this sample is qualified as non-detected (U) due to blank contamination.**

- SDG L1217858 – Analytical batch WG1478160: A low level of gasoline was detected in the method blank. No action was taken for sample BB-8-051220 since the detection was slightly above the RDL. **Gasoline was detected below the RDL in sample** MW105-051220**. Gasoline results for this sample is qualified as non-detected (U) due to blank contamination.**

- SDG L1218975 – Analytical batch WG1479186: A low level of gasoline was detected in the method blank. No action was taken for the associated samples since gasoline is not detected.

Dissolved Gases (Methane, Ethane, and Ethene) by RSK 175:
Laboratory method blanks were included with the analytical batches per method requirement. The target analytes (dissolved gases) are not detected in the method blanks at or above the RDLs.

USEPA Method 6020B and General Chemistry (Alkalinity, Chloride, Sulfate, Nitrate, and TOC):
Laboratory method blanks were included with the analytical batches per method requirement. The target analytes were detected in the method blanks below the RDLs. Per Guidance, no action is taken for blank detections less than the RDL when associated sample detections are greater than the RDL. General chemistry and metal blank detections are shown below:

SDG	Batch	Method	Analyte	Method Blank Result	Qualifier	RDL	Units	Associated Result(s) Qualified
L1215318	WG1472815	9060A	TOC	361	J	1000	µg/L	NO
L1215869	WG1472819	9060A	TOC	179	J	1000	µg/L	NO
L1216431	WG1474460	9060A	TOC	213	J	1000	µg/L	NO
L1216431	WG1472616	9056A	Chloride	403	J	1000	µg/L	NO
L1216893	WG1476027	9060A	TOC	281	J	1000	µg/L	NO
L1217858	WG1476840	9060A	TOC	247	J	1000	µg/L	NO
L1218975	WG1478610	9060A	TOC	469	J	1000	µg/L	NO
L1218975	WG1478998	9060A	TOC	184	J	1000	µg/L	NO

Target analytes were detected in method blanks at low levels with no impact to the associated samples.

Trip Blank Results

USEPA Method 8260D, NWTPH-Gx:

One trip blank was collected. The target analytes are not detected in the trip blanks at or above the RDLs with the following exception:

- SDG L1216431: A low level of isopropylbenzene is detected in the trip blank (TB-050720) and in the associated method blank. No action is needed since isopropylbenzene is not detected in the associated samples.

Field, Rinsate, or Equipment Blank Results

All Analytical Methods:
One equipment blank (EQ-050620 with SDG L1215869) is associated with all samples collected via bladder pump on May 6, 2020. This equipment blank is associated with samples FMW-137-050620, MW-930-050620, MW106-050620, and FMW-129-050620. Low levels of gasoline, nitrate, TOC, iron, and manganese were detected in the equipment blank. No action is taken for these nitrate, TOC, iron, and manganese detections since these are either not detected in the associated samples or sample detections are far greater than detections in the equipment blank. **Associated gasoline results for samples MW-930-050620 and MW106-050620 are detected below the RDL. These results are qualified as not detected (U) due to method and/or equipment blank contamination**

Field Duplicate Analyses

Field duplicate pairs were submitted and analyzed. Field duplicate sample pair is as follows:

- SDG L1215869: MW-930-050620 is a field duplicate of MW106-050620
- SDG L1218975: MW-931-051420 is a field duplicate of MW-339-051420
- SDG L1218975: MW-932-051420 is a field duplicate of MW-330-051420

Target analyte results are comparable and within a relative percent difference (RPD) of 30% (± 1x RDL for groundwater results <5X the RDL) for the field duplicate pair with the following exceptions:

- SDG L1218975: MW-931-051420 is a field duplicate of MW-339-051420. **Methane RPD exceeds acceptance criteria and methane results for this field duplicate pair are estimated and qualified (J).**

- SDG L1218975: MW-932-051420 is a field duplicate of MW-330-051420. **Methane RPD exceeds acceptance criteria and methane results for this field duplicate pair are estimated and qualified (J).**

Laboratory Duplicate Analyses

USEPA Method 8260D:
Laboratory duplicate samples were not analyzed. Refer to laboratory control sample/sample duplicate (LCS/LCSD) or matrix spike/matrix spike duplicate (MS/MSD) results for precision data.

NWTPH-Gx Method:
Laboratory duplicate samples were not analyzed. Refer to field duplicate, LCS, or MS results for additional information.

Dissolved Gases (Methane, Ethane, and Ethene) by RSK 175:
Laboratory duplicate sample analyses were performed on client and non-client samples within the analytical batches. The primary/duplicate RPDs for dissolved gas analyses are within the laboratory control limit of 20%.

USEPA Method 6020B:
Laboratory duplicate samples were not analyzed. Refer to LCS/LCSD or MS/MSD results for precision data.

General Chemistry (Alkalinity, Chloride, Sulfate, Nitrate, and TOC):
Laboratory duplicate sample analyses were performed on client samples and/or on non-client samples. The primary/duplicate RPDs for general chemistry parameters are within the laboratory control RPD limits or ± 1x RDL for groundwater results <5X the RDL with the following discussion:

- SDG L1215318: A laboratory duplicate was performed on a non-client sample with chloride, nitrate, and sulfate results exceeding upper calibration limits and laboratory qualified (E or EV). No action is taken on this basis since the laboratory duplicate was performed on a non-client sample. Refer to additional laboratory quality control results for precision and accuracy data.

Surrogate Recoveries

USEPA Method 8260D:
The surrogate recovery results for the samples, laboratory control samples, matrix spike samples, and the method blanks are within the laboratory surrogate control limits for all the analyses.

NWTPH-Gx Method:
The surrogate recovery results for the samples, laboratory control samples, matrix spike samples, and the method blanks are within the laboratory surrogate control limits for all analyses.

Laboratory Control Samples

USEPA Method 8260D:
Laboratory control sample/laboratory control sample duplicate (LCS/LCSD) or laboratory control sample (LCS) were analyzed by USEPA Method 8260D method. The LCS % Rs or LCS/LCSD % Rs and RPDs for the all target compounds are within the laboratory control criteria for waters with the following discussions:

- SDG L1215869 - Analytical batch WG1472732: LCS/LCSD RPD exceeds QC criteria for trans-1,4-dichloro-2-butene and is laboratory qualified (J3). Recoveries are within criteria but are recovered wide. No action is taken on this basis.

- SDG L1215869 - Analytical batch WG1472992: LCS % recovery exceeds QC criteria for acetone and is laboratory qualified (J4). No action is needed since acetone is not detected in the associated samples.

- SDG L1216431 - Analytical batch WG1473710: LCS/LCSD recoveries exceed QC criteria for multiple compounds and are laboratory qualified (J4). No action is needed since these compounds are not detected in the associated samples.

- SDG L1218975 - Analytical batch WG1477940: LCS and/or LCSD % recoveries for sec-butylbenzene and 4-chlorotoluene are above laboratory acceptance criteria and laboratory qualified (J4). No action is needed since these compounds are not detected in the associated samples. RPD criteria are exceeded for naphthalene and 1,2,3-trichlorobenzene. Recoveries are within criteria but are recovered wide. No action is taken on this basis.

NWTPH-Gx Method:
The LCS % Rs for the target compound (gasoline) are within the laboratory control criteria for waters. No measures of precision are provided with the analytical batch. No action is taken other than to note this.

Dissolved Gases (Methane, Ethane, and Ethene) by RSK 175:
The LCS/LCSD % Rs and RPDs for the target compound (dissolved gases) are within the laboratory control criteria for waters.

USEPA Method 6020B:
The LCS % Rs or LCS/LCSD % Rs and RPDs for the target compound (iron and manganese) are within the laboratory control criteria for waters.

General Chemistry (Alkalinity, Chloride, Sulfate, Nitrate, and TOC):
The LCS % Rs for general chemistry parameters are within the laboratory control criteria for waters.

Matrix Spike/Matrix Spike Duplicates

USEPA Method 8260D:
Matrix spike/matrix spike duplicate (MS/MSD) analyses were performed on non-client samples within the analytical batches. In cases where matrix spike analyses were not performed refer to LCS results. Refer to the field duplicate results for precision data. The MS/MSD % Rs and RPDs are acceptable and within laboratory control limit criteria for water samples with the following discussions:

- SDG L1215869 - Analytical batch WG1472732: Matrix spike was performed on a non-client sample. MS/MSD RPD exceeds criteria for multiple compounds and laboratory qualified (J3). MS/MSD recoveries are outside of criteria due to elevated sample concentrations or matrix interferences and laboratory qualified (V, J6 or J5). No action is taken on this basis since the spike is performed on a non-client sample. Refer to LCS/LCSD results for precision and accuracy data.

- SDG L1216431 - Analytical batch WG1473710: Matrix spike was performed on a non-client sample. MS/MSD recoveries and RPDs are outside of criteria for multiple compounds and laboratory qualified (J3, J5, J6, V, E, EV) due to matrix interferences and elevated targets. No action is taken on this basis since the spike is performed on a non-client sample. Refer to LCS/LCSD results for precision and accuracy data.

NWTPH-Gx Method:
MS/MSD analyses were not performed. Refer to LCS results. No measure of precision was provided. In some cases, no measure of precision is provided. Refer to field duplicate results for precision data. No action was taken other than to note this.

Dissolved Gases (Methane, Ethane, and Ethene) by RSK 175:
MS/MSD analyses were performed on a non-client sample. In cases where matrix spike data are not provided refer to laboratory QC results and field duplicate sample for accuracy and precision data. The MS/MSD % Rs and RPD were acceptable and within laboratory control limit criteria for water samples with the following discussion:

- SDG L1215318: MS/MSDs were performed on a non-client sample with poor spike recoveries due to elevated methane concentration or interference and laboratory qualified (V or J6). No action is taken since the spike was performed on a non-client sample. Refer to laboratory duplicate and laboratory control sample results for precision and accuracy data.

USEPA Method 6020B:
MS/MSD analyses were performed on client and on non-client samples within the analytical batches. The MS/MSD % Rs and RPD were acceptable and within laboratory control limit criteria for water samples with the following discussion:

- SDG L1218975: Matrix spike analysis was performed on client sample MW-931-051420 and manganese spike results are laboratory qualified (V) to indicate that the sample concentration is greater than 4X the spike amount. Per guidance no action is necessary. Refer to LCS results for accuracy data.

General Chemistry (Alkalinity, Chloride, Sulfate, Nitrate, and TOC):
MS or MS/MSD analyses were performed on client and/or non-client samples within the analytical batches. In cases where MS/MSD spike analyses are not performed refer to LCS/LCSD or laboratory duplicate data for accuracy and precision data. The MS/MSD % Rs and RPDs are acceptable and within laboratory control limit criteria for water samples with the following discussions:

- SDG L1217858: Matrix spike analysis was performed on sample BB-8-051220 with all RPD criteria met for chloride, nitrate, and sulfate. Sulfate results are laboratory qualified (E) to indicate that the sample concentration exceeds the linear calibration range. No action is taken in this case since the RPD criteria is met.

- SDG L1217858: Matrix spike analysis was performed on a non-client sample with sulfate recovery results laboratory qualified (E, J6) to indicate that the sample concentration exceeds the linear calibration range and MS % R is slightly below criteria due to matrix interference. No action is taken on this basis since the spike was performed on a non-client sample. Refer to additional laboratory quality control results for precision and accuracy data.

- SDG L1218975: Matrix spike analysis was performed on client sample FMW-143-051420 with chloride and sulfate recovery results laboratory qualified (E) to indicate that the sample concentration exceeds the linear calibration range. No action is taken on this basis since the spike recoveries are within criteria. Refer to additional laboratory quality control results for precision and accuracy data.

Other Quality Control Issues

No laboratory quality control issues were identified in the laboratory report with the following discussions:

- Multiple SDGs: Sample narratives for alkalinity results indicate that the endpoint pH is 4.5. No action was taken other than to note that this reflects total alkalinity.

- Electronic data deliverables (EDDs) for these SDGs were provided by the laboratory and data validator qualifiers were entered. In some cases, different chemical synonyms are used between the EDD and the hardcopy however associated Chemical Abstracts Service (CAS) numbers are provided in the EDD to confirm chemical identifications.

Compound Identification and Quantitation Limits

Results of the analyses were reported based on laboratory RDLs for all compounds. RDLs for selected compounds are elevated due to method-required dilutions. In some cases, non-target compounds are too high to run at a lower dilution with the following discussion:

- SDG L1215318: Sample MW-169-050520 sample for gasoline analysis was diluted five-fold due to sample foaming. Pace indicated that anti-foam was not added to gasoline because the anti-foam peaks are within the GRO range and will cause a biased high result.

Gasoline and gasoline range organics are analyzed for via Volatile Organic Compounds (GC) by Washington State Method NWTPHGx (using a gas chromatograph/flame ionization detector (GC/FID)) and Pace reported gasoline range organic-NWTPH results. Several chlorinated VOC compounds (including cis-1,2-dichloroethene, trans-1,2-dichloroethene, trichloroethene, and tetrachloroethene) elute within the gasoline range organics (GRO) retention time range as specified by Washington State (detections falling between the toluene and dodecane range).

Non-petroleum organics (e.g. chlorinated VOC compounds) eluting within the gasoline range contribute to the GRO result and GRO results are likely biased high (J+). PES requested that Pace evaluate chromatograms associated with positive sample detections to confirm the potential presence of gasoline. Per PES's request Pace reviewed selected sample chromatograms against the gasoline standard chromatograms and assigned “no discernible petroleum pattern” to GRO results associated with this Task. PES assigned an additional project level qualifier (Z) to GRO results when the chromatogram for the sample does not match a discernible gasoline standard pattern. Associated chromatograms and qualified samples for this Task are as follows:

Sample ID	Laboratory Identification	Gasoline Range Organic Result (µg/L)	DV Qualifier	Data Validation Comments	Pace Chromatogram Review Notes
BB-8-051220	L1217858-01	101	Z, J+	Elevated chlorinated VOCs detected within the GRO elution range	No sample narrative included.

Project level qualifiers have been included to the PES’s project database (Epiphany) as (ZJ+). Washington State EIM valid values were reviewed. In this case no Washington State EIM valid value descriptor is ideal and the default estimated value (J) has been selected as the best match to qualify GRO (Z,J+) data.

Data Assessment

The laboratory data reported for this project were reviewed based on the criteria outlined in:

- USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (USEPA, 2017); and
- USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Superfund Methods Data Review (USEPA, 2017).

Data qualifiers are assigned and laboratory report pages with qualifiers are attached. All data, including qualified data, are judged to be acceptable for their intended use.

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	601000		8450	20000	1	05/07/2020 14:20	WG1471423

Sample Narrative:

L1215318-01 WG1471423: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	147000		1900	5000	5	05/06/2020 16:11	WG1471206
Nitrate	225		48.0	100	1	05/06/2020 16:01	WG1471206
Sulfate	U		594	5000	1	05/06/2020 16:01	WG1471206

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	19200		102	1000	1	05/08/2020 16:48	WG1472815

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	5100		48.9	100	1	05/08/2020 17:17	WG1472548
Manganese	821		1.32	5.00	1	05/08/2020 17:17	WG1472548

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	U		158	500	5	05/13/2020 05:38	WG1474063
(S) a,a,a-Trifluorotoluene(FID)	*99.2*			*78.0-120*		*05/13/2020 05:38*	WG1474063

Sample Narrative:

L1215318-01 WG1474063: Lowest possible dilution due to sample foaming.

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	18700		2.87	6.78	10	05/12/2020 13:08	WG1474309
Ethane	336		0.296	1.29	1	05/11/2020 13:37	WG1473786
Ethene	1180		0.422	1.27	1	05/11/2020 13:37	WG1473786

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U		11.3	25.0	1	05/13/2020 09:51	WG1474847
Acrylonitrile	U		0.671	5.00	1	05/13/2020 09:51	WG1474847
Benzene	0.127	J	0.0941	0.500	1	05/13/2020 09:51	WG1474847
Bromobenzene	U		0.118	0.500	1	05/13/2020 09:51	WG1474847
Bromodichloromethane	U		0.136	0.500	1	05/13/2020 09:51	WG1474847
Bromochloromethane	U		0.128	0.500	1	05/13/2020 09:51	WG1474847
Bromoform	U		0.129	0.500	1	05/13/2020 09:51	WG1474847
Bromomethane	U		0.605	2.50	1	05/13/2020 09:51	WG1474847
n-Butylbenzene	U		0.157	0.500	1	05/13/2020 09:51	WG1474847
sec-Butylbenzene	U		0.125	0.500	1	05/13/2020 09:51	WG1474847

JC 5/27/2020

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Volatile Organic Compounds (GC/MS) by Method 8260D

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
tert-Butylbenzene	U		0.127	0.500	1	05/13/2020 09:51	WG1474847
Carbon disulfide	0.527		0.0962	0.500	1	05/13/2020 09:51	WG1474847
Carbon tetrachloride	U		0.128	0.500	1	05/13/2020 09:51	WG1474847
Chlorobenzene	U		0.117	0.500	1	05/13/2020 09:51	WG1474847
Chlorodibromomethane	U		0.140	0.500	1	05/13/2020 09:51	WG1474847
Chloroethane	U		0.192	2.50	1	05/13/2020 09:51	WG1474847
Chloroform	U		0.111	0.500	1	05/13/2020 09:51	WG1474847
Chloromethane	U		0.960	1.25	1	05/13/2020 09:51	WG1474847
2-Chlorotoluene	U		0.106	0.500	1	05/13/2020 09:51	WG1474847
4-Chlorotoluene	U		0.114	0.500	1	05/13/2020 09:51	WG1474847
1,2-Dibromo-3-Chloropropane	U		0.276	2.50	1	05/13/2020 09:51	WG1474847
1,2-Dibromoethane	U		0.126	0.500	1	05/13/2020 09:51	WG1474847
Dibromomethane	U		0.122	0.500	1	05/13/2020 09:51	WG1474847
1,2-Dichlorobenzene	U		0.107	0.500	1	05/13/2020 09:51	WG1474847
1,3-Dichlorobenzene	U		0.299	0.500	1	05/13/2020 09:51	WG1474847
1,4-Dichlorobenzene	U		0.120	0.500	1	05/13/2020 09:51	WG1474847
Dichlorodifluoromethane	U		0.374	2.50	1	05/13/2020 09:51	WG1474847
1,1-Dichloroethane	U		0.100	0.500	1	05/13/2020 09:51	WG1474847
1,2-Dichloroethane	U		0.0819	0.500	1	05/13/2020 09:51	WG1474847
1,1-Dichloroethene	U		0.188	0.500	1	05/13/2020 09:51	WG1474847
cis-1,2-Dichloroethene	U		0.126	0.500	1	05/13/2020 09:51	WG1474847
trans-1,2-Dichloroethene	2.20		0.149	0.500	1	05/13/2020 09:51	WG1474847
1,2-Dichloropropane	U		0.149	0.500	1	05/13/2020 09:51	WG1474847
1,1-Dichloropropene	U		0.142	0.500	1	05/13/2020 09:51	WG1474847
1,3-Dichloropropane	U		0.109	1.00	1	05/13/2020 09:51	WG1474847
cis-1,3-Dichloropropene	U		0.111	0.500	1	05/13/2020 09:51	WG1474847
trans-1,3-Dichloropropene	U		0.118	0.500	1	05/13/2020 09:51	WG1474847
trans-1,4-Dichloro-2-butene	U		0.467	5.00	1	05/13/2020 09:51	WG1474847
2,2-Dichloropropane	U		0.161	0.500	1	05/13/2020 09:51	WG1474847
Di-isopropyl ether	U		0.105	0.500	1	05/13/2020 09:51	WG1474847
Ethylbenzene	U		0.137	0.500	1	05/13/2020 09:51	WG1474847
Hexachloro-1,3-butadiene	U		0.337	1.00	1	05/13/2020 09:51	WG1474847
2-Hexanone	U		0.787	5.00	1	05/13/2020 09:51	WG1474847
n-Hexane	1.32	J	0.749	5.00	1	05/13/2020 09:51	WG1474847
Iodomethane	U		0.554	5.00	1	05/13/2020 09:51	WG1474847
Isopropylbenzene	U		0.105	0.500	1	05/13/2020 09:51	WG1474847
p-Isopropyltoluene	U		0.120	0.500	1	05/13/2020 09:51	WG1474847
2-Butanone (MEK)	U		1.19	5.00	1	05/13/2020 09:51	WG1474847
Methylene Chloride	U		0.430	2.50	1	05/13/2020 09:51	WG1474847
4-Methyl-2-pentanone (MIBK)	U		0.478	5.00	1	05/13/2020 09:51	WG1474847
Methyl tert-butyl ether	U		0.101	0.500	1	05/13/2020 09:51	WG1474847
Naphthalene	0.176	J	0.174	2.50	1	05/13/2020 09:51	WG1474847
n-Propylbenzene	U		0.0993	0.500	1	05/13/2020 09:51	WG1474847
Styrene	U		0.118	0.500	1	05/13/2020 09:51	WG1474847
1,1,1,2-Tetrachloroethane	U		0.147	0.500	1	05/13/2020 09:51	WG1474847
1,1,2,2-Tetrachloroethane	U		0.133	0.500	1	05/13/2020 09:51	WG1474847
1,1,2-Trichlorotrifluoroethane	U		0.180	0.500	1	05/13/2020 09:51	WG1474847
Tetrachloroethene	U		0.300	0.500	1	05/13/2020 09:51	WG1474847
Toluene	0.388	J	0.278	0.500	1	05/13/2020 09:51	WG1474847
1,2,3-Trichlorobenzene	U		0.164	0.500	1	05/13/2020 09:51	WG1474847
1,2,4-Trichlorobenzene	U		0.481	1.00	1	05/13/2020 09:51	WG1474847
1,1,1-Trichloroethane	U		0.149	0.500	1	05/13/2020 09:51	WG1474847
1,1,2-Trichloroethane	U		0.158	0.500	1	05/13/2020 09:51	WG1474847
Trichloroethene	U		0.190	0.500	1	05/13/2020 09:51	WG1474847
Trichlorofluoromethane	U		0.160	2.50	1	05/13/2020 09:51	WG1474847
1,2,3-Trichloropropane	U		0.237	2.50	1	05/13/2020 09:51	WG1474847

JC 5/27/2020

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,2,4-Trimethylbenzene	U		0.322	0.500	1	05/13/2020 09:51	WG1474847
1,2,3-Trimethylbenzene	U		0.104	0.500	1	05/13/2020 09:51	WG1474847
1,3,5-Trimethylbenzene	U		0.104	0.500	1	05/13/2020 09:51	WG1474847
Vinyl acetate	U		0.692	5.00	1	05/13/2020 09:51	WG1474847
Vinyl chloride	40.5		0.234	0.500	1	05/13/2020 09:51	WG1474847
Xylenes, Total	0.493	J	0.174	1.50	1	05/13/2020 09:51	WG1474847
(S) Toluene-d8	*110*			*80.0-120*		*05/13/2020 09:51*	WG1474847
(S) 4-Bromofluorobenzene	*105*			*77.0-126*		*05/13/2020 09:51*	WG1474847
(S) 1,2-Dichloroethane-d4	*119*			*70.0-130*		*05/13/2020 09:51*	WG1474847

JC 5/27/2020

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	511000		8450	20000	1	05/07/2020 14:38	WG1471423

Sample Narrative:

L1215318-02 WG1471423: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	37500		379	1000	1	05/06/2020 16:22	WG1471206
Nitrate	U		48.0	100	1	05/06/2020 16:22	WG1471206
Sulfate	74300		594	5000	1	05/06/2020 16:22	WG1471206

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	3580	~~B~~	102	1000	1	05/08/2020 17:09	WG1472815

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	10500		48.9	100	1	05/08/2020 17:21	WG1472548
Manganese	596		1.32	5.00	1	05/08/2020 17:21	WG1472548

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	271		0.287	0.678	1	05/11/2020 13:42	WG1473786
Ethane	U		0.296	1.29	1	05/11/2020 13:42	WG1473786
Ethene	U		0.422	1.27	1	05/11/2020 13:42	WG1473786

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U		11.3	25.0	1	05/07/2020 23:12	WG1472450
Acrylonitrile	U		0.671	5.00	1	05/07/2020 23:12	WG1472450
Benzene	U		0.0941	0.500	1	05/07/2020 23:12	WG1472450
Bromobenzene	U		0.118	0.500	1	05/07/2020 23:12	WG1472450
Bromodichloromethane	U		0.136	0.500	1	05/07/2020 23:12	WG1472450
Bromochloromethane	U		0.128	0.500	1	05/07/2020 23:12	WG1472450
Bromoform	U		0.129	0.500	1	05/07/2020 23:12	WG1472450
Bromomethane	U		0.605	2.50	1	05/07/2020 23:12	WG1472450
n-Butylbenzene	U		0.157	0.500	1	05/07/2020 23:12	WG1472450
sec-Butylbenzene	U		0.125	0.500	1	05/07/2020 23:12	WG1472450
tert-Butylbenzene	U		0.127	0.500	1	05/07/2020 23:12	WG1472450
Carbon disulfide	U		0.0962	0.500	1	05/07/2020 23:12	WG1472450
Carbon tetrachloride	U		0.128	0.500	1	05/07/2020 23:12	WG1472450
Chlorobenzene	U		0.117	0.500	1	05/07/2020 23:12	WG1472450
Chlorodibromomethane	U		0.140	0.500	1	05/07/2020 23:12	WG1472450
Chloroethane	U		0.192	2.50	1	05/07/2020 23:12	WG1472450
Chloroform	U		0.111	0.500	1	05/07/2020 23:12	WG1472450
Chloromethane	U		0.960	1.25	1	05/07/2020 23:12	WG1472450
2-Chlorotoluene	U		0.106	0.500	1	05/07/2020 23:12	WG1472450
4-Chlorotoluene	U		0.114	0.500	1	05/07/2020 23:12	WG1472450

JC 5/27/2020

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,2-Dibromo-3-Chloropropane	U		0.276	2.50	1	05/07/2020 23:12	WG1472450
1,2-Dibromoethane	U		0.126	0.500	1	05/07/2020 23:12	WG1472450
Dibromomethane	U		0.122	0.500	1	05/07/2020 23:12	WG1472450
1,2-Dichlorobenzene	U		0.107	0.500	1	05/07/2020 23:12	WG1472450
1,3-Dichlorobenzene	U		0.299	0.500	1	05/07/2020 23:12	WG1472450
1,4-Dichlorobenzene	U		0.120	0.500	1	05/07/2020 23:12	WG1472450
Dichlorodifluoromethane	U		0.374	2.50	1	05/07/2020 23:12	WG1472450
1,1-Dichloroethane	U		0.100	0.500	1	05/07/2020 23:12	WG1472450
1,2-Dichloroethane	U		0.0819	0.500	1	05/07/2020 23:12	WG1472450
1,1-Dichloroethene	U		0.188	0.500	1	05/07/2020 23:12	WG1472450
cis-1,2-Dichloroethene	57.1		0.126	0.500	1	05/07/2020 23:12	WG1472450
trans-1,2-Dichloroethene	U		0.149	0.500	1	05/07/2020 23:12	WG1472450
1,2-Dichloropropane	U		0.149	0.500	1	05/07/2020 23:12	WG1472450
1,1-Dichloropropene	U		0.142	0.500	1	05/07/2020 23:12	WG1472450
1,3-Dichloropropane	U		0.109	1.00	1	05/07/2020 23:12	WG1472450
cis-1,3-Dichloropropene	U		0.111	0.500	1	05/07/2020 23:12	WG1472450
trans-1,3-Dichloropropene	U		0.118	0.500	1	05/07/2020 23:12	WG1472450
trans-1,4-Dichloro-2-butene	U	UJ J0	0.467	5.00	1	05/07/2020 23:12	WG1472450
2,2-Dichloropropane	U		0.161	0.500	1	05/07/2020 23:12	WG1472450
Di-isopropyl ether	U		0.105	0.500	1	05/07/2020 23:12	WG1472450
Ethylbenzene	U		0.137	0.500	1	05/07/2020 23:12	WG1472450
Hexachloro-1,3-butadiene	U		0.337	1.00	1	05/07/2020 23:12	WG1472450
2-Hexanone	U		0.787	5.00	1	05/07/2020 23:12	WG1472450
n-Hexane	U		0.749	5.00	1	05/07/2020 23:12	WG1472450
Iodomethane	U		0.554	5.00	1	05/07/2020 23:12	WG1472450
Isopropylbenzene	U		0.105	0.500	1	05/07/2020 23:12	WG1472450
p-Isopropyltoluene	U		0.120	0.500	1	05/07/2020 23:12	WG1472450
2-Butanone (MEK)	U		1.19	5.00	1	05/07/2020 23:12	WG1472450
Methylene Chloride	U		0.430	2.50	1	05/07/2020 23:12	WG1472450
4-Methyl-2-pentanone (MIBK)	U		0.478	5.00	1	05/07/2020 23:12	WG1472450
Methyl tert-butyl ether	U		0.101	0.500	1	05/07/2020 23:12	WG1472450
Naphthalene	U	UJ J0	0.174	2.50	1	05/07/2020 23:12	WG1472450
n-Propylbenzene	U		0.0993	0.500	1	05/07/2020 23:12	WG1472450
Styrene	U		0.118	0.500	1	05/07/2020 23:12	WG1472450
1,1,1,2-Tetrachloroethane	U		0.147	0.500	1	05/07/2020 23:12	WG1472450
1,1,2,2-Tetrachloroethane	U		0.133	0.500	1	05/07/2020 23:12	WG1472450
1,1,2-Trichlorotrifluoroethane	U		0.180	0.500	1	05/07/2020 23:12	WG1472450
Tetrachloroethene	U		0.300	0.500	1	05/07/2020 23:12	WG1472450
Toluene	0.318	J	0.278	0.500	1	05/13/2020 04:39	WG1474615
1,2,3-Trichlorobenzene	U	UJ J0	0.164	0.500	1	05/07/2020 23:12	WG1472450
1,2,4-Trichlorobenzene	U		0.481	1.00	1	05/07/2020 23:12	WG1472450
1,1,1-Trichloroethane	U		0.149	0.500	1	05/07/2020 23:12	WG1472450
1,1,2-Trichloroethane	U		0.158	0.500	1	05/07/2020 23:12	WG1472450
Trichloroethene	0.304	J	0.190	0.500	1	05/07/2020 23:12	WG1472450
Trichlorofluoromethane	U		0.160	2.50	1	05/07/2020 23:12	WG1472450
1,2,3-Trichloropropane	U		0.237	2.50	1	05/07/2020 23:12	WG1472450
1,2,4-Trimethylbenzene	U		0.322	0.500	1	05/07/2020 23:12	WG1472450
1,2,3-Trimethylbenzene	U		0.104	0.500	1	05/07/2020 23:12	WG1472450
1,3,5-Trimethylbenzene	U		0.104	0.500	1	05/07/2020 23:12	WG1472450
Vinyl acetate	U		0.692	5.00	1	05/07/2020 23:12	WG1472450
Vinyl chloride	6.03		0.234	0.500	1	05/07/2020 23:12	WG1472450
Xylenes, Total	U		0.174	1.50	1	05/13/2020 04:39	WG1474615
(S) Toluene-d8	*105*			*80.0-120*		*05/07/2020 23:12*	WG1472450
(S) Toluene-d8	*96.1*			*80.0-120*		*05/13/2020 04:39*	WG1474615
(S) 4-Bromofluorobenzene	*92.7*			*77.0-126*		*05/07/2020 23:12*	WG1472450
(S) 4-Bromofluorobenzene	*92.7*			*77.0-126*		*05/13/2020 04:39*	WG1474615

JC 5/27/2020

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
(S) 1,2-Dichloroethane-d4	*96.3*			*70.0-130*		*05/07/2020 23:12*	WG1472450
(S) 1,2-Dichloroethane-d4	*92.2*			*70.0-130*		*05/13/2020 04:39*	WG1474615

JC 5/27/2020

MW123-050520
Collected date/time: 05/05/20 12:20

SAMPLE RESULTS - 03

L1215318

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Wet Chemistry by Method 2320 B-2011

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Alkalinity	337000		8450	20000	1	05/07/2020 14:48	WG1471423

Sample Narrative:

L1215318-03 WG1471423: Endpoint pH 4.5

Wet Chemistry by Method 9056A

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Chloride	31000		379	1000	1	05/06/2020 16:44	WG1471206
Nitrate	U		48.0	100	1	05/06/2020 16:44	WG1471206
Sulfate	23000		594	5000	1	05/06/2020 16:44	WG1471206

Wet Chemistry by Method 9060A

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
TOC (Total Organic Carbon)	4770		102	1000	1	05/08/2020 17:28	WG1472815

Metals (ICPMS) by Method 6020B

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Iron	3460		48.9	100	1	05/08/2020 17:24	WG1472548
Manganese	1400		1.32	5.00	1	05/08/2020 17:24	WG1472548

Volatile Organic Compounds (GC) by Method RSK175

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Methane	2740		0.287	0.678	1	05/11/2020 13:46	WG1473786
Ethane	U		0.296	1.29	1	05/11/2020 13:46	WG1473786
Ethene	U		0.422	1.27	1	05/11/2020 13:46	WG1473786

Volatile Organic Compounds (GC/MS) by Method 8260D

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Acetone	U		11.3	25.0	1	05/07/2020 23:33	WG1472450
Acrylonitrile	U		0.671	5.00	1	05/07/2020 23:33	WG1472450
Benzene	U		0.0941	0.500	1	05/07/2020 23:33	WG1472450
Bromobenzene	U		0.118	0.500	1	05/07/2020 23:33	WG1472450
Bromodichloromethane	U		0.136	0.500	1	05/07/2020 23:33	WG1472450
Bromochloromethane	U		0.128	0.500	1	05/07/2020 23:33	WG1472450
Bromoform	U		0.129	0.500	1	05/07/2020 23:33	WG1472450
Bromomethane	U		0.605	2.50	1	05/07/2020 23:33	WG1472450
n-Butylbenzene	U		0.157	0.500	1	05/07/2020 23:33	WG1472450
sec-Butylbenzene	U		0.125	0.500	1	05/07/2020 23:33	WG1472450
tert-Butylbenzene	U		0.127	0.500	1	05/07/2020 23:33	WG1472450
Carbon disulfide	U		0.0962	0.500	1	05/07/2020 23:33	WG1472450
Carbon tetrachloride	U		0.128	0.500	1	05/07/2020 23:33	WG1472450
Chlorobenzene	U		0.117	0.500	1	05/07/2020 23:33	WG1472450
Chlorodibromomethane	U		0.140	0.500	1	05/07/2020 23:33	WG1472450
Chloroethane	U		0.192	2.50	1	05/07/2020 23:33	WG1472450
Chloroform	U		0.111	0.500	1	05/07/2020 23:33	WG1472450
Chloromethane	U		0.960	1.25	1	05/07/2020 23:33	WG1472450
2-Chlorotoluene	U		0.106	0.500	1	05/07/2020 23:33	WG1472450
4-Chlorotoluene	U		0.114	0.500	1	05/07/2020 23:33	WG1472450

JC 5/27/2020

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,2-Dibromo-3-Chloropropane	U		0.276	2.50	1	05/07/2020 23:33	WG1472450
1,2-Dibromoethane	U		0.126	0.500	1	05/07/2020 23:33	WG1472450
Dibromomethane	U		0.122	0.500	1	05/07/2020 23:33	WG1472450
1,2-Dichlorobenzene	U		0.107	0.500	1	05/07/2020 23:33	WG1472450
1,3-Dichlorobenzene	U		0.299	0.500	1	05/07/2020 23:33	WG1472450
1,4-Dichlorobenzene	U		0.120	0.500	1	05/07/2020 23:33	WG1472450
Dichlorodifluoromethane	U		0.374	2.50	1	05/07/2020 23:33	WG1472450
1,1-Dichloroethane	U		0.100	0.500	1	05/07/2020 23:33	WG1472450
1,2-Dichloroethane	U		0.0819	0.500	1	05/07/2020 23:33	WG1472450
1,1-Dichloroethene	U		0.188	0.500	1	05/07/2020 23:33	WG1472450
cis-1,2-Dichloroethene	U		0.126	0.500	1	05/07/2020 23:33	WG1472450
trans-1,2-Dichloroethene	U		0.149	0.500	1	05/07/2020 23:33	WG1472450
1,2-Dichloropropane	U		0.149	0.500	1	05/07/2020 23:33	WG1472450
1,1-Dichloropropene	U		0.142	0.500	1	05/07/2020 23:33	WG1472450
1,3-Dichloropropane	U		0.109	1.00	1	05/07/2020 23:33	WG1472450
cis-1,3-Dichloropropene	U		0.111	0.500	1	05/07/2020 23:33	WG1472450
trans-1,3-Dichloropropene	U		0.118	0.500	1	05/07/2020 23:33	WG1472450
trans-1,4-Dichloro-2-butene	U	UJ J0	0.467	5.00	1	05/07/2020 23:33	WG1472450
2,2-Dichloropropane	U		0.161	0.500	1	05/07/2020 23:33	WG1472450
Di-isopropyl ether	U		0.105	0.500	1	05/07/2020 23:33	WG1472450
Ethylbenzene	U		0.137	0.500	1	05/07/2020 23:33	WG1472450
Hexachloro-1,3-butadiene	U		0.337	1.00	1	05/07/2020 23:33	WG1472450
2-Hexanone	U		0.787	5.00	1	05/07/2020 23:33	WG1472450
n-Hexane	U		0.749	5.00	1	05/07/2020 23:33	WG1472450
Iodomethane	U		0.554	5.00	1	05/07/2020 23:33	WG1472450
Isopropylbenzene	U		0.105	0.500	1	05/07/2020 23:33	WG1472450
p-Isopropyltoluene	U		0.120	0.500	1	05/07/2020 23:33	WG1472450
2-Butanone (MEK)	U		1.19	5.00	1	05/07/2020 23:33	WG1472450
Methylene Chloride	U		0.430	2.50	1	05/07/2020 23:33	WG1472450
4-Methyl-2-pentanone (MIBK)	U		0.478	5.00	1	05/07/2020 23:33	WG1472450
Methyl tert-butyl ether	U		0.101	0.500	1	05/07/2020 23:33	WG1472450
Naphthalene	U	UJ J0	0.174	2.50	1	05/07/2020 23:33	WG1472450
n-Propylbenzene	U		0.0993	0.500	1	05/07/2020 23:33	WG1472450
Styrene	U		0.118	0.500	1	05/07/2020 23:33	WG1472450
1,1,1,2-Tetrachloroethane	U		0.147	0.500	1	05/07/2020 23:33	WG1472450
1,1,2,2-Tetrachloroethane	U		0.133	0.500	1	05/07/2020 23:33	WG1472450
1,1,2-Trichlorotrifluoroethane	U		0.180	0.500	1	05/07/2020 23:33	WG1472450
Tetrachloroethene	U		0.300	0.500	1	05/07/2020 23:33	WG1472450
Toluene	0.293	J	0.278	0.500	1	05/13/2020 05:00	WG1474615
1,2,3-Trichlorobenzene	U	UJ J0	0.164	0.500	1	05/07/2020 23:33	WG1472450
1,2,4-Trichlorobenzene	U		0.481	1.00	1	05/07/2020 23:33	WG1472450
1,1,1-Trichloroethane	U		0.149	0.500	1	05/07/2020 23:33	WG1472450
1,1,2-Trichloroethane	U		0.158	0.500	1	05/07/2020 23:33	WG1472450
Trichloroethene	U		0.190	0.500	1	05/07/2020 23:33	WG1472450
Trichlorofluoromethane	U		0.160	2.50	1	05/07/2020 23:33	WG1472450
1,2,3-Trichloropropane	U		0.237	2.50	1	05/07/2020 23:33	WG1472450
1,2,4-Trimethylbenzene	U		0.322	0.500	1	05/07/2020 23:33	WG1472450
1,2,3-Trimethylbenzene	U		0.104	0.500	1	05/07/2020 23:33	WG1472450
1,3,5-Trimethylbenzene	U		0.104	0.500	1	05/07/2020 23:33	WG1472450
Vinyl acetate	U		0.692	5.00	1	05/07/2020 23:33	WG1472450
Vinyl chloride	U		0.234	0.500	1	05/07/2020 23:33	WG1472450
Xylenes, Total	U		0.174	1.50	1	05/13/2020 05:00	WG1474615
(S) Toluene-d8	*109*			*80.0-120*		*05/07/2020 23:33*	WG1472450
(S) Toluene-d8	*97.7*			*80.0-120*		*05/13/2020 05:00*	WG1474615
(S) 4-Bromofluorobenzene	*91.8*			*77.0-126*		*05/07/2020 23:33*	WG1472450
(S) 4-Bromofluorobenzene	*89.5*			*77.0-126*		*05/13/2020 05:00*	WG1474615

JC 5/27/2020

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
(S) 1,2-Dichloroethane-d4	*98.9*			*70.0-130*		*05/07/2020 23:33*	WG1472450
(S) 1,2-Dichloroethane-d4	*89.1*			*70.0-130*		*05/13/2020 05:00*	WG1474615

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

JC 5/27/2020

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Wet Chemistry by Method 2320 B-2011

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Alkalinity	258000		8450	20000	1	05/07/2020 14:56	WG1471423

Sample Narrative:

L1215318-04 WG1471423: Endpoint pH 4.5

Wet Chemistry by Method 9056A

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Chloride	12300		379	1000	1	05/06/2020 16:55	WG1471206
Nitrate	5070		48.0	100	1	05/06/2020 16:55	WG1471206
Sulfate	73300		594	5000	1	05/06/2020 16:55	WG1471206

Wet Chemistry by Method 9060A

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
TOC (Total Organic Carbon)	2750	~~B~~	102	1000	1	05/08/2020 19:45	WG1472815

Metals (ICPMS) by Method 6020B

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Iron	700		48.9	100	1	05/08/2020 17:27	WG1472548
Manganese	37.5		1.32	5.00	1	05/08/2020 17:27	WG1472548

Volatile Organic Compounds (GC) by Method NWTPHGX

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Gasoline Range Organics-NWTPH	U		31.6	100	1	05/13/2020 06:02	WG1474063
(S) a,a,a-Trifluorotoluene(FID)	*100*			*78.0-120*		*05/13/2020 06:02*	WG1474063

Volatile Organic Compounds (GC) by Method RSK175

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Methane	U		0.287	0.678	1	05/11/2020 13:53	WG1473786
Ethane	U		0.296	1.29	1	05/11/2020 13:53	WG1473786
Ethene	U		0.422	1.27	1	05/11/2020 13:53	WG1473786

Volatile Organic Compounds (GC/MS) by Method 8260D

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Acetone	U		11.3	25.0	1	05/07/2020 23:53	WG1472450
Acrylonitrile	U		0.671	5.00	1	05/07/2020 23:53	WG1472450
Benzene	U		0.0941	0.500	1	05/07/2020 23:53	WG1472450
Bromobenzene	U		0.118	0.500	1	05/07/2020 23:53	WG1472450
Bromodichloromethane	U		0.136	0.500	1	05/07/2020 23:53	WG1472450
Bromochloromethane	U		0.128	0.500	1	05/07/2020 23:53	WG1472450
Bromoform	U		0.129	0.500	1	05/07/2020 23:53	WG1472450
Bromomethane	U		0.605	2.50	1	05/07/2020 23:53	WG1472450
n-Butylbenzene	U		0.157	0.500	1	05/07/2020 23:53	WG1472450
sec-Butylbenzene	U		0.125	0.500	1	05/07/2020 23:53	WG1472450
tert-Butylbenzene	U		0.127	0.500	1	05/07/2020 23:53	WG1472450
Carbon disulfide	U		0.0962	0.500	1	05/07/2020 23:53	WG1472450
Carbon tetrachloride	U		0.128	0.500	1	05/07/2020 23:53	WG1472450

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Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chlorobenzene	U		0.117	0.500	1	05/07/2020 23:53	WG1472450
Chlorodibromomethane	U		0.140	0.500	1	05/07/2020 23:53	WG1472450
Chloroethane	U		0.192	2.50	1	05/07/2020 23:53	WG1472450
Chloroform	U		0.111	0.500	1	05/07/2020 23:53	WG1472450
Chloromethane	U		0.960	1.25	1	05/07/2020 23:53	WG1472450
2-Chlorotoluene	U		0.106	0.500	1	05/07/2020 23:53	WG1472450
4-Chlorotoluene	U		0.114	0.500	1	05/07/2020 23:53	WG1472450
1,2-Dibromo-3-Chloropropane	U		0.276	2.50	1	05/07/2020 23:53	WG1472450
1,2-Dibromoethane	U		0.126	0.500	1	05/07/2020 23:53	WG1472450
Dibromomethane	U		0.122	0.500	1	05/07/2020 23:53	WG1472450
1,2-Dichlorobenzene	U		0.107	0.500	1	05/07/2020 23:53	WG1472450
1,3-Dichlorobenzene	U		0.299	0.500	1	05/07/2020 23:53	WG1472450
1,4-Dichlorobenzene	U		0.120	0.500	1	05/07/2020 23:53	WG1472450
Dichlorodifluoromethane	U		0.374	2.50	1	05/07/2020 23:53	WG1472450
1,1-Dichloroethane	U		0.100	0.500	1	05/07/2020 23:53	WG1472450
1,2-Dichloroethane	U		0.0819	0.500	1	05/07/2020 23:53	WG1472450
1,1-Dichloroethene	U		0.188	0.500	1	05/07/2020 23:53	WG1472450
cis-1,2-Dichloroethene	16.4		0.126	0.500	1	05/07/2020 23:53	WG1472450
trans-1,2-Dichloroethene	0.158	J	0.149	0.500	1	05/07/2020 23:53	WG1472450
1,2-Dichloropropane	U		0.149	0.500	1	05/07/2020 23:53	WG1472450
1,1-Dichloropropene	U		0.142	0.500	1	05/07/2020 23:53	WG1472450
1,3-Dichloropropane	U		0.109	1.00	1	05/07/2020 23:53	WG1472450
cis-1,3-Dichloropropene	U		0.111	0.500	1	05/07/2020 23:53	WG1472450
trans-1,3-Dichloropropene	U		0.118	0.500	1	05/07/2020 23:53	WG1472450
trans-1,4-Dichloro-2-butene	U	UJ J0	0.467	5.00	1	05/07/2020 23:53	WG1472450
2,2-Dichloropropane	U		0.161	0.500	1	05/07/2020 23:53	WG1472450
Di-isopropyl ether	U		0.105	0.500	1	05/07/2020 23:53	WG1472450
Ethylbenzene	U		0.137	0.500	1	05/07/2020 23:53	WG1472450
Hexachloro-1,3-butadiene	U		0.337	1.00	1	05/07/2020 23:53	WG1472450
2-Hexanone	U		0.787	5.00	1	05/07/2020 23:53	WG1472450
n-Hexane	U		0.749	5.00	1	05/07/2020 23:53	WG1472450
Iodomethane	U		0.554	5.00	1	05/07/2020 23:53	WG1472450
Isopropylbenzene	U		0.105	0.500	1	05/07/2020 23:53	WG1472450
p-Isopropyltoluene	U		0.120	0.500	1	05/07/2020 23:53	WG1472450
2-Butanone (MEK)	U		1.19	5.00	1	05/07/2020 23:53	WG1472450
Methylene Chloride	U		0.430	2.50	1	05/07/2020 23:53	WG1472450
4-Methyl-2-pentanone (MIBK)	U		0.478	5.00	1	05/07/2020 23:53	WG1472450
Methyl tert-butyl ether	U		0.101	0.500	1	05/07/2020 23:53	WG1472450
Naphthalene	U	UJ J0	0.174	2.50	1	05/07/2020 23:53	WG1472450
n-Propylbenzene	U		0.0993	0.500	1	05/07/2020 23:53	WG1472450
Styrene	U		0.118	0.500	1	05/07/2020 23:53	WG1472450
1,1,1,2-Tetrachloroethane	U		0.147	0.500	1	05/07/2020 23:53	WG1472450
1,1,2,2-Tetrachloroethane	U		0.133	0.500	1	05/07/2020 23:53	WG1472450
1,1,2-Trichlorotrifluoroethane	U		0.180	0.500	1	05/07/2020 23:53	WG1472450
Tetrachloroethene	140		0.300	0.500	1	05/07/2020 23:53	WG1472450
Toluene	U		0.278	0.500	1	05/07/2020 23:53	WG1472450
1,2,3-Trichlorobenzene	U	UJ J0	0.164	0.500	1	05/07/2020 23:53	WG1472450
1,2,4-Trichlorobenzene	U		0.481	1.00	1	05/07/2020 23:53	WG1472450
1,1,1-Trichloroethane	U		0.149	0.500	1	05/07/2020 23:53	WG1472450
1,1,2-Trichloroethane	U		0.158	0.500	1	05/07/2020 23:53	WG1472450
Trichloroethene	27.3		0.190	0.500	1	05/07/2020 23:53	WG1472450
Trichlorofluoromethane	U		0.160	2.50	1	05/07/2020 23:53	WG1472450
1,2,3-Trichloropropane	U		0.237	2.50	1	05/07/2020 23:53	WG1472450
1,2,4-Trimethylbenzene	U		0.322	0.500	1	05/07/2020 23:53	WG1472450
1,2,3-Trimethylbenzene	U		0.104	0.500	1	05/07/2020 23:53	WG1472450
1,3,5-Trimethylbenzene	U		0.104	0.500	1	05/07/2020 23:53	WG1472450

JC 5/27/2020

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Vinyl acetate	U		0.692	5.00	1	05/07/2020 23:53	WG1472450
Vinyl chloride	U		0.234	0.500	1	05/07/2020 23:53	WG1472450
Xylenes, Total	U		0.174	1.50	1	05/07/2020 23:53	WG1472450
(S) Toluene-d8	*107*			*80.0-120*		*05/07/2020 23:53*	WG1472450
(S) 4-Bromofluorobenzene	*93.9*			*77.0-126*		*05/07/2020 23:53*	WG1472450
(S) 1,2-Dichloroethane-d4	*95.6*			*70.0-130*		*05/07/2020 23:53*	WG1472450

JC 5/27/2020

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Wet Chemistry by Method 2320 B-2011

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Alkalinity	355000		8450	20000	1	05/07/2020 15:05	WG1471423

Sample Narrative:

L1215318-05 WG1471423: Endpoint pH 4.5

Wet Chemistry by Method 9056A

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Chloride	28300		379	1000	1	05/06/2020 17:06	WG1471206
Nitrate	U		48.0	100	1	05/06/2020 17:06	WG1471206
Sulfate	209000		2970	25000	5	05/06/2020 19:16	WG1471206

Wet Chemistry by Method 9060A

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
TOC (Total Organic Carbon)	6840		102	1000	1	05/08/2020 20:53	WG1472815

Metals (ICPMS) by Method 6020B

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Iron	11500		48.9	100	1	05/08/2020 17:41	WG1472548
Manganese	1460		1.32	5.00	1	05/08/2020 17:41	WG1472548

Volatile Organic Compounds (GC) by Method RSK175

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Methane	1760		0.287	0.678	1	05/11/2020 14:19	WG1473786
Ethane	U		0.296	1.29	1	05/11/2020 14:19	WG1473786
Ethene	U		0.422	1.27	1	05/11/2020 14:19	WG1473786

Volatile Organic Compounds (GC/MS) by Method 8260D

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Acetone	U		11.3	25.0	1	05/08/2020 00:14	WG1472450
Acrylonitrile	U		0.671	5.00	1	05/08/2020 00:14	WG1472450
Benzene	U		0.0941	0.500	1	05/08/2020 00:14	WG1472450
Bromobenzene	U		0.118	0.500	1	05/08/2020 00:14	WG1472450
Bromodichloromethane	U		0.136	0.500	1	05/08/2020 00:14	WG1472450
Bromochloromethane	U		0.128	0.500	1	05/08/2020 00:14	WG1472450
Bromoform	U		0.129	0.500	1	05/08/2020 00:14	WG1472450
Bromomethane	U		0.605	2.50	1	05/08/2020 00:14	WG1472450
n-Butylbenzene	U		0.157	0.500	1	05/08/2020 00:14	WG1472450
sec-Butylbenzene	U		0.125	0.500	1	05/08/2020 00:14	WG1472450
tert-Butylbenzene	U		0.127	0.500	1	05/08/2020 00:14	WG1472450
Carbon disulfide	U		0.0962	0.500	1	05/08/2020 00:14	WG1472450
Carbon tetrachloride	U		0.128	0.500	1	05/08/2020 00:14	WG1472450
Chlorobenzene	U		0.117	0.500	1	05/08/2020 00:14	WG1472450
Chlorodibromomethane	U		0.140	0.500	1	05/08/2020 00:14	WG1472450
Chloroethane	U		0.192	2.50	1	05/08/2020 00:14	WG1472450
Chloroform	U		0.111	0.500	1	05/08/2020 00:14	WG1472450
Chloromethane	U		0.960	1.25	1	05/08/2020 00:14	WG1472450
2-Chlorotoluene	U		0.106	0.500	1	05/08/2020 00:14	WG1472450
4-Chlorotoluene	U		0.114	0.500	1	05/08/2020 00:14	WG1472450

JC 5/27/2020

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,2-Dibromo-3-Chloropropane	U		0.276	2.50	1	05/08/2020 00:14	WG1472450
1,2-Dibromoethane	U		0.126	0.500	1	05/08/2020 00:14	WG1472450
Dibromomethane	U		0.122	0.500	1	05/08/2020 00:14	WG1472450
1,2-Dichlorobenzene	U		0.107	0.500	1	05/08/2020 00:14	WG1472450
1,3-Dichlorobenzene	U		0.299	0.500	1	05/08/2020 00:14	WG1472450
1,4-Dichlorobenzene	U		0.120	0.500	1	05/08/2020 00:14	WG1472450
Dichlorodifluoromethane	U		0.374	2.50	1	05/08/2020 00:14	WG1472450
1,1-Dichloroethane	U		0.100	0.500	1	05/08/2020 00:14	WG1472450
1,2-Dichloroethane	U		0.0819	0.500	1	05/08/2020 00:14	WG1472450
1,1-Dichloroethene	U		0.188	0.500	1	05/08/2020 00:14	WG1472450
cis-1,2-Dichloroethene	0.654		0.126	0.500	1	05/08/2020 00:14	WG1472450
trans-1,2-Dichloroethene	U		0.149	0.500	1	05/08/2020 00:14	WG1472450
1,2-Dichloropropane	U		0.149	0.500	1	05/08/2020 00:14	WG1472450
1,1-Dichloropropene	U		0.142	0.500	1	05/08/2020 00:14	WG1472450
1,3-Dichloropropane	U		0.109	1.00	1	05/08/2020 00:14	WG1472450
cis-1,3-Dichloropropene	U		0.111	0.500	1	05/08/2020 00:14	WG1472450
trans-1,3-Dichloropropene	U		0.118	0.500	1	05/08/2020 00:14	WG1472450
trans-1,4-Dichloro-2-butene	U	UJ J0	0.467	5.00	1	05/08/2020 00:14	WG1472450
2,2-Dichloropropane	U		0.161	0.500	1	05/08/2020 00:14	WG1472450
Di-isopropyl ether	U		0.105	0.500	1	05/08/2020 00:14	WG1472450
Ethylbenzene	U		0.137	0.500	1	05/08/2020 00:14	WG1472450
Hexachloro-1,3-butadiene	U		0.337	1.00	1	05/08/2020 00:14	WG1472450
2-Hexanone	U		0.787	5.00	1	05/08/2020 00:14	WG1472450
n-Hexane	U		0.749	5.00	1	05/08/2020 00:14	WG1472450
Iodomethane	U		0.554	5.00	1	05/08/2020 00:14	WG1472450
Isopropylbenzene	U		0.105	0.500	1	05/08/2020 00:14	WG1472450
p-Isopropyltoluene	U		0.120	0.500	1	05/08/2020 00:14	WG1472450
2-Butanone (MEK)	U		1.19	5.00	1	05/08/2020 00:14	WG1472450
Methylene Chloride	U		0.430	2.50	1	05/08/2020 00:14	WG1472450
4-Methyl-2-pentanone (MIBK)	U		0.478	5.00	1	05/08/2020 00:14	WG1472450
Methyl tert-butyl ether	U		0.101	0.500	1	05/08/2020 00:14	WG1472450
Naphthalene	U	UJ J0	0.174	2.50	1	05/08/2020 00:14	WG1472450
n-Propylbenzene	U		0.0993	0.500	1	05/08/2020 00:14	WG1472450
Styrene	U		0.118	0.500	1	05/08/2020 00:14	WG1472450
1,1,1,2-Tetrachloroethane	U		0.147	0.500	1	05/08/2020 00:14	WG1472450
1,1,2,2-Tetrachloroethane	U		0.133	0.500	1	05/08/2020 00:14	WG1472450
1,1,2-Trichlorotrifluoroethane	U		0.180	0.500	1	05/08/2020 00:14	WG1472450
Tetrachloroethene	U		0.300	0.500	1	05/08/2020 00:14	WG1472450
Toluene	U		0.278	0.500	1	05/08/2020 00:14	WG1472450
1,2,3-Trichlorobenzene	U	UJ J0	0.164	0.500	1	05/08/2020 00:14	WG1472450
1,2,4-Trichlorobenzene	U		0.481	1.00	1	05/08/2020 00:14	WG1472450
1,1,1-Trichloroethane	U		0.149	0.500	1	05/08/2020 00:14	WG1472450
1,1,2-Trichloroethane	U		0.158	0.500	1	05/08/2020 00:14	WG1472450
Trichloroethene	U		0.190	0.500	1	05/08/2020 00:14	WG1472450
Trichlorofluoromethane	U		0.160	2.50	1	05/08/2020 00:14	WG1472450
1,2,3-Trichloropropane	U		0.237	2.50	1	05/08/2020 00:14	WG1472450
1,2,4-Trimethylbenzene	U		0.322	0.500	1	05/08/2020 00:14	WG1472450
1,2,3-Trimethylbenzene	U		0.104	0.500	1	05/08/2020 00:14	WG1472450
1,3,5-Trimethylbenzene	U		0.104	0.500	1	05/08/2020 00:14	WG1472450
Vinyl acetate	U		0.692	5.00	1	05/08/2020 00:14	WG1472450
Vinyl chloride	8.86		0.234	0.500	1	05/08/2020 00:14	WG1472450
Xylenes, Total	U		0.174	1.50	1	05/08/2020 00:14	WG1472450
(S) Toluene-d8	*106*			*80.0-120*		*05/08/2020 00:14*	WG1472450
(S) 4-Bromofluorobenzene	*100*			*77.0-126*		*05/08/2020 00:14*	WG1472450
(S) 1,2-Dichloroethane-d4	*103*			*70.0-130*		*05/08/2020 00:14*	WG1472450

JC 5/27/2020

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	699000		8450	20000	1	05/09/2020 20:19	WG1472978

Sample Narrative:

L1215869-01 WG1472978: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	44400		379	1000	1	05/07/2020 15:19	WG1471933
Nitrate	U		48.0	100	1	05/07/2020 15:19	WG1471933
Sulfate	7180		594	5000	1	05/07/2020 15:19	WG1471933

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	5800		102	1000	1	05/08/2020 20:32	WG1472819

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	34600		48.9	100	1	05/11/2020 22:20	WG1472549
Manganese	2420		1.32	5.00	1	05/11/2020 22:20	WG1472549

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	21.8		0.287	0.678	1	05/12/2020 13:13	WG1474309
Ethane	U		0.296	1.29	1	05/12/2020 13:13	WG1474309
Ethene	U		0.422	1.27	1	05/12/2020 13:13	WG1474309

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U	J4	11.3	25.0	1	05/08/2020 21:45	WG1472992
Acrylonitrile	U		0.671	5.00	1	05/08/2020 21:45	WG1472992
Benzene	U		0.0941	0.500	1	05/08/2020 21:45	WG1472992
Bromobenzene	U		0.118	0.500	1	05/08/2020 21:45	WG1472992
Bromodichloromethane	U		0.136	0.500	1	05/08/2020 21:45	WG1472992
Bromochloromethane	U		0.128	0.500	1	05/08/2020 21:45	WG1472992
Bromoform	U		0.129	0.500	1	05/08/2020 21:45	WG1472992
Bromomethane	U		0.605	2.50	1	05/08/2020 21:45	WG1472992
n-Butylbenzene	U		0.157	0.500	1	05/08/2020 21:45	WG1472992
sec-Butylbenzene	U		0.125	0.500	1	05/08/2020 21:45	WG1472992
tert-Butylbenzene	U		0.127	0.500	1	05/08/2020 21:45	WG1472992
Carbon disulfide	U		0.0962	0.500	1	05/08/2020 21:45	WG1472992
Carbon tetrachloride	U		0.128	0.500	1	05/08/2020 21:45	WG1472992
Chlorobenzene	U		0.117	0.500	1	05/08/2020 21:45	WG1472992
Chlorodibromomethane	U		0.140	0.500	1	05/08/2020 21:45	WG1472992
Chloroethane	U		0.192	2.50	1	05/08/2020 21:45	WG1472992
Chloroform	U		0.111	0.500	1	05/08/2020 21:45	WG1472992
Chloromethane	U		0.960	1.25	1	05/08/2020 21:45	WG1472992
2-Chlorotoluene	U		0.106	0.500	1	05/08/2020 21:45	WG1472992
4-Chlorotoluene	U		0.114	0.500	1	05/08/2020 21:45	WG1472992

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Volatile Organic Compounds (GC/MS) by Method 8260D

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
1,2-Dibromo-3-Chloropropane	U		0.276	2.50	1	05/08/2020 21:45	WG1472992
1,2-Dibromoethane	U		0.126	0.500	1	05/08/2020 21:45	WG1472992
Dibromomethane	U		0.122	0.500	1	05/08/2020 21:45	WG1472992
1,2-Dichlorobenzene	U		0.107	0.500	1	05/08/2020 21:45	WG1472992
1,3-Dichlorobenzene	U		0.299	0.500	1	05/08/2020 21:45	WG1472992
1,4-Dichlorobenzene	U		0.120	0.500	1	05/08/2020 21:45	WG1472992
Dichlorodifluoromethane	U		0.374	2.50	1	05/08/2020 21:45	WG1472992
1,1-Dichloroethane	U		0.100	0.500	1	05/08/2020 21:45	WG1472992
1,2-Dichloroethane	U		0.0819	0.500	1	05/08/2020 21:45	WG1472992
1,1-Dichloroethene	U		0.188	0.500	1	05/08/2020 21:45	WG1472992
cis-1,2-Dichloroethene	U		0.126	0.500	1	05/08/2020 21:45	WG1472992
trans-1,2-Dichloroethene	U		0.149	0.500	1	05/08/2020 21:45	WG1472992
1,2-Dichloropropane	U		0.149	0.500	1	05/08/2020 21:45	WG1472992
1,1-Dichloropropene	U		0.142	0.500	1	05/08/2020 21:45	WG1472992
1,3-Dichloropropane	U		0.109	1.00	1	05/08/2020 21:45	WG1472992
cis-1,3-Dichloropropene	U		0.111	0.500	1	05/08/2020 21:45	WG1472992
trans-1,3-Dichloropropene	U		0.118	0.500	1	05/08/2020 21:45	WG1472992
trans-1,4-Dichloro-2-butene	U		0.467	5.00	1	05/08/2020 21:45	WG1472992
2,2-Dichloropropane	U		0.161	0.500	1	05/08/2020 21:45	WG1472992
Di-isopropyl ether	U		0.105	0.500	1	05/08/2020 21:45	WG1472992
Ethylbenzene	U		0.137	0.500	1	05/08/2020 21:45	WG1472992
Hexachloro-1,3-butadiene	U		0.337	1.00	1	05/08/2020 21:45	WG1472992
2-Hexanone	U		0.787	5.00	1	05/08/2020 21:45	WG1472992
n-Hexane	U		0.749	5.00	1	05/08/2020 21:45	WG1472992
Iodomethane	U		0.554	5.00	1	05/08/2020 21:45	WG1472992
Isopropylbenzene	U		0.105	0.500	1	05/08/2020 21:45	WG1472992
p-Isopropyltoluene	U		0.120	0.500	1	05/08/2020 21:45	WG1472992
2-Butanone (MEK)	U		1.19	5.00	1	05/08/2020 21:45	WG1472992
Methylene Chloride	U		0.430	2.50	1	05/08/2020 21:45	WG1472992
4-Methyl-2-pentanone (MIBK)	U		0.478	5.00	1	05/08/2020 21:45	WG1472992
Methyl tert-butyl ether	U		0.101	0.500	1	05/08/2020 21:45	WG1472992
Naphthalene	U		0.174	2.50	1	05/08/2020 21:45	WG1472992
n-Propylbenzene	U		0.0993	0.500	1	05/08/2020 21:45	WG1472992
Styrene	U		0.118	0.500	1	05/08/2020 21:45	WG1472992
1,1,1,2-Tetrachloroethane	U		0.147	0.500	1	05/08/2020 21:45	WG1472992
1,1,2,2-Tetrachloroethane	U		0.133	0.500	1	05/08/2020 21:45	WG1472992
1,1,2-Trichlorotrifluoroethane	U		0.180	0.500	1	05/08/2020 21:45	WG1472992
Tetrachloroethene	U		0.300	0.500	1	05/08/2020 21:45	WG1472992
Toluene	U		0.278	0.500	1	05/08/2020 21:45	WG1472992
1,2,3-Trichlorobenzene	U		0.164	0.500	1	05/08/2020 21:45	WG1472992
1,2,4-Trichlorobenzene	U		0.481	1.00	1	05/08/2020 21:45	WG1472992
1,1,1-Trichloroethane	U		0.149	0.500	1	05/08/2020 21:45	WG1472992
1,1,2-Trichloroethane	U		0.158	0.500	1	05/08/2020 21:45	WG1472992
Trichloroethene	U		0.190	0.500	1	05/08/2020 21:45	WG1472992
Trichlorofluoromethane	U		0.160	2.50	1	05/08/2020 21:45	WG1472992
1,2,3-Trichloropropane	U		0.237	2.50	1	05/08/2020 21:45	WG1472992
1,2,4-Trimethylbenzene	U		0.322	0.500	1	05/08/2020 21:45	WG1472992
1,2,3-Trimethylbenzene	U		0.104	0.500	1	05/08/2020 21:45	WG1472992
1,3,5-Trimethylbenzene	U		0.104	0.500	1	05/08/2020 21:45	WG1472992
Vinyl acetate	U		0.692	5.00	1	05/08/2020 21:45	WG1472992
Vinyl chloride	U		0.234	0.500	1	05/08/2020 21:45	WG1472992
Xylenes, Total	U		0.174	1.50	1	05/08/2020 21:45	WG1472992
(S) Toluene-d8	*109*			*80.0-120*		*05/08/2020 21:45*	WG1472992
(S) 4-Bromofluorobenzene	*102*			*77.0-126*		*05/08/2020 21:45*	WG1472992
(S) 1,2-Dichloroethane-d4	*114*			*70.0-130*		*05/08/2020 21:45*	WG1472992

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Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U	J4	11.3	25.0	1	05/08/2020 22:04	WG1472992
Acrylonitrile	U		0.671	5.00	1	05/08/2020 22:04	WG1472992
Benzene	U		0.0941	0.500	1	05/08/2020 22:04	WG1472992
Bromobenzene	U		0.118	0.500	1	05/08/2020 22:04	WG1472992
Bromodichloromethane	U		0.136	0.500	1	05/08/2020 22:04	WG1472992
Bromochloromethane	U		0.128	0.500	1	05/08/2020 22:04	WG1472992
Bromoform	U		0.129	0.500	1	05/08/2020 22:04	WG1472992
Bromomethane	U		0.605	2.50	1	05/08/2020 22:04	WG1472992
n-Butylbenzene	U		0.157	0.500	1	05/08/2020 22:04	WG1472992
sec-Butylbenzene	U		0.125	0.500	1	05/08/2020 22:04	WG1472992
tert-Butylbenzene	U		0.127	0.500	1	05/08/2020 22:04	WG1472992
Carbon disulfide	U		0.0962	0.500	1	05/08/2020 22:04	WG1472992
Carbon tetrachloride	U		0.128	0.500	1	05/08/2020 22:04	WG1472992
Chlorobenzene	U		0.117	0.500	1	05/08/2020 22:04	WG1472992
Chlorodibromomethane	U		0.140	0.500	1	05/08/2020 22:04	WG1472992
Chloroethane	U		0.192	2.50	1	05/08/2020 22:04	WG1472992
Chloroform	U		0.111	0.500	1	05/08/2020 22:04	WG1472992
Chloromethane	U		0.960	1.25	1	05/08/2020 22:04	WG1472992
2-Chlorotoluene	U		0.106	0.500	1	05/08/2020 22:04	WG1472992
4-Chlorotoluene	U		0.114	0.500	1	05/08/2020 22:04	WG1472992
1,2-Dibromo-3-Chloropropane	U		0.276	2.50	1	05/08/2020 22:04	WG1472992
1,2-Dibromoethane	U		0.126	0.500	1	05/08/2020 22:04	WG1472992
Dibromomethane	U		0.122	0.500	1	05/08/2020 22:04	WG1472992
1,2-Dichlorobenzene	U		0.107	0.500	1	05/08/2020 22:04	WG1472992
1,3-Dichlorobenzene	U		0.299	0.500	1	05/08/2020 22:04	WG1472992
1,4-Dichlorobenzene	U		0.120	0.500	1	05/08/2020 22:04	WG1472992
Dichlorodifluoromethane	U		0.374	2.50	1	05/08/2020 22:04	WG1472992
1,1-Dichloroethane	U		0.100	0.500	1	05/08/2020 22:04	WG1472992
1,2-Dichloroethane	U		0.0819	0.500	1	05/08/2020 22:04	WG1472992
1,1-Dichloroethene	U		0.188	0.500	1	05/08/2020 22:04	WG1472992
cis-1,2-Dichloroethene	U		0.126	0.500	1	05/08/2020 22:04	WG1472992
trans-1,2-Dichloroethene	U		0.149	0.500	1	05/08/2020 22:04	WG1472992
1,2-Dichloropropane	U		0.149	0.500	1	05/08/2020 22:04	WG1472992
1,1-Dichloropropene	U		0.142	0.500	1	05/08/2020 22:04	WG1472992
1,3-Dichloropropane	U		0.109	1.00	1	05/08/2020 22:04	WG1472992
cis-1,3-Dichloropropene	U		0.111	0.500	1	05/08/2020 22:04	WG1472992
trans-1,3-Dichloropropene	U		0.118	0.500	1	05/08/2020 22:04	WG1472992
trans-1,4-Dichloro-2-butene	U		0.467	5.00	1	05/08/2020 22:04	WG1472992
2,2-Dichloropropane	U		0.161	0.500	1	05/08/2020 22:04	WG1472992
Di-isopropyl ether	U		0.105	0.500	1	05/08/2020 22:04	WG1472992
Ethylbenzene	U		0.137	0.500	1	05/08/2020 22:04	WG1472992
Hexachloro-1,3-butadiene	U		0.337	1.00	1	05/08/2020 22:04	WG1472992
2-Hexanone	U		0.787	5.00	1	05/08/2020 22:04	WG1472992
n-Hexane	U		0.749	5.00	1	05/08/2020 22:04	WG1472992
Iodomethane	U		0.554	5.00	1	05/08/2020 22:04	WG1472992
Isopropylbenzene	U		0.105	0.500	1	05/08/2020 22:04	WG1472992
p-Isopropyltoluene	U		0.120	0.500	1	05/08/2020 22:04	WG1472992
2-Butanone (MEK)	U		1.19	5.00	1	05/08/2020 22:04	WG1472992
Methylene Chloride	U		0.430	2.50	1	05/08/2020 22:04	WG1472992
4-Methyl-2-pentanone (MIBK)	U		0.478	5.00	1	05/08/2020 22:04	WG1472992
Methyl tert-butyl ether	U		0.101	0.500	1	05/08/2020 22:04	WG1472992
Naphthalene	U		0.174	2.50	1	05/08/2020 22:04	WG1472992
n-Propylbenzene	U		0.0993	0.500	1	05/08/2020 22:04	WG1472992
Styrene	U		0.118	0.500	1	05/08/2020 22:04	WG1472992
1,1,1,2-Tetrachloroethane	U		0.147	0.500	1	05/08/2020 22:04	WG1472992
1,1,2,2-Tetrachloroethane	U		0.133	0.500	1	05/08/2020 22:04	WG1472992

JC 5/27/2020

Volatile Organic Compounds (GC/MS) by Method 8260D

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
1,1,2-Trichlorotrifluoroethane	U		0.180	0.500	1	05/08/2020 22:04	WG1472992
Tetrachloroethene	U		0.300	0.500	1	05/08/2020 22:04	WG1472992
Toluene	U		0.278	0.500	1	05/08/2020 22:04	WG1472992
1,2,3-Trichlorobenzene	U		0.164	0.500	1	05/08/2020 22:04	WG1472992
1,2,4-Trichlorobenzene	U		0.481	1.00	1	05/08/2020 22:04	WG1472992
1,1,1-Trichloroethane	U		0.149	0.500	1	05/08/2020 22:04	WG1472992
1,1,2-Trichloroethane	U		0.158	0.500	1	05/08/2020 22:04	WG1472992
Trichloroethene	U		0.190	0.500	1	05/08/2020 22:04	WG1472992
Trichlorofluoromethane	U		0.160	2.50	1	05/08/2020 22:04	WG1472992
1,2,3-Trichloropropane	U		0.237	2.50	1	05/08/2020 22:04	WG1472992
1,2,4-Trimethylbenzene	U		0.322	0.500	1	05/08/2020 22:04	WG1472992
1,2,3-Trimethylbenzene	U		0.104	0.500	1	05/08/2020 22:04	WG1472992
1,3,5-Trimethylbenzene	U		0.104	0.500	1	05/08/2020 22:04	WG1472992
Vinyl acetate	U		0.692	5.00	1	05/08/2020 22:04	WG1472992
Vinyl chloride	U		0.234	0.500	1	05/08/2020 22:04	WG1472992
Xylenes, Total	U		0.174	1.50	1	05/08/2020 22:04	WG1472992
(S) Toluene-d8	*109*			*80.0-120*		*05/08/2020 22:04*	WG1472992
(S) 4-Bromofluorobenzene	*101*			*77.0-126*		*05/08/2020 22:04*	WG1472992
(S) 1,2-Dichloroethane-d4	*116*			*70.0-130*		*05/08/2020 22:04*	WG1472992

JC 5/27/2020

Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	276000		8450	20000	1	05/09/2020 20:26	WG1472978

Sample Narrative:

L1215869-03 WG1472978: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	23700		379	1000	1	05/07/2020 15:36	WG1471933
Nitrate	U		48.0	100	1	05/07/2020 15:36	WG1471933
Sulfate	15200		594	5000	1	05/07/2020 15:36	WG1471933

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	2450		102	1000	1	05/08/2020 20:45	WG1472819

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	8020		48.9	100	1	05/11/2020 22:23	WG1472549
Manganese	856		1.32	5.00	1	05/11/2020 22:23	WG1472549

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	48.8 U	~~B J~~	31.6	100	1	05/13/2020 17:16	WG1475231
(S) a,a,a-Trifluorotoluene(FID)	*96.3*			*78.0-120*		*05/13/2020 17:16*	WG1475231

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	26.4		0.287	0.678	1	05/12/2020 13:18	WG1474309
Ethane	U		0.296	1.29	1	05/12/2020 13:18	WG1474309
Ethene	U		0.422	1.27	1	05/12/2020 13:18	WG1474309

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U	~~J4~~	11.3	25.0	1	05/08/2020 22:23	WG1472992
Acrylonitrile	U		0.671	5.00	1	05/08/2020 22:23	WG1472992
Benzene	U		0.0941	0.500	1	05/08/2020 22:23	WG1472992
Bromobenzene	U		0.118	0.500	1	05/08/2020 22:23	WG1472992
Bromodichloromethane	U		0.136	0.500	1	05/08/2020 22:23	WG1472992
Bromochloromethane	U		0.128	0.500	1	05/08/2020 22:23	WG1472992
Bromoform	U		0.129	0.500	1	05/08/2020 22:23	WG1472992
Bromomethane	U		0.605	2.50	1	05/08/2020 22:23	WG1472992
n-Butylbenzene	U		0.157	0.500	1	05/08/2020 22:23	WG1472992
sec-Butylbenzene	U		0.125	0.500	1	05/08/2020 22:23	WG1472992
tert-Butylbenzene	U		0.127	0.500	1	05/08/2020 22:23	WG1472992
Carbon disulfide	U		0.0962	0.500	1	05/08/2020 22:23	WG1472992
Carbon tetrachloride	U		0.128	0.500	1	05/08/2020 22:23	WG1472992

JC 5/27/2020

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chlorobenzene	U		0.117	0.500	1	05/08/2020 22:23	WG1472992
Chlorodibromomethane	U		0.140	0.500	1	05/08/2020 22:23	WG1472992
Chloroethane	U		0.192	2.50	1	05/08/2020 22:23	WG1472992
Chloroform	U		0.111	0.500	1	05/08/2020 22:23	WG1472992
Chloromethane	U		0.960	1.25	1	05/08/2020 22:23	WG1472992
2-Chlorotoluene	U		0.106	0.500	1	05/08/2020 22:23	WG1472992
4-Chlorotoluene	U		0.114	0.500	1	05/08/2020 22:23	WG1472992
1,2-Dibromo-3-Chloropropane	U		0.276	2.50	1	05/08/2020 22:23	WG1472992
1,2-Dibromoethane	U		0.126	0.500	1	05/08/2020 22:23	WG1472992
Dibromomethane	U		0.122	0.500	1	05/08/2020 22:23	WG1472992
1,2-Dichlorobenzene	U		0.107	0.500	1	05/08/2020 22:23	WG1472992
1,3-Dichlorobenzene	U		0.299	0.500	1	05/08/2020 22:23	WG1472992
1,4-Dichlorobenzene	U		0.120	0.500	1	05/08/2020 22:23	WG1472992
Dichlorodifluoromethane	U		0.374	2.50	1	05/08/2020 22:23	WG1472992
1,1-Dichloroethane	U		0.100	0.500	1	05/08/2020 22:23	WG1472992
1,2-Dichloroethane	U		0.0819	0.500	1	05/08/2020 22:23	WG1472992
1,1-Dichloroethene	U		0.188	0.500	1	05/08/2020 22:23	WG1472992
cis-1,2-Dichloroethene	U		0.126	0.500	1	05/08/2020 22:23	WG1472992
trans-1,2-Dichloroethene	U		0.149	0.500	1	05/08/2020 22:23	WG1472992
1,2-Dichloropropane	U		0.149	0.500	1	05/08/2020 22:23	WG1472992
1,1-Dichloropropene	U		0.142	0.500	1	05/08/2020 22:23	WG1472992
1,3-Dichloropropane	U		0.109	1.00	1	05/08/2020 22:23	WG1472992
cis-1,3-Dichloropropene	U		0.111	0.500	1	05/08/2020 22:23	WG1472992
trans-1,3-Dichloropropene	U		0.118	0.500	1	05/08/2020 22:23	WG1472992
trans-1,4-Dichloro-2-butene	U		0.467	5.00	1	05/08/2020 22:23	WG1472992
2,2-Dichloropropane	U		0.161	0.500	1	05/08/2020 22:23	WG1472992
Di-isopropyl ether	U		0.105	0.500	1	05/08/2020 22:23	WG1472992
Ethylbenzene	U		0.137	0.500	1	05/08/2020 22:23	WG1472992
Hexachloro-1,3-butadiene	U		0.337	1.00	1	05/08/2020 22:23	WG1472992
2-Hexanone	U		0.787	5.00	1	05/08/2020 22:23	WG1472992
n-Hexane	U		0.749	5.00	1	05/08/2020 22:23	WG1472992
Iodomethane	U		0.554	5.00	1	05/08/2020 22:23	WG1472992
Isopropylbenzene	U		0.105	0.500	1	05/08/2020 22:23	WG1472992
p-Isopropyltoluene	U		0.120	0.500	1	05/08/2020 22:23	WG1472992
2-Butanone (MEK)	U		1.19	5.00	1	05/08/2020 22:23	WG1472992
Methylene Chloride	U		0.430	2.50	1	05/08/2020 22:23	WG1472992
4-Methyl-2-pentanone (MIBK)	U		0.478	5.00	1	05/08/2020 22:23	WG1472992
Methyl tert-butyl ether	U		0.101	0.500	1	05/08/2020 22:23	WG1472992
Naphthalene	U		0.174	2.50	1	05/08/2020 22:23	WG1472992
n-Propylbenzene	U		0.0993	0.500	1	05/08/2020 22:23	WG1472992
Styrene	U		0.118	0.500	1	05/08/2020 22:23	WG1472992
1,1,1,2-Tetrachloroethane	U		0.147	0.500	1	05/08/2020 22:23	WG1472992
1,1,2,2-Tetrachloroethane	U		0.133	0.500	1	05/08/2020 22:23	WG1472992
1,1,2-Trichlorotrifluoroethane	U		0.180	0.500	1	05/08/2020 22:23	WG1472992
Tetrachloroethene	U		0.300	0.500	1	05/08/2020 22:23	WG1472992
Toluene	U		0.278	0.500	1	05/08/2020 22:23	WG1472992
1,2,3-Trichlorobenzene	U		0.164	0.500	1	05/08/2020 22:23	WG1472992
1,2,4-Trichlorobenzene	U		0.481	1.00	1	05/08/2020 22:23	WG1472992
1,1,1-Trichloroethane	U		0.149	0.500	1	05/08/2020 22:23	WG1472992
1,1,2-Trichloroethane	U		0.158	0.500	1	05/08/2020 22:23	WG1472992
Trichloroethene	U		0.190	0.500	1	05/08/2020 22:23	WG1472992
Trichlorofluoromethane	U		0.160	2.50	1	05/08/2020 22:23	WG1472992
1,2,3-Trichloropropane	U		0.237	2.50	1	05/08/2020 22:23	WG1472992
1,2,4-Trimethylbenzene	U		0.322	0.500	1	05/08/2020 22:23	WG1472992
1,2,3-Trimethylbenzene	U		0.104	0.500	1	05/08/2020 22:23	WG1472992
1,3,5-Trimethylbenzene	U		0.104	0.500	1	05/08/2020 22:23	WG1472992

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Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Vinyl acetate	U		0.692	5.00	1	05/08/2020 22:23	WG1472992
Vinyl chloride	U		0.234	0.500	1	05/08/2020 22:23	WG1472992
Xylenes, Total	U		0.174	1.50	1	05/08/2020 22:23	WG1472992
(S) Toluene-d8	*108*			*80.0-120*		*05/08/2020 22:23*	WG1472992
(S) 4-Bromofluorobenzene	*102*			*77.0-126*		*05/08/2020 22:23*	WG1472992
(S) 1,2-Dichloroethane-d4	*115*			*70.0-130*		*05/08/2020 22:23*	WG1472992

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Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	272000		8450	20000	1	05/09/2020 20:43	WG1472978

Sample Narrative:

L1215869-04 WG1472978: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	23900		379	1000	1	05/07/2020 16:10	WG1471933
Nitrate	U		48.0	100	1	05/07/2020 16:10	WG1471933
Sulfate	15300		594	5000	1	05/07/2020 16:10	WG1471933

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	2520		102	1000	1	05/08/2020 20:58	WG1472819

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	9990		48.9	100	1	05/11/2020 22:26	WG1472549
Manganese	904		1.32	5.00	1	05/11/2020 22:26	WG1472549

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	32.3 U	~~B J~~	31.6	100	1	05/13/2020 17:37	WG1475231
(S) a,a,a-Trifluorotoluene(FID)	*96.7*			*78.0-120*		*05/13/2020 17:37*	WG1475231

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	27.3		0.287	0.678	1	05/12/2020 13:21	WG1474309
Ethane	U		0.296	1.29	1	05/12/2020 13:21	WG1474309
Ethene	U		0.422	1.27	1	05/12/2020 13:21	WG1474309

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U	~~J4~~	11.3	25.0	1	05/08/2020 22:42	WG1472992
Acrylonitrile	U		0.671	5.00	1	05/08/2020 22:42	WG1472992
Benzene	U		0.0941	0.500	1	05/08/2020 22:42	WG1472992
Bromobenzene	U		0.118	0.500	1	05/08/2020 22:42	WG1472992
Bromodichloromethane	U		0.136	0.500	1	05/08/2020 22:42	WG1472992
Bromochloromethane	U		0.128	0.500	1	05/08/2020 22:42	WG1472992
Bromoform	U		0.129	0.500	1	05/08/2020 22:42	WG1472992
Bromomethane	U		0.605	2.50	1	05/08/2020 22:42	WG1472992
n-Butylbenzene	U		0.157	0.500	1	05/08/2020 22:42	WG1472992
sec-Butylbenzene	U		0.125	0.500	1	05/08/2020 22:42	WG1472992
tert-Butylbenzene	U		0.127	0.500	1	05/08/2020 22:42	WG1472992
Carbon disulfide	U		0.0962	0.500	1	05/08/2020 22:42	WG1472992
Carbon tetrachloride	U		0.128	0.500	1	05/08/2020 22:42	WG1472992

JC 5/27/2020

Volatile Organic Compounds (GC/MS) by Method 8260D

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Chlorobenzene	U		0.117	0.500	1	05/08/2020 22:42	WG1472992
Chlorodibromomethane	U		0.140	0.500	1	05/08/2020 22:42	WG1472992
Chloroethane	U		0.192	2.50	1	05/08/2020 22:42	WG1472992
Chloroform	U		0.111	0.500	1	05/08/2020 22:42	WG1472992
Chloromethane	U		0.960	1.25	1	05/08/2020 22:42	WG1472992
2-Chlorotoluene	U		0.106	0.500	1	05/08/2020 22:42	WG1472992
4-Chlorotoluene	U		0.114	0.500	1	05/08/2020 22:42	WG1472992
1,2-Dibromo-3-Chloropropane	U		0.276	2.50	1	05/08/2020 22:42	WG1472992
1,2-Dibromoethane	U		0.126	0.500	1	05/08/2020 22:42	WG1472992
Dibromomethane	U		0.122	0.500	1	05/08/2020 22:42	WG1472992
1,2-Dichlorobenzene	U		0.107	0.500	1	05/08/2020 22:42	WG1472992
1,3-Dichlorobenzene	U		0.299	0.500	1	05/08/2020 22:42	WG1472992
1,4-Dichlorobenzene	U		0.120	0.500	1	05/08/2020 22:42	WG1472992
Dichlorodifluoromethane	U		0.374	2.50	1	05/08/2020 22:42	WG1472992
1,1-Dichloroethane	U		0.100	0.500	1	05/08/2020 22:42	WG1472992
1,2-Dichloroethane	U		0.0819	0.500	1	05/08/2020 22:42	WG1472992
1,1-Dichloroethene	U		0.188	0.500	1	05/08/2020 22:42	WG1472992
cis-1,2-Dichloroethene	U		0.126	0.500	1	05/08/2020 22:42	WG1472992
trans-1,2-Dichloroethene	U		0.149	0.500	1	05/08/2020 22:42	WG1472992
1,2-Dichloropropane	U		0.149	0.500	1	05/08/2020 22:42	WG1472992
1,1-Dichloropropene	U		0.142	0.500	1	05/08/2020 22:42	WG1472992
1,3-Dichloropropane	U		0.109	1.00	1	05/08/2020 22:42	WG1472992
cis-1,3-Dichloropropene	U		0.111	0.500	1	05/08/2020 22:42	WG1472992
trans-1,3-Dichloropropene	U		0.118	0.500	1	05/08/2020 22:42	WG1472992
trans-1,4-Dichloro-2-butene	U		0.467	5.00	1	05/08/2020 22:42	WG1472992
2,2-Dichloropropane	U		0.161	0.500	1	05/08/2020 22:42	WG1472992
Di-isopropyl ether	U		0.105	0.500	1	05/08/2020 22:42	WG1472992
Ethylbenzene	U		0.137	0.500	1	05/08/2020 22:42	WG1472992
Hexachloro-1,3-butadiene	U		0.337	1.00	1	05/08/2020 22:42	WG1472992
2-Hexanone	U		0.787	5.00	1	05/08/2020 22:42	WG1472992
n-Hexane	U		0.749	5.00	1	05/08/2020 22:42	WG1472992
Iodomethane	U		0.554	5.00	1	05/08/2020 22:42	WG1472992
Isopropylbenzene	U		0.105	0.500	1	05/08/2020 22:42	WG1472992
p-Isopropyltoluene	U		0.120	0.500	1	05/08/2020 22:42	WG1472992
2-Butanone (MEK)	U		1.19	5.00	1	05/08/2020 22:42	WG1472992
Methylene Chloride	U		0.430	2.50	1	05/08/2020 22:42	WG1472992
4-Methyl-2-pentanone (MIBK)	U		0.478	5.00	1	05/08/2020 22:42	WG1472992
Methyl tert-butyl ether	U		0.101	0.500	1	05/08/2020 22:42	WG1472992
Naphthalene	U		0.174	2.50	1	05/08/2020 22:42	WG1472992
n-Propylbenzene	U		0.0993	0.500	1	05/08/2020 22:42	WG1472992
Styrene	U		0.118	0.500	1	05/08/2020 22:42	WG1472992
1,1,1,2-Tetrachloroethane	U		0.147	0.500	1	05/08/2020 22:42	WG1472992
1,1,2,2-Tetrachloroethane	U		0.133	0.500	1	05/08/2020 22:42	WG1472992
1,1,2-Trichlorotrifluoroethane	U		0.180	0.500	1	05/08/2020 22:42	WG1472992
Tetrachloroethene	U		0.300	0.500	1	05/08/2020 22:42	WG1472992
Toluene	U		0.278	0.500	1	05/08/2020 22:42	WG1472992
1,2,3-Trichlorobenzene	U		0.164	0.500	1	05/08/2020 22:42	WG1472992
1,2,4-Trichlorobenzene	U		0.481	1.00	1	05/08/2020 22:42	WG1472992
1,1,1-Trichloroethane	U		0.149	0.500	1	05/08/2020 22:42	WG1472992
1,1,2-Trichloroethane	U		0.158	0.500	1	05/08/2020 22:42	WG1472992
Trichloroethene	U		0.190	0.500	1	05/08/2020 22:42	WG1472992
Trichlorofluoromethane	U		0.160	2.50	1	05/08/2020 22:42	WG1472992
1,2,3-Trichloropropane	U		0.237	2.50	1	05/08/2020 22:42	WG1472992
1,2,4-Trimethylbenzene	U		0.322	0.500	1	05/08/2020 22:42	WG1472992
1,2,3-Trimethylbenzene	U		0.104	0.500	1	05/08/2020 22:42	WG1472992
1,3,5-Trimethylbenzene	U		0.104	0.500	1	05/08/2020 22:42	WG1472992

JC 5/27/2020

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Vinyl acetate	U		0.692	5.00	1	05/08/2020 22:42	WG1472992
Vinyl chloride	U		0.234	0.500	1	05/08/2020 22:42	WG1472992
Xylenes, Total	U		0.174	1.50	1	05/08/2020 22:42	WG1472992
(S) Toluene-d8	*111*			*80.0-120*		*05/08/2020 22:42*	WG1472992
(S) 4-Bromofluorobenzene	*102*			*77.0-126*		*05/08/2020 22:42*	WG1472992
(S) 1,2-Dichloroethane-d4	*114*			*70.0-130*		*05/08/2020 22:42*	WG1472992

JC 5/27/2020

Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	313000		8450	20000	1	05/09/2020 20:50	WG1472978

Sample Narrative:

L1215869-05 WG1472978: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	35600		379	1000	1	05/07/2020 17:35	WG1471933
Nitrate	U		48.0	100	1	05/07/2020 17:35	WG1471933
Sulfate	92700		594	5000	1	05/07/2020 17:35	WG1471933

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	2220		102	1000	1	05/08/2020 21:15	WG1472819

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	77900		48.9	100	1	05/11/2020 22:30	WG1472549
Manganese	1040		1.32	5.00	1	05/11/2020 22:30	WG1472549

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	160		0.287	0.678	1	05/12/2020 13:25	WG1474309
Ethane	13.6		0.296	1.29	1	05/12/2020 13:25	WG1474309
Ethene	U		0.422	1.27	1	05/12/2020 13:25	WG1474309

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U		11.3	25.0	1	05/10/2020 15:32	WG1473379
Acrylonitrile	U		0.671	5.00	1	05/10/2020 15:32	WG1473379
Benzene	U		0.0941	0.500	1	05/10/2020 15:32	WG1473379
Bromobenzene	U		0.118	0.500	1	05/10/2020 15:32	WG1473379
Bromodichloromethane	U		0.136	0.500	1	05/10/2020 15:32	WG1473379
Bromochloromethane	U		0.128	0.500	1	05/10/2020 15:32	WG1473379
Bromoform	U		0.129	0.500	1	05/10/2020 15:32	WG1473379
Bromomethane	U		0.605	2.50	1	05/10/2020 15:32	WG1473379
n-Butylbenzene	U		0.157	0.500	1	05/10/2020 15:32	WG1473379
sec-Butylbenzene	U		0.125	0.500	1	05/10/2020 15:32	WG1473379
tert-Butylbenzene	U		0.127	0.500	1	05/10/2020 15:32	WG1473379
Carbon disulfide	U		0.0962	0.500	1	05/10/2020 15:32	WG1473379
Carbon tetrachloride	U		0.128	0.500	1	05/10/2020 15:32	WG1473379
Chlorobenzene	U		0.117	0.500	1	05/10/2020 15:32	WG1473379
Chlorodibromomethane	U		0.140	0.500	1	05/10/2020 15:32	WG1473379
Chloroethane	U		0.192	2.50	1	05/10/2020 15:32	WG1473379
Chloroform	U		0.111	0.500	1	05/10/2020 15:32	WG1473379
Chloromethane	U		0.960	1.25	1	05/10/2020 15:32	WG1473379
2-Chlorotoluene	U		0.106	0.500	1	05/10/2020 15:32	WG1473379
4-Chlorotoluene	U		0.114	0.500	1	05/10/2020 15:32	WG1473379

JC 5/27/2020

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,2-Dibromo-3-Chloropropane	U		0.276	2.50	1	05/10/2020 15:32	WG1473379
1,2-Dibromoethane	U		0.126	0.500	1	05/10/2020 15:32	WG1473379
Dibromomethane	U		0.122	0.500	1	05/10/2020 15:32	WG1473379
1,2-Dichlorobenzene	U		0.107	0.500	1	05/10/2020 15:32	WG1473379
1,3-Dichlorobenzene	U		0.299	0.500	1	05/10/2020 15:32	WG1473379
1,4-Dichlorobenzene	U		0.120	0.500	1	05/10/2020 15:32	WG1473379
Dichlorodifluoromethane	U		0.374	2.50	1	05/10/2020 15:32	WG1473379
1,1-Dichloroethane	U		0.100	0.500	1	05/10/2020 15:32	WG1473379
1,2-Dichloroethane	U		0.0819	0.500	1	05/10/2020 15:32	WG1473379
1,1-Dichloroethene	0.589		0.188	0.500	1	05/10/2020 15:32	WG1473379
cis-1,2-Dichloroethene	157		0.126	0.500	1	05/10/2020 15:32	WG1473379
trans-1,2-Dichloroethene	0.433	J	0.149	0.500	1	05/10/2020 15:32	WG1473379
1,2-Dichloropropane	U		0.149	0.500	1	05/10/2020 15:32	WG1473379
1,1-Dichloropropene	U		0.142	0.500	1	05/10/2020 15:32	WG1473379
1,3-Dichloropropane	U		0.109	1.00	1	05/10/2020 15:32	WG1473379
cis-1,3-Dichloropropene	U		0.111	0.500	1	05/10/2020 15:32	WG1473379
trans-1,3-Dichloropropene	U		0.118	0.500	1	05/10/2020 15:32	WG1473379
trans-1,4-Dichloro-2-butene	U		0.467	5.00	1	05/10/2020 15:32	WG1473379
2,2-Dichloropropane	U		0.161	0.500	1	05/10/2020 15:32	WG1473379
Di-isopropyl ether	U		0.105	0.500	1	05/10/2020 15:32	WG1473379
Ethylbenzene	U		0.137	0.500	1	05/10/2020 15:32	WG1473379
Hexachloro-1,3-butadiene	U		0.337	1.00	1	05/10/2020 15:32	WG1473379
2-Hexanone	U		0.787	5.00	1	05/10/2020 15:32	WG1473379
n-Hexane	U		0.749	5.00	1	05/10/2020 15:32	WG1473379
Iodomethane	U		0.554	5.00	1	05/10/2020 15:32	WG1473379
Isopropylbenzene	U		0.105	0.500	1	05/10/2020 15:32	WG1473379
p-Isopropyltoluene	U		0.120	0.500	1	05/10/2020 15:32	WG1473379
2-Butanone (MEK)	U		1.19	5.00	1	05/10/2020 15:32	WG1473379
Methylene Chloride	U		0.430	2.50	1	05/10/2020 15:32	WG1473379
4-Methyl-2-pentanone (MIBK)	U		0.478	5.00	1	05/10/2020 15:32	WG1473379
Methyl tert-butyl ether	U		0.101	0.500	1	05/10/2020 15:32	WG1473379
Naphthalene	U UJ	J0	0.174	2.50	1	05/10/2020 15:32	WG1473379
n-Propylbenzene	U		0.0993	0.500	1	05/10/2020 15:32	WG1473379
Styrene	U		0.118	0.500	1	05/10/2020 15:32	WG1473379
1,1,1,2-Tetrachloroethane	U		0.147	0.500	1	05/10/2020 15:32	WG1473379
1,1,2,2-Tetrachloroethane	U		0.133	0.500	1	05/10/2020 15:32	WG1473379
1,1,2-Trichlorotrifluoroethane	U		0.180	0.500	1	05/10/2020 15:32	WG1473379
Tetrachloroethene	34.6		0.300	0.500	1	05/10/2020 15:32	WG1473379
Toluene	U		0.278	0.500	1	05/10/2020 15:32	WG1473379
1,2,3-Trichlorobenzene	U		0.164	0.500	1	05/10/2020 15:32	WG1473379
1,2,4-Trichlorobenzene	U		0.481	1.00	1	05/10/2020 15:32	WG1473379
1,1,1-Trichloroethane	U		0.149	0.500	1	05/10/2020 15:32	WG1473379
1,1,2-Trichloroethane	U		0.158	0.500	1	05/10/2020 15:32	WG1473379
Trichloroethene	61.9		0.190	0.500	1	05/10/2020 15:32	WG1473379
Trichlorofluoromethane	U		0.160	2.50	1	05/10/2020 15:32	WG1473379
1,2,3-Trichloropropane	U		0.237	2.50	1	05/10/2020 15:32	WG1473379
1,2,4-Trimethylbenzene	U		0.322	0.500	1	05/10/2020 15:32	WG1473379
1,2,3-Trimethylbenzene	U		0.104	0.500	1	05/10/2020 15:32	WG1473379
1,3,5-Trimethylbenzene	U		0.104	0.500	1	05/10/2020 15:32	WG1473379
Vinyl acetate	U		0.692	5.00	1	05/10/2020 15:32	WG1473379
Vinyl chloride	14.2		0.234	0.500	1	05/10/2020 15:32	WG1473379
Xylenes, Total	U		0.174	1.50	1	05/10/2020 15:32	WG1473379
(S) Toluene-d8	*107*			*80.0-120*		*05/10/2020 15:32*	WG1473379
(S) 4-Bromofluorobenzene	*104*			*77.0-126*		*05/10/2020 15:32*	WG1473379
(S) 1,2-Dichloroethane-d4	*116*			*70.0-130*		*05/10/2020 15:32*	WG1473379

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Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	U		8450	20000	1	05/11/2020 20:09	WG1472980

Sample Narrative:

L1215869-06 WG1472980: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	U		379	1000	1	05/07/2020 17:52	WG1471933
Nitrate	52.5	J	48.0	100	1	05/07/2020 17:52	WG1471933
Sulfate	U		594	5000	1	05/07/2020 17:52	WG1471933

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	257	B J	102	1000	1	05/08/2020 22:47	WG1472819

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	77.1	J	48.9	100	1	05/11/2020 22:33	WG1472549
Manganese	2.57	J	1.32	5.00	1	05/11/2020 22:33	WG1472549

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	44.3	B J	31.6	100	1	05/13/2020 18:29	WG1475231
(S) a,a,a-Trifluorotoluene(FID)	*96.8*			*78.0-120*		*05/13/2020 18:29*	WG1475231

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	U		0.287	0.678	1	05/12/2020 13:29	WG1474309
Ethane	U		0.296	1.29	1	05/12/2020 13:29	WG1474309
Ethene	U		0.422	1.27	1	05/12/2020 13:29	WG1474309

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U		11.3	25.0	1	05/08/2020 17:46	WG1472732
Acrylonitrile	U		0.671	5.00	1	05/08/2020 17:46	WG1472732
Benzene	U		0.0941	0.500	1	05/08/2020 17:46	WG1472732
Bromobenzene	U		0.118	0.500	1	05/08/2020 17:46	WG1472732
Bromodichloromethane	U		0.136	0.500	1	05/08/2020 17:46	WG1472732
Bromochloromethane	U		0.128	0.500	1	05/08/2020 17:46	WG1472732
Bromoform	U		0.129	0.500	1	05/08/2020 17:46	WG1472732
Bromomethane	U		0.605	2.50	1	05/08/2020 17:46	WG1472732
n-Butylbenzene	U		0.157	0.500	1	05/08/2020 17:46	WG1472732
sec-Butylbenzene	U		0.125	0.500	1	05/08/2020 17:46	WG1472732
tert-Butylbenzene	U		0.127	0.500	1	05/08/2020 17:46	WG1472732
Carbon disulfide	U		0.0962	0.500	1	05/08/2020 17:46	WG1472732
Carbon tetrachloride	U		0.128	0.500	1	05/08/2020 17:46	WG1472732

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1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chlorobenzene	U		0.117	0.500	1	05/08/2020 17:46	WG1472732
Chlorodibromomethane	U		0.140	0.500	1	05/08/2020 17:46	WG1472732
Chloroethane	U		0.192	2.50	1	05/08/2020 17:46	WG1472732
Chloroform	U		0.111	0.500	1	05/08/2020 17:46	WG1472732
Chloromethane	U		0.960	1.25	1	05/08/2020 17:46	WG1472732
2-Chlorotoluene	U		0.106	0.500	1	05/08/2020 17:46	WG1472732
4-Chlorotoluene	U		0.114	0.500	1	05/08/2020 17:46	WG1472732
1,2-Dibromo-3-Chloropropane	U UJ	J0	0.276	2.50	1	05/08/2020 17:46	WG1472732
1,2-Dibromoethane	U		0.126	0.500	1	05/08/2020 17:46	WG1472732
Dibromomethane	U		0.122	0.500	1	05/08/2020 17:46	WG1472732
1,2-Dichlorobenzene	U		0.107	0.500	1	05/08/2020 17:46	WG1472732
1,3-Dichlorobenzene	U		0.299	0.500	1	05/08/2020 17:46	WG1472732
1,4-Dichlorobenzene	U		0.120	0.500	1	05/08/2020 17:46	WG1472732
Dichlorodifluoromethane	U		0.374	2.50	1	05/08/2020 17:46	WG1472732
1,1-Dichloroethane	U		0.100	0.500	1	05/08/2020 17:46	WG1472732
1,2-Dichloroethane	U		0.0819	0.500	1	05/08/2020 17:46	WG1472732
1,1-Dichloroethene	U		0.188	0.500	1	05/08/2020 17:46	WG1472732
cis-1,2-Dichloroethene	U		0.126	0.500	1	05/08/2020 17:46	WG1472732
trans-1,2-Dichloroethene	U		0.149	0.500	1	05/08/2020 17:46	WG1472732
1,2-Dichloropropane	U		0.149	0.500	1	05/08/2020 17:46	WG1472732
1,1-Dichloropropene	U		0.142	0.500	1	05/08/2020 17:46	WG1472732
1,3-Dichloropropane	U		0.109	1.00	1	05/08/2020 17:46	WG1472732
cis-1,3-Dichloropropene	U		0.111	0.500	1	05/08/2020 17:46	WG1472732
trans-1,3-Dichloropropene	U		0.118	0.500	1	05/08/2020 17:46	WG1472732
trans-1,4-Dichloro-2-butene	U UJ	J0 J3	0.467	5.00	1	05/08/2020 17:46	WG1472732
2,2-Dichloropropane	U		0.161	0.500	1	05/08/2020 17:46	WG1472732
Di-isopropyl ether	U		0.105	0.500	1	05/08/2020 17:46	WG1472732
Ethylbenzene	U		0.137	0.500	1	05/08/2020 17:46	WG1472732
Hexachloro-1,3-butadiene	U		0.337	1.00	1	05/08/2020 17:46	WG1472732
2-Hexanone	U		0.787	5.00	1	05/08/2020 17:46	WG1472732
n-Hexane	U		0.749	5.00	1	05/08/2020 17:46	WG1472732
Iodomethane	U		0.554	5.00	1	05/08/2020 17:46	WG1472732
Isopropylbenzene	U		0.105	0.500	1	05/08/2020 17:46	WG1472732
p-Isopropyltoluene	U		0.120	0.500	1	05/08/2020 17:46	WG1472732
2-Butanone (MEK)	U		1.19	5.00	1	05/08/2020 17:46	WG1472732
Methylene Chloride	U		0.430	2.50	1	05/08/2020 17:46	WG1472732
4-Methyl-2-pentanone (MIBK)	U		0.478	5.00	1	05/08/2020 17:46	WG1472732
Methyl tert-butyl ether	U		0.101	0.500	1	05/08/2020 17:46	WG1472732
Naphthalene	U UJ	J0	0.174	2.50	1	05/08/2020 17:46	WG1472732
n-Propylbenzene	U		0.0993	0.500	1	05/08/2020 17:46	WG1472732
Styrene	U		0.118	0.500	1	05/08/2020 17:46	WG1472732
1,1,1,2-Tetrachloroethane	U		0.147	0.500	1	05/08/2020 17:46	WG1472732
1,1,2,2-Tetrachloroethane	U		0.133	0.500	1	05/08/2020 17:46	WG1472732
1,1,2-Trichlorotrifluoroethane	U		0.180	0.500	1	05/08/2020 17:46	WG1472732
Tetrachloroethene	U		0.300	0.500	1	05/08/2020 17:46	WG1472732
Toluene	U		0.278	0.500	1	05/08/2020 17:46	WG1472732
1,2,3-Trichlorobenzene	U		0.164	0.500	1	05/08/2020 17:46	WG1472732
1,2,4-Trichlorobenzene	U		0.481	1.00	1	05/08/2020 17:46	WG1472732
1,1,1-Trichloroethane	U		0.149	0.500	1	05/08/2020 17:46	WG1472732
1,1,2-Trichloroethane	U		0.158	0.500	1	05/08/2020 17:46	WG1472732
Trichloroethene	U		0.190	0.500	1	05/08/2020 17:46	WG1472732
Trichlorofluoromethane	U		0.160	2.50	1	05/08/2020 17:46	WG1472732
1,2,3-Trichloropropane	U		0.237	2.50	1	05/08/2020 17:46	WG1472732
1,2,4-Trimethylbenzene	U		0.322	0.500	1	05/08/2020 17:46	WG1472732
1,2,3-Trimethylbenzene	U		0.104	0.500	1	05/08/2020 17:46	WG1472732
1,3,5-Trimethylbenzene	U		0.104	0.500	1	05/08/2020 17:46	WG1472732

JC 5/27/2020

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Vinyl acetate	U		0.692	5.00	1	05/08/2020 17:46	WG1472732
Vinyl chloride	U		0.234	0.500	1	05/08/2020 17:46	WG1472732
Xylenes, Total	U		0.174	1.50	1	05/08/2020 17:46	WG1472732
(S) Toluene-d8	*94.2*			*80.0-120*		*05/08/2020 17:46*	WG1472732
(S) 4-Bromofluorobenzene	*92.2*			*77.0-126*		*05/08/2020 17:46*	WG1472732
(S) 1,2-Dichloroethane-d4	*92.1*			*70.0-130*		*05/08/2020 17:46*	WG1472732

JC 5/27/2020

MW-303-050720
Collected date/time: 05/07/20 10:00

SAMPLE RESULTS - 01

L1216431

Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	156000		8450	20000	1	05/13/2020 13:38	WG1473769

Sample Narrative:

L1216431-01 WG1473769: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	14200		379	1000	1	05/08/2020 13:29	WG1472616
Nitrate	U		48.0	100	1	05/08/2020 13:29	WG1472616
Sulfate	43500		594	5000	1	05/08/2020 13:29	WG1472616

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	1660	~~B~~	102	1000	1	05/13/2020 00:29	WG1474460

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	4490		48.9	100	1	05/14/2020 00:24	WG1474279
Manganese	371		1.32	5.00	1	05/14/2020 00:24	WG1474279

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	41.5	U ~~B J~~	31.6	100	1	05/16/2020 11:45	WG1477085
(S) a,a,a-Trifluorotoluene(FID)	*96.5*			*78.0-120*		*05/16/2020 11:45*	WG1477085

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	177		0.287	0.678	1	05/13/2020 11:03	WG1474312
Ethane	U		0.296	1.29	1	05/13/2020 11:03	WG1474312
Ethene	U		0.422	1.27	1	05/13/2020 11:03	WG1474312

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U		11.3	25.0	1	05/11/2020 03:22	WG1473710
Acrylonitrile	U		0.671	5.00	1	05/11/2020 03:22	WG1473710
Benzene	U		0.0941	0.500	1	05/11/2020 03:22	WG1473710
Bromobenzene	U	~~J4~~	0.118	0.500	1	05/11/2020 03:22	WG1473710
Bromodichloromethane	U		0.136	0.500	1	05/11/2020 03:22	WG1473710
Bromochloromethane	U		0.128	0.500	1	05/11/2020 03:22	WG1473710
Bromoform	U		0.129	0.500	1	05/11/2020 03:22	WG1473710
Bromomethane	U	UJ J0	0.605	2.50	1	05/11/2020 03:22	WG1473710
n-Butylbenzene	U		0.157	0.500	1	05/11/2020 03:22	WG1473710
sec-Butylbenzene	U	~~J4~~	0.125	0.500	1	05/11/2020 03:22	WG1473710
tert-Butylbenzene	U	~~J4~~	0.127	0.500	1	05/11/2020 03:22	WG1473710
Carbon disulfide	0.385	J	0.0962	0.500	1	05/11/2020 03:22	WG1473710
Carbon tetrachloride	U		0.128	0.500	1	05/11/2020 03:22	WG1473710

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Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chlorobenzene	U		0.117	0.500	1	05/11/2020 03:22	WG1473710
Chlorodibromomethane	U		0.140	0.500	1	05/11/2020 03:22	WG1473710
Chloroethane	U	UJ J0	0.192	2.50	1	05/11/2020 03:22	WG1473710
Chloroform	U		0.111	0.500	1	05/11/2020 03:22	WG1473710
Chloromethane	U		0.960	1.25	1	05/11/2020 03:22	WG1473710
2-Chlorotoluene	U	~~J4~~	0.106	0.500	1	05/11/2020 03:22	WG1473710
4-Chlorotoluene	U	~~J4~~	0.114	0.500	1	05/11/2020 03:22	WG1473710
1,2-Dibromo-3-Chloropropane	U		0.276	2.50	1	05/11/2020 03:22	WG1473710
1,2-Dibromoethane	U		0.126	0.500	1	05/11/2020 03:22	WG1473710
Dibromomethane	U		0.122	0.500	1	05/11/2020 03:22	WG1473710
1,2-Dichlorobenzene	U		0.107	0.500	1	05/11/2020 03:22	WG1473710
1,3-Dichlorobenzene	U		0.299	0.500	1	05/11/2020 03:22	WG1473710
1,4-Dichlorobenzene	U		0.120	0.500	1	05/11/2020 03:22	WG1473710
Dichlorodifluoromethane	U		0.374	2.50	1	05/11/2020 03:22	WG1473710
1,1-Dichloroethane	U		0.100	0.500	1	05/11/2020 03:22	WG1473710
1,2-Dichloroethane	U		0.0819	0.500	1	05/11/2020 03:22	WG1473710
1,1-Dichloroethene	U		0.188	0.500	1	05/11/2020 03:22	WG1473710
cis-1,2-Dichloroethene	U		0.126	0.500	1	05/11/2020 03:22	WG1473710
trans-1,2-Dichloroethene	U		0.149	0.500	1	05/11/2020 03:22	WG1473710
1,2-Dichloropropane	U		0.149	0.500	1	05/11/2020 03:22	WG1473710
1,1-Dichloropropene	U		0.142	0.500	1	05/11/2020 03:22	WG1473710
1,3-Dichloropropane	U		0.109	1.00	1	05/11/2020 03:22	WG1473710
cis-1,3-Dichloropropene	U		0.111	0.500	1	05/11/2020 03:22	WG1473710
trans-1,3-Dichloropropene	U		0.118	0.500	1	05/11/2020 03:22	WG1473710
trans-1,4-Dichloro-2-butene	U		0.467	5.00	1	05/11/2020 03:22	WG1473710
2,2-Dichloropropane	U		0.161	0.500	1	05/11/2020 03:22	WG1473710
Di-isopropyl ether	U		0.105	0.500	1	05/11/2020 03:22	WG1473710
Ethylbenzene	U		0.137	0.500	1	05/11/2020 03:22	WG1473710
Hexachloro-1,3-butadiene	U		0.337	1.00	1	05/11/2020 03:22	WG1473710
2-Hexanone	U		0.787	5.00	1	05/11/2020 03:22	WG1473710
n-Hexane	U		0.749	5.00	1	05/11/2020 03:22	WG1473710
Iodomethane	U		0.554	5.00	1	05/11/2020 03:22	WG1473710
Isopropylbenzene	U		0.105	0.500	1	05/11/2020 03:22	WG1473710
p-Isopropyltoluene	U		0.120	0.500	1	05/11/2020 03:22	WG1473710
2-Butanone (MEK)	U		1.19	5.00	1	05/11/2020 03:22	WG1473710
Methylene Chloride	U		0.430	2.50	1	05/11/2020 03:22	WG1473710
4-Methyl-2-pentanone (MIBK)	U		0.478	5.00	1	05/11/2020 03:22	WG1473710
Methyl tert-butyl ether	U		0.101	0.500	1	05/11/2020 03:22	WG1473710
Naphthalene	U	UJ J0	0.174	2.50	1	05/11/2020 03:22	WG1473710
n-Propylbenzene	U	~~J4~~	0.0993	0.500	1	05/11/2020 03:22	WG1473710
Styrene	U		0.118	0.500	1	05/11/2020 03:22	WG1473710
1,1,1,2-Tetrachloroethane	U		0.147	0.500	1	05/11/2020 03:22	WG1473710
1,1,2,2-Tetrachloroethane	U	~~J4~~	0.133	0.500	1	05/11/2020 03:22	WG1473710
1,1,2-Trichlorotrifluoroethane	U		0.180	0.500	1	05/11/2020 03:22	WG1473710
Tetrachloroethene	U		0.300	0.500	1	05/11/2020 03:22	WG1473710
Toluene	U		0.278	0.500	1	05/11/2020 03:22	WG1473710
1,2,3-Trichlorobenzene	U		0.164	0.500	1	05/11/2020 03:22	WG1473710
1,2,4-Trichlorobenzene	U		0.481	1.00	1	05/11/2020 03:22	WG1473710
1,1,1-Trichloroethane	U		0.149	0.500	1	05/11/2020 03:22	WG1473710
1,1,2-Trichloroethane	U		0.158	0.500	1	05/11/2020 03:22	WG1473710
Trichloroethene	U		0.190	0.500	1	05/11/2020 03:22	WG1473710
Trichlorofluoromethane	U		0.160	2.50	1	05/11/2020 03:22	WG1473710
1,2,3-Trichloropropane	U	~~J4~~	0.237	2.50	1	05/11/2020 03:22	WG1473710
1,2,4-Trimethylbenzene	U	~~J4~~	0.322	0.500	1	05/11/2020 03:22	WG1473710
1,2,3-Trimethylbenzene	U		0.104	0.500	1	05/11/2020 03:22	WG1473710
1,3,5-Trimethylbenzene	U	~~J4~~	0.104	0.500	1	05/11/2020 03:22	WG1473710

JC 5/27/2020

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Vinyl acetate	U		0.692	5.00	1	05/11/2020 03:22	WG1473710
Vinyl chloride	U		0.234	0.500	1	05/11/2020 03:22	WG1473710
Xylenes, Total	U		0.174	1.50	1	05/11/2020 03:22	WG1473710
(S) Toluene-d8	*106*			*80.0-120*		*05/11/2020 03:22*	WG1473710
(S) 4-Bromofluorobenzene	*106*			*77.0-126*		*05/11/2020 03:22*	WG1473710
(S) 1,2-Dichloroethane-d4	*110*			*70.0-130*		*05/11/2020 03:22*	WG1473710

JC 5/27/2020

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Wet Chemistry by Method 2320 B-2011

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Alkalinity	356000		8450	20000	1	05/13/2020 13:49	WG1473769

Sample Narrative:

L1216431-02 WG1473769: Endpoint pH 4.5

Wet Chemistry by Method 9056A

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Chloride	22300		379	1000	1	05/08/2020 13:40	WG1472616
Nitrate	U		48.0	100	1	05/08/2020 13:40	WG1472616
Sulfate	20800		594	5000	1	05/08/2020 13:40	WG1472616

Wet Chemistry by Method 9060A

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
TOC (Total Organic Carbon)	1710	~~B~~	102	1000	1	05/13/2020 00:51	WG1474460

Metals (ICPMS) by Method 6020B

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Iron	11100		48.9	100	1	05/14/2020 00:27	WG1474279
Manganese	518		1.32	5.00	1	05/14/2020 00:27	WG1474279

Volatile Organic Compounds (GC) by Method NWTPHGX

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Gasoline Range Organics-NWTPH	U		31.6	100	1	05/16/2020 12:07	WG1477085
(S) a,a,a-Trifluorotoluene(FID)	*96.8*			*78.0-120*		*05/16/2020 12:07*	WG1477085

Volatile Organic Compounds (GC) by Method RSK175

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Methane	297		0.287	0.678	1	05/13/2020 11:06	WG1474312
Ethane	U		0.296	1.29	1	05/13/2020 11:06	WG1474312
Ethene	U		0.422	1.27	1	05/13/2020 11:06	WG1474312

Volatile Organic Compounds (GC/MS) by Method 8260D

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Acetone	U		11.3	25.0	1	05/11/2020 03:42	WG1473710
Acrylonitrile	U		0.671	5.00	1	05/11/2020 03:42	WG1473710
Benzene	U		0.0941	0.500	1	05/11/2020 03:42	WG1473710
Bromobenzene	U	~~J4~~	0.118	0.500	1	05/11/2020 03:42	WG1473710
Bromodichloromethane	U		0.136	0.500	1	05/11/2020 03:42	WG1473710
Bromochloromethane	U		0.128	0.500	1	05/11/2020 03:42	WG1473710
Bromoform	U		0.129	0.500	1	05/11/2020 03:42	WG1473710
Bromomethane	U	UJ J0	0.605	2.50	1	05/11/2020 03:42	WG1473710
n-Butylbenzene	U		0.157	0.500	1	05/11/2020 03:42	WG1473710
sec-Butylbenzene	U	~~J4~~	0.125	0.500	1	05/11/2020 03:42	WG1473710
tert-Butylbenzene	U	~~J4~~	0.127	0.500	1	05/11/2020 03:42	WG1473710
Carbon disulfide	U		0.0962	0.500	1	05/11/2020 03:42	WG1473710
Carbon tetrachloride	U		0.128	0.500	1	05/11/2020 03:42	WG1473710

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Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chlorobenzene	U		0.117	0.500	1	05/11/2020 03:42	WG1473710
Chlorodibromomethane	U		0.140	0.500	1	05/11/2020 03:42	WG1473710
Chloroethane	U	UJ J0	0.192	2.50	1	05/11/2020 03:42	WG1473710
Chloroform	U		0.111	0.500	1	05/11/2020 03:42	WG1473710
Chloromethane	U		0.960	1.25	1	05/11/2020 03:42	WG1473710
2-Chlorotoluene	U	~~J4~~	0.106	0.500	1	05/11/2020 03:42	WG1473710
4-Chlorotoluene	U	~~J4~~	0.114	0.500	1	05/11/2020 03:42	WG1473710
1,2-Dibromo-3-Chloropropane	U		0.276	2.50	1	05/11/2020 03:42	WG1473710
1,2-Dibromoethane	U		0.126	0.500	1	05/11/2020 03:42	WG1473710
Dibromomethane	U		0.122	0.500	1	05/11/2020 03:42	WG1473710
1,2-Dichlorobenzene	U		0.107	0.500	1	05/11/2020 03:42	WG1473710
1,3-Dichlorobenzene	U		0.299	0.500	1	05/11/2020 03:42	WG1473710
1,4-Dichlorobenzene	U		0.120	0.500	1	05/11/2020 03:42	WG1473710
Dichlorodifluoromethane	U		0.374	2.50	1	05/11/2020 03:42	WG1473710
1,1-Dichloroethane	U		0.100	0.500	1	05/11/2020 03:42	WG1473710
1,2-Dichloroethane	U		0.0819	0.500	1	05/11/2020 03:42	WG1473710
1,1-Dichloroethene	U		0.188	0.500	1	05/11/2020 03:42	WG1473710
cis-1,2-Dichloroethene	U		0.126	0.500	1	05/11/2020 03:42	WG1473710
trans-1,2-Dichloroethene	U		0.149	0.500	1	05/11/2020 03:42	WG1473710
1,2-Dichloropropane	U		0.149	0.500	1	05/11/2020 03:42	WG1473710
1,1-Dichloropropene	U		0.142	0.500	1	05/11/2020 03:42	WG1473710
1,3-Dichloropropane	U		0.109	1.00	1	05/11/2020 03:42	WG1473710
cis-1,3-Dichloropropene	U		0.111	0.500	1	05/11/2020 03:42	WG1473710
trans-1,3-Dichloropropene	U		0.118	0.500	1	05/11/2020 03:42	WG1473710
trans-1,4-Dichloro-2-butene	U		0.467	5.00	1	05/11/2020 03:42	WG1473710
2,2-Dichloropropane	U		0.161	0.500	1	05/11/2020 03:42	WG1473710
Di-isopropyl ether	U		0.105	0.500	1	05/11/2020 03:42	WG1473710
Ethylbenzene	U		0.137	0.500	1	05/11/2020 03:42	WG1473710
Hexachloro-1,3-butadiene	U		0.337	1.00	1	05/11/2020 03:42	WG1473710
2-Hexanone	U		0.787	5.00	1	05/11/2020 03:42	WG1473710
n-Hexane	U		0.749	5.00	1	05/11/2020 03:42	WG1473710
Iodomethane	U		0.554	5.00	1	05/11/2020 03:42	WG1473710
Isopropylbenzene	U		0.105	0.500	1	05/11/2020 03:42	WG1473710
p-Isopropyltoluene	U		0.120	0.500	1	05/11/2020 03:42	WG1473710
2-Butanone (MEK)	U		1.19	5.00	1	05/11/2020 03:42	WG1473710
Methylene Chloride	U		0.430	2.50	1	05/11/2020 03:42	WG1473710
4-Methyl-2-pentanone (MIBK)	U		0.478	5.00	1	05/11/2020 03:42	WG1473710
Methyl tert-butyl ether	U		0.101	0.500	1	05/11/2020 03:42	WG1473710
Naphthalene	U	UJ J0	0.174	2.50	1	05/11/2020 03:42	WG1473710
n-Propylbenzene	U	~~J4~~	0.0993	0.500	1	05/11/2020 03:42	WG1473710
Styrene	U		0.118	0.500	1	05/11/2020 03:42	WG1473710
1,1,1,2-Tetrachloroethane	U		0.147	0.500	1	05/11/2020 03:42	WG1473710
1,1,2,2-Tetrachloroethane	U	~~J4~~	0.133	0.500	1	05/11/2020 03:42	WG1473710
1,1,2-Trichlorotrifluoroethane	U		0.180	0.500	1	05/11/2020 03:42	WG1473710
Tetrachloroethene	U		0.300	0.500	1	05/11/2020 03:42	WG1473710
Toluene	0.308	J	0.278	0.500	1	05/11/2020 03:42	WG1473710
1,2,3-Trichlorobenzene	U		0.164	0.500	1	05/11/2020 03:42	WG1473710
1,2,4-Trichlorobenzene	U		0.481	1.00	1	05/11/2020 03:42	WG1473710
1,1,1-Trichloroethane	U		0.149	0.500	1	05/11/2020 03:42	WG1473710
1,1,2-Trichloroethane	U		0.158	0.500	1	05/11/2020 03:42	WG1473710
Trichloroethene	U		0.190	0.500	1	05/11/2020 03:42	WG1473710
Trichlorofluoromethane	U		0.160	2.50	1	05/11/2020 03:42	WG1473710
1,2,3-Trichloropropane	U	~~J4~~	0.237	2.50	1	05/11/2020 03:42	WG1473710
1,2,4-Trimethylbenzene	U	~~J4~~	0.322	0.500	1	05/11/2020 03:42	WG1473710
1,2,3-Trimethylbenzene	U		0.104	0.500	1	05/11/2020 03:42	WG1473710
1,3,5-Trimethylbenzene	U	~~J4~~	0.104	0.500	1	05/11/2020 03:42	WG1473710

JC 5/27/2020

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Vinyl acetate	U		0.692	5.00	1	05/11/2020 03:42	WG1473710
Vinyl chloride	U		0.234	0.500	1	05/11/2020 03:42	WG1473710
Xylenes, Total	U		0.174	1.50	1	05/11/2020 03:42	WG1473710
(S) Toluene-d8	*110*			*80.0-120*		*05/11/2020 03:42*	WG1473710
(S) 4-Bromofluorobenzene	*105*			*77.0-126*		*05/11/2020 03:42*	WG1473710
(S) 1,2-Dichloroethane-d4	*109*			*70.0-130*		*05/11/2020 03:42*	WG1473710

JC 5/27/2020

MW-304-050720

Collected date/time: 05/07/20 10:15

SAMPLE RESULTS - 03

L1216431

Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	146000		8450	20000	1	05/13/2020 14:00	WG1473769

Sample Narrative:

L1216431-03 WG1473769: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	10500		379	1000	1	05/08/2020 13:51	WG1472616
Nitrate	U		48.0	100	1	05/08/2020 13:51	WG1472616
Sulfate	11000		594	5000	1	05/08/2020 13:51	WG1472616

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	1630	~~B~~	102	1000	1	05/13/2020 01:12	WG1474460

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	14200		48.9	100	1	05/14/2020 00:31	WG1474279
Manganese	609		1.32	5.00	1	05/14/2020 00:31	WG1474279

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	U		31.6	100	1	05/16/2020 12:28	WG1477085
(S) a,a,a-Trifluorotoluene(FID)	*96.8*			*78.0-120*		*05/16/2020 12:28*	WG1477085

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	324		0.287	0.678	1	05/13/2020 11:08	WG1474312
Ethane	U		0.296	1.29	1	05/13/2020 11:08	WG1474312
Ethene	U		0.422	1.27	1	05/13/2020 11:08	WG1474312

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U		11.3	25.0	1	05/11/2020 04:02	WG1473710
Acrylonitrile	U		0.671	5.00	1	05/11/2020 04:02	WG1473710
Benzene	U		0.0941	0.500	1	05/11/2020 04:02	WG1473710
Bromobenzene	U	~~J4~~	0.118	0.500	1	05/11/2020 04:02	WG1473710
Bromodichloromethane	U		0.136	0.500	1	05/11/2020 04:02	WG1473710
Bromochloromethane	U		0.128	0.500	1	05/11/2020 04:02	WG1473710
Bromoform	U		0.129	0.500	1	05/11/2020 04:02	WG1473710
Bromomethane	U UJ	J0	0.605	2.50	1	05/11/2020 04:02	WG1473710
n-Butylbenzene	U		0.157	0.500	1	05/11/2020 04:02	WG1473710
sec-Butylbenzene	U	~~J4~~	0.125	0.500	1	05/11/2020 04:02	WG1473710
tert-Butylbenzene	U	~~J4~~	0.127	0.500	1	05/11/2020 04:02	WG1473710
Carbon disulfide	U		0.0962	0.500	1	05/11/2020 04:02	WG1473710
Carbon tetrachloride	U		0.128	0.500	1	05/11/2020 04:02	WG1473710

JC 5/27/2020

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chlorobenzene	U		0.117	0.500	1	05/11/2020 04:02	WG1473710
Chlorodibromomethane	U		0.140	0.500	1	05/11/2020 04:02	WG1473710
Chloroethane	U UJ	J0	0.192	2.50	1	05/11/2020 04:02	WG1473710
Chloroform	U		0.111	0.500	1	05/11/2020 04:02	WG1473710
Chloromethane	U		0.960	1.25	1	05/11/2020 04:02	WG1473710
2-Chlorotoluene	U	~~J4~~	0.106	0.500	1	05/11/2020 04:02	WG1473710
4-Chlorotoluene	U	~~J4~~	0.114	0.500	1	05/11/2020 04:02	WG1473710
1,2-Dibromo-3-Chloropropane	U		0.276	2.50	1	05/11/2020 04:02	WG1473710
1,2-Dibromoethane	U		0.126	0.500	1	05/11/2020 04:02	WG1473710
Dibromomethane	U		0.122	0.500	1	05/11/2020 04:02	WG1473710
1,2-Dichlorobenzene	U		0.107	0.500	1	05/11/2020 04:02	WG1473710
1,3-Dichlorobenzene	U		0.299	0.500	1	05/11/2020 04:02	WG1473710
1,4-Dichlorobenzene	U		0.120	0.500	1	05/11/2020 04:02	WG1473710
Dichlorodifluoromethane	U		0.374	2.50	1	05/11/2020 04:02	WG1473710
1,1-Dichloroethane	U		0.100	0.500	1	05/11/2020 04:02	WG1473710
1,2-Dichloroethane	U		0.0819	0.500	1	05/11/2020 04:02	WG1473710
1,1-Dichloroethene	U		0.188	0.500	1	05/11/2020 04:02	WG1473710
cis-1,2-Dichloroethene	U		0.126	0.500	1	05/11/2020 04:02	WG1473710
trans-1,2-Dichloroethene	U		0.149	0.500	1	05/11/2020 04:02	WG1473710
1,2-Dichloropropane	U		0.149	0.500	1	05/11/2020 04:02	WG1473710
1,1-Dichloropropene	U		0.142	0.500	1	05/11/2020 04:02	WG1473710
1,3-Dichloropropane	U		0.109	1.00	1	05/11/2020 04:02	WG1473710
cis-1,3-Dichloropropene	U		0.111	0.500	1	05/11/2020 04:02	WG1473710
trans-1,3-Dichloropropene	U		0.118	0.500	1	05/11/2020 04:02	WG1473710
trans-1,4-Dichloro-2-butene	U		0.467	5.00	1	05/11/2020 04:02	WG1473710
2,2-Dichloropropane	U		0.161	0.500	1	05/11/2020 04:02	WG1473710
Di-isopropyl ether	U		0.105	0.500	1	05/11/2020 04:02	WG1473710
Ethylbenzene	U		0.137	0.500	1	05/11/2020 04:02	WG1473710
Hexachloro-1,3-butadiene	U		0.337	1.00	1	05/11/2020 04:02	WG1473710
2-Hexanone	U		0.787	5.00	1	05/11/2020 04:02	WG1473710
n-Hexane	U		0.749	5.00	1	05/11/2020 04:02	WG1473710
Iodomethane	U		0.554	5.00	1	05/11/2020 04:02	WG1473710
Isopropylbenzene	U		0.105	0.500	1	05/11/2020 04:02	WG1473710
p-Isopropyltoluene	U		0.120	0.500	1	05/11/2020 04:02	WG1473710
2-Butanone (MEK)	U		1.19	5.00	1	05/11/2020 04:02	WG1473710
Methylene Chloride	U		0.430	2.50	1	05/11/2020 04:02	WG1473710
4-Methyl-2-pentanone (MIBK)	U		0.478	5.00	1	05/11/2020 04:02	WG1473710
Methyl tert-butyl ether	U		0.101	0.500	1	05/11/2020 04:02	WG1473710
Naphthalene	U UJ	J0	0.174	2.50	1	05/11/2020 04:02	WG1473710
n-Propylbenzene	U	~~J4~~	0.0993	0.500	1	05/11/2020 04:02	WG1473710
Styrene	U		0.118	0.500	1	05/11/2020 04:02	WG1473710
1,1,1,2-Tetrachloroethane	U		0.147	0.500	1	05/11/2020 04:02	WG1473710
1,1,2,2-Tetrachloroethane	U	~~J4~~	0.133	0.500	1	05/11/2020 04:02	WG1473710
1,1,2-Trichlorotrifluoroethane	U		0.180	0.500	1	05/11/2020 04:02	WG1473710
Tetrachloroethene	U		0.300	0.500	1	05/11/2020 04:02	WG1473710
Toluene	U		0.278	0.500	1	05/11/2020 04:02	WG1473710
1,2,3-Trichlorobenzene	U		0.164	0.500	1	05/11/2020 04:02	WG1473710
1,2,4-Trichlorobenzene	U		0.481	1.00	1	05/11/2020 04:02	WG1473710
1,1,1-Trichloroethane	U		0.149	0.500	1	05/11/2020 04:02	WG1473710
1,1,2-Trichloroethane	U		0.158	0.500	1	05/11/2020 04:02	WG1473710
Trichloroethene	U		0.190	0.500	1	05/11/2020 04:02	WG1473710
Trichlorofluoromethane	U		0.160	2.50	1	05/11/2020 04:02	WG1473710
1,2,3-Trichloropropane	U	~~J4~~	0.237	2.50	1	05/11/2020 04:02	WG1473710
1,2,4-Trimethylbenzene	U	~~J4~~	0.322	0.500	1	05/11/2020 04:02	WG1473710
1,2,3-Trimethylbenzene	U		0.104	0.500	1	05/11/2020 04:02	WG1473710
1,3,5-Trimethylbenzene	U	~~J4~~	0.104	0.500	1	05/11/2020 04:02	WG1473710

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Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Vinyl acetate	U		0.692	5.00	1	05/11/2020 04:02	WG1473710
Vinyl chloride	U		0.234	0.500	1	05/11/2020 04:02	WG1473710
Xylenes, Total	U		0.174	1.50	1	05/11/2020 04:02	WG1473710
(S) Toluene-d8	*107*			*80.0-120*		*05/11/2020 04:02*	WG1473710
(S) 4-Bromofluorobenzene	*104*			*77.0-126*		*05/11/2020 04:02*	WG1473710
(S) 1,2-Dichloroethane-d4	*111*			*70.0-130*		*05/11/2020 04:02*	WG1473710

JC 5/27/2020

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Wet Chemistry by Method 2320 B-2011

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Alkalinity	75200		8450	20000	1	05/13/2020 14:08	WG1473769

Sample Narrative:

L1216431-04 WG1473769: Endpoint pH 4.5

Wet Chemistry by Method 9056A

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Chloride	8950		379	1000	1	05/08/2020 14:13	WG1472616
Nitrate	U		48.0	100	1	05/08/2020 14:13	WG1472616
Sulfate	2620	J	594	5000	1	05/08/2020 14:13	WG1472616

Wet Chemistry by Method 9060A

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
TOC (Total Organic Carbon)	2910		102	1000	1	05/13/2020 02:14	WG1474460

Metals (ICPMS) by Method 6020B

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Iron	3220		48.9	100	1	05/14/2020 00:34	WG1474279
Manganese	239		1.32	5.00	1	05/14/2020 00:34	WG1474279

Volatile Organic Compounds (GC) by Method NWTPHGX

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Gasoline Range Organics-NWTPH	U		31.6	100	1	05/16/2020 12:50	WG1477085
(S) a,a,a-Trifluorotoluene(FID)	*96.8*			*78.0-120*		*05/16/2020 12:50*	WG1477085

Volatile Organic Compounds (GC) by Method RSK175

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Methane	752		0.287	0.678	1	05/13/2020 11:12	WG1474312
Ethane	U		0.296	1.29	1	05/13/2020 11:12	WG1474312
Ethene	U		0.422	1.27	1	05/13/2020 11:12	WG1474312

Volatile Organic Compounds (GC/MS) by Method 8260D

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Acetone	U		11.3	25.0	1	05/11/2020 04:23	WG1473710
Acrylonitrile	U		0.671	5.00	1	05/11/2020 04:23	WG1473710
Benzene	U		0.0941	0.500	1	05/11/2020 04:23	WG1473710
Bromobenzene	U	~~J4~~	0.118	0.500	1	05/11/2020 04:23	WG1473710
Bromodichloromethane	U		0.136	0.500	1	05/11/2020 04:23	WG1473710
Bromochloromethane	U		0.128	0.500	1	05/11/2020 04:23	WG1473710
Bromoform	U		0.129	0.500	1	05/11/2020 04:23	WG1473710
Bromomethane	U	UJ J0	0.605	2.50	1	05/11/2020 04:23	WG1473710
n-Butylbenzene	U		0.157	0.500	1	05/11/2020 04:23	WG1473710
sec-Butylbenzene	U	~~J4~~	0.125	0.500	1	05/11/2020 04:23	WG1473710
tert-Butylbenzene	U	~~J4~~	0.127	0.500	1	05/11/2020 04:23	WG1473710
Carbon disulfide	U		0.0962	0.500	1	05/11/2020 04:23	WG1473710
Carbon tetrachloride	U		0.128	0.500	1	05/11/2020 04:23	WG1473710

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Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chlorobenzene	U		0.117	0.500	1	05/11/2020 04:23	WG1473710
Chlorodibromomethane	U		0.140	0.500	1	05/11/2020 04:23	WG1473710
Chloroethane	U	UJ J0	0.192	2.50	1	05/11/2020 04:23	WG1473710
Chloroform	U		0.111	0.500	1	05/11/2020 04:23	WG1473710
Chloromethane	U		0.960	1.25	1	05/11/2020 04:23	WG1473710
2-Chlorotoluene	U	~~J4~~	0.106	0.500	1	05/11/2020 04:23	WG1473710
4-Chlorotoluene	U	~~J4~~	0.114	0.500	1	05/11/2020 04:23	WG1473710
1,2-Dibromo-3-Chloropropane	U		0.276	2.50	1	05/11/2020 04:23	WG1473710
1,2-Dibromoethane	U		0.126	0.500	1	05/11/2020 04:23	WG1473710
Dibromomethane	U		0.122	0.500	1	05/11/2020 04:23	WG1473710
1,2-Dichlorobenzene	U		0.107	0.500	1	05/11/2020 04:23	WG1473710
1,3-Dichlorobenzene	U		0.299	0.500	1	05/11/2020 04:23	WG1473710
1,4-Dichlorobenzene	U		0.120	0.500	1	05/11/2020 04:23	WG1473710
Dichlorodifluoromethane	U		0.374	2.50	1	05/11/2020 04:23	WG1473710
1,1-Dichloroethane	U		0.100	0.500	1	05/11/2020 04:23	WG1473710
1,2-Dichloroethane	U		0.0819	0.500	1	05/11/2020 04:23	WG1473710
1,1-Dichloroethene	U		0.188	0.500	1	05/11/2020 04:23	WG1473710
cis-1,2-Dichloroethene	U		0.126	0.500	1	05/11/2020 04:23	WG1473710
trans-1,2-Dichloroethene	U		0.149	0.500	1	05/11/2020 04:23	WG1473710
1,2-Dichloropropane	U		0.149	0.500	1	05/11/2020 04:23	WG1473710
1,1-Dichloropropene	U		0.142	0.500	1	05/11/2020 04:23	WG1473710
1,3-Dichloropropane	U		0.109	1.00	1	05/11/2020 04:23	WG1473710
cis-1,3-Dichloropropene	U		0.111	0.500	1	05/11/2020 04:23	WG1473710
trans-1,3-Dichloropropene	U		0.118	0.500	1	05/11/2020 04:23	WG1473710
trans-1,4-Dichloro-2-butene	U		0.467	5.00	1	05/11/2020 04:23	WG1473710
2,2-Dichloropropane	U		0.161	0.500	1	05/11/2020 04:23	WG1473710
Di-isopropyl ether	U		0.105	0.500	1	05/11/2020 04:23	WG1473710
Ethylbenzene	U		0.137	0.500	1	05/11/2020 04:23	WG1473710
Hexachloro-1,3-butadiene	U		0.337	1.00	1	05/11/2020 04:23	WG1473710
2-Hexanone	U		0.787	5.00	1	05/11/2020 04:23	WG1473710
n-Hexane	U		0.749	5.00	1	05/11/2020 04:23	WG1473710
Iodomethane	U		0.554	5.00	1	05/11/2020 04:23	WG1473710
Isopropylbenzene	U		0.105	0.500	1	05/11/2020 04:23	WG1473710
p-Isopropyltoluene	U		0.120	0.500	1	05/11/2020 04:23	WG1473710
2-Butanone (MEK)	U		1.19	5.00	1	05/11/2020 04:23	WG1473710
Methylene Chloride	U		0.430	2.50	1	05/11/2020 04:23	WG1473710
4-Methyl-2-pentanone (MIBK)	U		0.478	5.00	1	05/11/2020 04:23	WG1473710
Methyl tert-butyl ether	U		0.101	0.500	1	05/11/2020 04:23	WG1473710
Naphthalene	U	UJ J0	0.174	2.50	1	05/11/2020 04:23	WG1473710
n-Propylbenzene	U	~~J4~~	0.0993	0.500	1	05/11/2020 04:23	WG1473710
Styrene	U		0.118	0.500	1	05/11/2020 04:23	WG1473710
1,1,1,2-Tetrachloroethane	U		0.147	0.500	1	05/11/2020 04:23	WG1473710
1,1,2,2-Tetrachloroethane	U	~~J4~~	0.133	0.500	1	05/11/2020 04:23	WG1473710
1,1,2-Trichlorotrifluoroethane	U		0.180	0.500	1	05/11/2020 04:23	WG1473710
Tetrachloroethene	U		0.300	0.500	1	05/11/2020 04:23	WG1473710
Toluene	0.390	J	0.278	0.500	1	05/11/2020 04:23	WG1473710
1,2,3-Trichlorobenzene	U		0.164	0.500	1	05/11/2020 04:23	WG1473710
1,2,4-Trichlorobenzene	U		0.481	1.00	1	05/11/2020 04:23	WG1473710
1,1,1-Trichloroethane	U		0.149	0.500	1	05/11/2020 04:23	WG1473710
1,1,2-Trichloroethane	U		0.158	0.500	1	05/11/2020 04:23	WG1473710
Trichloroethene	U		0.190	0.500	1	05/11/2020 04:23	WG1473710
Trichlorofluoromethane	U		0.160	2.50	1	05/11/2020 04:23	WG1473710
1,2,3-Trichloropropane	U	~~J4~~	0.237	2.50	1	05/11/2020 04:23	WG1473710
1,2,4-Trimethylbenzene	U	~~J4~~	0.322	0.500	1	05/11/2020 04:23	WG1473710
1,2,3-Trimethylbenzene	U		0.104	0.500	1	05/11/2020 04:23	WG1473710
1,3,5-Trimethylbenzene	U	~~J4~~	0.104	0.500	1	05/11/2020 04:23	WG1473710

JC 5/27/2020

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Vinyl acetate	U		0.692	5.00	1	05/11/2020 04:23	WG1473710
Vinyl chloride	U		0.234	0.500	1	05/11/2020 04:23	WG1473710
Xylenes, Total	U		0.174	1.50	1	05/11/2020 04:23	WG1473710
(S) Toluene-d8	*106*			*80.0-120*		*05/11/2020 04:23*	WG1473710
(S) 4-Bromofluorobenzene	*105*			*77.0-126*		*05/11/2020 04:23*	WG1473710
(S) 1,2-Dichloroethane-d4	*113*			*70.0-130*		*05/11/2020 04:23*	WG1473710

JC 5/27/2020

Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	229000		8450	20000	1	05/13/2020 14:17	WG1473769

Sample Narrative:

L1216431-05 WG1473769: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	11000		379	1000	1	05/08/2020 14:35	WG1472616
Nitrate	U		48.0	100	1	05/08/2020 14:35	WG1472616
Sulfate	2940	J	594	5000	1	05/08/2020 14:35	WG1472616

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	2690		102	1000	1	05/13/2020 02:35	WG1474460

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	3120		48.9	100	1	05/14/2020 00:45	WG1474279
Manganese	1210		6.60	25.0	5	05/14/2020 01:44	WG1474279

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	1950		0.287	0.678	1	05/13/2020 11:14	WG1474312
Ethane	U		0.296	1.29	1	05/13/2020 11:14	WG1474312
Ethene	U		0.422	1.27	1	05/13/2020 11:14	WG1474312

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U		11.3	25.0	1	05/11/2020 04:43	WG1473710
Acrylonitrile	U		0.671	5.00	1	05/11/2020 04:43	WG1473710
Benzene	U		0.0941	0.500	1	05/11/2020 04:43	WG1473710
Bromobenzene	U	~~J4~~	0.118	0.500	1	05/11/2020 04:43	WG1473710
Bromodichloromethane	U		0.136	0.500	1	05/11/2020 04:43	WG1473710
Bromochloromethane	U		0.128	0.500	1	05/11/2020 04:43	WG1473710
Bromoform	U		0.129	0.500	1	05/11/2020 04:43	WG1473710
Bromomethane	U	UJ J0	0.605	2.50	1	05/11/2020 04:43	WG1473710
n-Butylbenzene	U		0.157	0.500	1	05/11/2020 04:43	WG1473710
sec-Butylbenzene	U	~~J4~~	0.125	0.500	1	05/11/2020 04:43	WG1473710
tert-Butylbenzene	U	~~J4~~	0.127	0.500	1	05/11/2020 04:43	WG1473710
Carbon disulfide	U		0.0962	0.500	1	05/11/2020 04:43	WG1473710
Carbon tetrachloride	U		0.128	0.500	1	05/11/2020 04:43	WG1473710
Chlorobenzene	U		0.117	0.500	1	05/11/2020 04:43	WG1473710
Chlorodibromomethane	U		0.140	0.500	1	05/11/2020 04:43	WG1473710
Chloroethane	U	UJ J0	0.192	2.50	1	05/11/2020 04:43	WG1473710
Chloroform	U		0.111	0.500	1	05/11/2020 04:43	WG1473710
Chloromethane	U		0.960	1.25	1	05/11/2020 04:43	WG1473710
2-Chlorotoluene	U	~~J4~~	0.106	0.500	1	05/11/2020 04:43	WG1473710
4-Chlorotoluene	U	~~J4~~	0.114	0.500	1	05/11/2020 04:43	WG1473710

JC 5/27/2020

MW-337-050720

Collected date/time: 05/07/20 12:30

SAMPLE RESULTS - 05

L1216431

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,2-Dibromo-3-Chloropropane	U		0.276	2.50	1	05/11/2020 04:43	WG1473710
1,2-Dibromoethane	U		0.126	0.500	1	05/11/2020 04:43	WG1473710
Dibromomethane	U		0.122	0.500	1	05/11/2020 04:43	WG1473710
1,2-Dichlorobenzene	U		0.107	0.500	1	05/11/2020 04:43	WG1473710
1,3-Dichlorobenzene	U		0.299	0.500	1	05/11/2020 04:43	WG1473710
1,4-Dichlorobenzene	U		0.120	0.500	1	05/11/2020 04:43	WG1473710
Dichlorodifluoromethane	U		0.374	2.50	1	05/11/2020 04:43	WG1473710
1,1-Dichloroethane	U		0.100	0.500	1	05/11/2020 04:43	WG1473710
1,2-Dichloroethane	U		0.0819	0.500	1	05/11/2020 04:43	WG1473710
1,1-Dichloroethene	U		0.188	0.500	1	05/11/2020 04:43	WG1473710
cis-1,2-Dichloroethene	U		0.126	0.500	1	05/11/2020 04:43	WG1473710
trans-1,2-Dichloroethene	U		0.149	0.500	1	05/11/2020 04:43	WG1473710
1,2-Dichloropropane	U		0.149	0.500	1	05/11/2020 04:43	WG1473710
1,1-Dichloropropene	U		0.142	0.500	1	05/11/2020 04:43	WG1473710
1,3-Dichloropropane	U		0.109	1.00	1	05/11/2020 04:43	WG1473710
cis-1,3-Dichloropropene	U		0.111	0.500	1	05/11/2020 04:43	WG1473710
trans-1,3-Dichloropropene	U		0.118	0.500	1	05/11/2020 04:43	WG1473710
trans-1,4-Dichloro-2-butene	U		0.467	5.00	1	05/11/2020 04:43	WG1473710
2,2-Dichloropropane	U		0.161	0.500	1	05/11/2020 04:43	WG1473710
Di-isopropyl ether	U		0.105	0.500	1	05/11/2020 04:43	WG1473710
Ethylbenzene	U		0.137	0.500	1	05/11/2020 04:43	WG1473710
Hexachloro-1,3-butadiene	U		0.337	1.00	1	05/11/2020 04:43	WG1473710
2-Hexanone	U		0.787	5.00	1	05/11/2020 04:43	WG1473710
n-Hexane	U		0.749	5.00	1	05/11/2020 04:43	WG1473710
Iodomethane	U		0.554	5.00	1	05/11/2020 04:43	WG1473710
Isopropylbenzene	U		0.105	0.500	1	05/11/2020 04:43	WG1473710
p-Isopropyltoluene	U		0.120	0.500	1	05/11/2020 04:43	WG1473710
2-Butanone (MEK)	U		1.19	5.00	1	05/11/2020 04:43	WG1473710
Methylene Chloride	U		0.430	2.50	1	05/11/2020 04:43	WG1473710
4-Methyl-2-pentanone (MIBK)	U		0.478	5.00	1	05/11/2020 04:43	WG1473710
Methyl tert-butyl ether	U		0.101	0.500	1	05/11/2020 04:43	WG1473710
Naphthalene	U UJ	J0	0.174	2.50	1	05/11/2020 04:43	WG1473710
n-Propylbenzene	U	~~J4~~	0.0993	0.500	1	05/11/2020 04:43	WG1473710
Styrene	U		0.118	0.500	1	05/11/2020 04:43	WG1473710
1,1,1,2-Tetrachloroethane	U		0.147	0.500	1	05/11/2020 04:43	WG1473710
1,1,2,2-Tetrachloroethane	U	~~J4~~	0.133	0.500	1	05/11/2020 04:43	WG1473710
1,1,2-Trichlorotrifluoroethane	U		0.180	0.500	1	05/11/2020 04:43	WG1473710
Tetrachloroethene	U		0.300	0.500	1	05/11/2020 04:43	WG1473710
Toluene	U		0.278	0.500	1	05/11/2020 04:43	WG1473710
1,2,3-Trichlorobenzene	U		0.164	0.500	1	05/11/2020 04:43	WG1473710
1,2,4-Trichlorobenzene	U		0.481	1.00	1	05/11/2020 04:43	WG1473710
1,1,1-Trichloroethane	U		0.149	0.500	1	05/11/2020 04:43	WG1473710
1,1,2-Trichloroethane	U		0.158	0.500	1	05/11/2020 04:43	WG1473710
Trichloroethene	U		0.190	0.500	1	05/11/2020 04:43	WG1473710
Trichlorofluoromethane	U		0.160	2.50	1	05/11/2020 04:43	WG1473710
1,2,3-Trichloropropane	U	~~J4~~	0.237	2.50	1	05/11/2020 04:43	WG1473710
1,2,4-Trimethylbenzene	U	~~J4~~	0.322	0.500	1	05/11/2020 04:43	WG1473710
1,2,3-Trimethylbenzene	U		0.104	0.500	1	05/11/2020 04:43	WG1473710
1,3,5-Trimethylbenzene	U	~~J4~~	0.104	0.500	1	05/11/2020 04:43	WG1473710
Vinyl acetate	U		0.692	5.00	1	05/11/2020 04:43	WG1473710
Vinyl chloride	U		0.234	0.500	1	05/11/2020 04:43	WG1473710
Xylenes, Total	U		0.174	1.50	1	05/11/2020 04:43	WG1473710
(S) Toluene-d8	*107*			*80.0-120*		*05/11/2020 04:43*	WG1473710
(S) 4-Bromofluorobenzene	*104*			*77.0-126*		*05/11/2020 04:43*	WG1473710
(S) 1,2-Dichloroethane-d4	*112*			*70.0-130*		*05/11/2020 04:43*	WG1473710

JC 5/27/2020

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	604000		28100	66600	3.33	05/13/2020 16:02	WG1473769

Sample Narrative:

L1216431-06 WG1473769: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	12400		379	1000	1	05/08/2020 14:46	WG1472616
Nitrate	U		48.0	100	1	05/08/2020 14:46	WG1472616
Sulfate	2190	J	594	5000	1	05/08/2020 14:46	WG1472616

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	7160		102	1000	1	05/13/2020 02:55	WG1474460

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	16400		48.9	100	1	05/14/2020 00:48	WG1474279
Manganese	1620		6.60	25.0	5	05/14/2020 01:48	WG1474279

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	16700		2.87	6.78	10	05/14/2020 09:44	WG1475318
Ethane	U		0.296	1.29	1	05/13/2020 11:16	WG1474312
Ethene	U		0.422	1.27	1	05/13/2020 11:16	WG1474312

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U		11.3	25.0	1	05/11/2020 05:03	WG1473710
Acrylonitrile	U		0.671	5.00	1	05/11/2020 05:03	WG1473710
Benzene	U		0.0941	0.500	1	05/11/2020 05:03	WG1473710
Bromobenzene	U	~~J4~~	0.118	0.500	1	05/11/2020 05:03	WG1473710
Bromodichloromethane	U		0.136	0.500	1	05/11/2020 05:03	WG1473710
Bromochloromethane	U		0.128	0.500	1	05/11/2020 05:03	WG1473710
Bromoform	U		0.129	0.500	1	05/11/2020 05:03	WG1473710
Bromomethane	U	UJ J0	0.605	2.50	1	05/11/2020 05:03	WG1473710
n-Butylbenzene	U		0.157	0.500	1	05/11/2020 05:03	WG1473710
sec-Butylbenzene	U	~~J4~~	0.125	0.500	1	05/11/2020 05:03	WG1473710
tert-Butylbenzene	U	~~J4~~	0.127	0.500	1	05/11/2020 05:03	WG1473710
Carbon disulfide	U		0.0962	0.500	1	05/11/2020 05:03	WG1473710
Carbon tetrachloride	U		0.128	0.500	1	05/11/2020 05:03	WG1473710
Chlorobenzene	U		0.117	0.500	1	05/11/2020 05:03	WG1473710
Chlorodibromomethane	U		0.140	0.500	1	05/11/2020 05:03	WG1473710
Chloroethane	U	UJ J0	0.192	2.50	1	05/11/2020 05:03	WG1473710
Chloroform	U		0.111	0.500	1	05/11/2020 05:03	WG1473710
Chloromethane	U		0.960	1.25	1	05/11/2020 05:03	WG1473710
2-Chlorotoluene	U	~~J4~~	0.106	0.500	1	05/11/2020 05:03	WG1473710
4-Chlorotoluene	U	~~J4~~	0.114	0.500	1	05/11/2020 05:03	WG1473710

JC 5/27/2020

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,2-Dibromo-3-Chloropropane	U		0.276	2.50	1	05/11/2020 05:03	WG1473710
1,2-Dibromoethane	U		0.126	0.500	1	05/11/2020 05:03	WG1473710
Dibromomethane	U		0.122	0.500	1	05/11/2020 05:03	WG1473710
1,2-Dichlorobenzene	U		0.107	0.500	1	05/11/2020 05:03	WG1473710
1,3-Dichlorobenzene	U		0.299	0.500	1	05/11/2020 05:03	WG1473710
1,4-Dichlorobenzene	U		0.120	0.500	1	05/11/2020 05:03	WG1473710
Dichlorodifluoromethane	U		0.374	2.50	1	05/11/2020 05:03	WG1473710
1,1-Dichloroethane	U		0.100	0.500	1	05/11/2020 05:03	WG1473710
1,2-Dichloroethane	U		0.0819	0.500	1	05/11/2020 05:03	WG1473710
1,1-Dichloroethene	U		0.188	0.500	1	05/11/2020 05:03	WG1473710
cis-1,2-Dichloroethene	U		0.126	0.500	1	05/11/2020 05:03	WG1473710
trans-1,2-Dichloroethene	U		0.149	0.500	1	05/11/2020 05:03	WG1473710
1,2-Dichloropropane	U		0.149	0.500	1	05/11/2020 05:03	WG1473710
1,1-Dichloropropene	U		0.142	0.500	1	05/11/2020 05:03	WG1473710
1,3-Dichloropropane	U		0.109	1.00	1	05/11/2020 05:03	WG1473710
cis-1,3-Dichloropropene	U		0.111	0.500	1	05/11/2020 05:03	WG1473710
trans-1,3-Dichloropropene	U		0.118	0.500	1	05/11/2020 05:03	WG1473710
trans-1,4-Dichloro-2-butene	U		0.467	5.00	1	05/11/2020 05:03	WG1473710
2,2-Dichloropropane	U		0.161	0.500	1	05/11/2020 05:03	WG1473710
Di-isopropyl ether	U		0.105	0.500	1	05/11/2020 05:03	WG1473710
Ethylbenzene	U		0.137	0.500	1	05/11/2020 05:03	WG1473710
Hexachloro-1,3-butadiene	U		0.337	1.00	1	05/11/2020 05:03	WG1473710
2-Hexanone	U		0.787	5.00	1	05/11/2020 05:03	WG1473710
n-Hexane	U		0.749	5.00	1	05/11/2020 05:03	WG1473710
Iodomethane	U		0.554	5.00	1	05/11/2020 05:03	WG1473710
Isopropylbenzene	U		0.105	0.500	1	05/11/2020 05:03	WG1473710
p-Isopropyltoluene	U		0.120	0.500	1	05/11/2020 05:03	WG1473710
2-Butanone (MEK)	U		1.19	5.00	1	05/11/2020 05:03	WG1473710
Methylene Chloride	U		0.430	2.50	1	05/11/2020 05:03	WG1473710
4-Methyl-2-pentanone (MIBK)	U		0.478	5.00	1	05/11/2020 05:03	WG1473710
Methyl tert-butyl ether	U		0.101	0.500	1	05/11/2020 05:03	WG1473710
Naphthalene	U	UJ J0	0.174	2.50	1	05/11/2020 05:03	WG1473710
n-Propylbenzene	U	~~J4~~	0.0993	0.500	1	05/11/2020 05:03	WG1473710
Styrene	U		0.118	0.500	1	05/11/2020 05:03	WG1473710
1,1,1,2-Tetrachloroethane	U		0.147	0.500	1	05/11/2020 05:03	WG1473710
1,1,2,2-Tetrachloroethane	U	~~J4~~	0.133	0.500	1	05/11/2020 05:03	WG1473710
1,1,2-Trichlorotrifluoroethane	U		0.180	0.500	1	05/11/2020 05:03	WG1473710
Tetrachloroethene	U		0.300	0.500	1	05/11/2020 05:03	WG1473710
Toluene	U		0.278	0.500	1	05/11/2020 05:03	WG1473710
1,2,3-Trichlorobenzene	U		0.164	0.500	1	05/11/2020 05:03	WG1473710
1,2,4-Trichlorobenzene	U		0.481	1.00	1	05/11/2020 05:03	WG1473710
1,1,1-Trichloroethane	U		0.149	0.500	1	05/11/2020 05:03	WG1473710
1,1,2-Trichloroethane	U		0.158	0.500	1	05/11/2020 05:03	WG1473710
Trichloroethene	U		0.190	0.500	1	05/11/2020 05:03	WG1473710
Trichlorofluoromethane	U		0.160	2.50	1	05/11/2020 05:03	WG1473710
1,2,3-Trichloropropane	U	~~J4~~	0.237	2.50	1	05/11/2020 05:03	WG1473710
1,2,4-Trimethylbenzene	U	~~J4~~	0.322	0.500	1	05/11/2020 05:03	WG1473710
1,2,3-Trimethylbenzene	U		0.104	0.500	1	05/11/2020 05:03	WG1473710
1,3,5-Trimethylbenzene	U	~~J4~~	0.104	0.500	1	05/11/2020 05:03	WG1473710
Vinyl acetate	U		0.692	5.00	1	05/11/2020 05:03	WG1473710
Vinyl chloride	U		0.234	0.500	1	05/11/2020 05:03	WG1473710
Xylenes, Total	U		0.174	1.50	1	05/11/2020 05:03	WG1473710
(S) Toluene-d8	*107*			*80.0-120*		*05/11/2020 05:03*	WG1473710
(S) 4-Bromofluorobenzene	*105*			*77.0-126*		*05/11/2020 05:03*	WG1473710
(S) 1,2-Dichloroethane-d4	*114*			*70.0-130*		*05/11/2020 05:03*	WG1473710

JC 5/27/2020

SAMPLE RESULTS - 07

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	U		31.6	100	1	05/16/2020 14:35	WG1477184
(S) a,a,a-Trifluorotoluene(FID)	*96.6*			*78.0-120*		*05/16/2020 14:35*	WG1477184

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U		11.3	25.0	1	05/10/2020 23:58	WG1473710
Acrylonitrile	U		0.671	5.00	1	05/10/2020 23:58	WG1473710
Benzene	U		0.0941	0.500	1	05/10/2020 23:58	WG1473710
Bromobenzene	U	J4	0.118	0.500	1	05/10/2020 23:58	WG1473710
Bromodichloromethane	U		0.136	0.500	1	05/10/2020 23:58	WG1473710
Bromochloromethane	U		0.128	0.500	1	05/10/2020 23:58	WG1473710
Bromoform	U		0.129	0.500	1	05/10/2020 23:58	WG1473710
Bromomethane	U	UJ J0	0.605	2.50	1	05/10/2020 23:58	WG1473710
n-Butylbenzene	U		0.157	0.500	1	05/10/2020 23:58	WG1473710
sec-Butylbenzene	U	J4	0.125	0.500	1	05/10/2020 23:58	WG1473710
tert-Butylbenzene	U	J4	0.127	0.500	1	05/10/2020 23:58	WG1473710
Carbon disulfide	U		0.0962	0.500	1	05/10/2020 23:58	WG1473710
Carbon tetrachloride	U		0.128	0.500	1	05/10/2020 23:58	WG1473710
Chlorobenzene	U		0.117	0.500	1	05/10/2020 23:58	WG1473710
Chlorodibromomethane	U		0.140	0.500	1	05/10/2020 23:58	WG1473710
Chloroethane	U	UJ J0	0.192	2.50	1	05/10/2020 23:58	WG1473710
Chloroform	U		0.111	0.500	1	05/10/2020 23:58	WG1473710
Chloromethane	U		0.960	1.25	1	05/10/2020 23:58	WG1473710
2-Chlorotoluene	U	J4	0.106	0.500	1	05/10/2020 23:58	WG1473710
4-Chlorotoluene	U	J4	0.114	0.500	1	05/10/2020 23:58	WG1473710
1,2-Dibromo-3-Chloropropane	U		0.276	2.50	1	05/10/2020 23:58	WG1473710
1,2-Dibromoethane	U		0.126	0.500	1	05/10/2020 23:58	WG1473710
Dibromomethane	U		0.122	0.500	1	05/10/2020 23:58	WG1473710
1,2-Dichlorobenzene	U		0.107	0.500	1	05/10/2020 23:58	WG1473710
1,3-Dichlorobenzene	U		0.299	0.500	1	05/10/2020 23:58	WG1473710
1,4-Dichlorobenzene	U		0.120	0.500	1	05/10/2020 23:58	WG1473710
Dichlorodifluoromethane	U		0.374	2.50	1	05/10/2020 23:58	WG1473710
1,1-Dichloroethane	U		0.100	0.500	1	05/10/2020 23:58	WG1473710
1,2-Dichloroethane	U		0.0819	0.500	1	05/10/2020 23:58	WG1473710
1,1-Dichloroethene	U		0.188	0.500	1	05/10/2020 23:58	WG1473710
cis-1,2-Dichloroethene	U		0.126	0.500	1	05/10/2020 23:58	WG1473710
trans-1,2-Dichloroethene	U		0.149	0.500	1	05/10/2020 23:58	WG1473710
1,2-Dichloropropane	U		0.149	0.500	1	05/10/2020 23:58	WG1473710
1,1-Dichloropropene	U		0.142	0.500	1	05/10/2020 23:58	WG1473710
1,3-Dichloropropane	U		0.109	1.00	1	05/10/2020 23:58	WG1473710
cis-1,3-Dichloropropene	U		0.111	0.500	1	05/10/2020 23:58	WG1473710
trans-1,3-Dichloropropene	U		0.118	0.500	1	05/10/2020 23:58	WG1473710
trans-1,4-Dichloro-2-butene	U		0.467	5.00	1	05/10/2020 23:58	WG1473710
2,2-Dichloropropane	U		0.161	0.500	1	05/10/2020 23:58	WG1473710
Di-isopropyl ether	U		0.105	0.500	1	05/10/2020 23:58	WG1473710
Ethylbenzene	U		0.137	0.500	1	05/10/2020 23:58	WG1473710
Hexachloro-1,3-butadiene	U		0.337	1.00	1	05/10/2020 23:58	WG1473710
2-Hexanone	U		0.787	5.00	1	05/10/2020 23:58	WG1473710
n-Hexane	U		0.749	5.00	1	05/10/2020 23:58	WG1473710
Iodomethane	U		0.554	5.00	1	05/10/2020 23:58	WG1473710
Isopropylbenzene	0.107	B J	0.105	0.500	1	05/10/2020 23:58	WG1473710
p-Isopropyltoluene	U		0.120	0.500	1	05/10/2020 23:58	WG1473710
2-Butanone (MEK)	U		1.19	5.00	1	05/10/2020 23:58	WG1473710

JC 5/27/2020

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methylene Chloride	U		0.430	2.50	1	05/10/2020 23:58	WG1473710
4-Methyl-2-pentanone (MIBK)	U		0.478	5.00	1	05/10/2020 23:58	WG1473710
Methyl tert-butyl ether	U		0.101	0.500	1	05/10/2020 23:58	WG1473710
Naphthalene	U	UJ J0	0.174	2.50	1	05/10/2020 23:58	WG1473710
n-Propylbenzene	U	J4	0.0993	0.500	1	05/10/2020 23:58	WG1473710
Styrene	U		0.118	0.500	1	05/10/2020 23:58	WG1473710
1,1,1,2-Tetrachloroethane	U		0.147	0.500	1	05/10/2020 23:58	WG1473710
1,1,2,2-Tetrachloroethane	U	J4	0.133	0.500	1	05/10/2020 23:58	WG1473710
1,1,2-Trichlorotrifluoroethane	U		0.180	0.500	1	05/10/2020 23:58	WG1473710
Tetrachloroethene	U		0.300	0.500	1	05/10/2020 23:58	WG1473710
Toluene	U		0.278	0.500	1	05/10/2020 23:58	WG1473710
1,2,3-Trichlorobenzene	U		0.164	0.500	1	05/10/2020 23:58	WG1473710
1,2,4-Trichlorobenzene	U		0.481	1.00	1	05/10/2020 23:58	WG1473710
1,1,1-Trichloroethane	U		0.149	0.500	1	05/10/2020 23:58	WG1473710
1,1,2-Trichloroethane	U		0.158	0.500	1	05/10/2020 23:58	WG1473710
Trichloroethene	U		0.190	0.500	1	05/10/2020 23:58	WG1473710
Trichlorofluoromethane	U		0.160	2.50	1	05/10/2020 23:58	WG1473710
1,2,3-Trichloropropane	U	J4	0.237	2.50	1	05/10/2020 23:58	WG1473710
1,2,4-Trimethylbenzene	U	J4	0.322	0.500	1	05/10/2020 23:58	WG1473710
1,2,3-Trimethylbenzene	U		0.104	0.500	1	05/10/2020 23:58	WG1473710
1,3,5-Trimethylbenzene	U	J4	0.104	0.500	1	05/10/2020 23:58	WG1473710
Vinyl acetate	U		0.692	5.00	1	05/10/2020 23:58	WG1473710
Vinyl chloride	U		0.234	0.500	1	05/10/2020 23:58	WG1473710
Xylenes, Total	U		0.174	1.50	1	05/10/2020 23:58	WG1473710
(S) Toluene-d8	*106*			*80.0-120*		*05/10/2020 23:58*	WG1473710
(S) 4-Bromofluorobenzene	*103*			*77.0-126*		*05/10/2020 23:58*	WG1473710
(S) 1,2-Dichloroethane-d4	*110*			*70.0-130*		*05/10/2020 23:58*	WG1473710

JC 5/27/2020

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Wet Chemistry by Method 2320 B-2011

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Alkalinity	101000		8450	20000	1	05/17/2020 22:33	WG1476787

Sample Narrative:

L1216893-01 WG1476787: Endpoint pH 4.5

Wet Chemistry by Method 9056A

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Chloride	10300		379	1000	1	05/09/2020 21:13	WG1473225
Nitrate	U		48.0	100	1	05/09/2020 21:13	WG1473225
Sulfate	36000		594	5000	1	05/09/2020 21:13	WG1473225

Wet Chemistry by Method 9060A

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
TOC (Total Organic Carbon)	1140	~~B~~	102	1000	1	05/15/2020 03:27	WG1476027

Metals (ICPMS) by Method 6020B

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Iron	45000		48.9	100	1	05/14/2020 01:30	WG1474279
Manganese	895		1.32	5.00	1	05/14/2020 01:30	WG1474279

Volatile Organic Compounds (GC) by Method NWTPHGX

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Gasoline Range Organics-NWTPH	53.4 U	~~B J~~	31.6	100	1	05/17/2020 01:27	WG1477292
(S) a,a,a-Trifluorotoluene(FID)	*94.3*			*78.0-120*		*05/17/2020 01:27*	WG1477292

Volatile Organic Compounds (GC) by Method RSK175

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Methane	398		0.287	0.678	1	05/13/2020 12:48	WG1475017
Ethane	U		0.296	1.29	1	05/13/2020 12:48	WG1475017
Ethene	U		0.422	1.27	1	05/13/2020 12:48	WG1475017

Volatile Organic Compounds (GC/MS) by Method 8260D

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Acetone	U		11.3	25.0	1	05/13/2020 12:24	WG1475072
Acrylonitrile	U		0.671	5.00	1	05/13/2020 12:24	WG1475072
Benzene	U		0.0941	0.500	1	05/13/2020 12:24	WG1475072
Bromobenzene	U		0.118	0.500	1	05/13/2020 12:24	WG1475072
Bromodichloromethane	U		0.136	0.500	1	05/13/2020 12:24	WG1475072
Bromochloromethane	U		0.128	0.500	1	05/13/2020 12:24	WG1475072
Bromoform	U		0.129	0.500	1	05/13/2020 12:24	WG1475072
Bromomethane	U		0.605	2.50	1	05/13/2020 12:24	WG1475072
n-Butylbenzene	U		0.157	0.500	1	05/13/2020 12:24	WG1475072
sec-Butylbenzene	U		0.125	0.500	1	05/13/2020 12:24	WG1475072
tert-Butylbenzene	U		0.127	0.500	1	05/13/2020 12:24	WG1475072
Carbon disulfide	U		0.0962	0.500	1	05/13/2020 12:24	WG1475072
Carbon tetrachloride	U		0.128	0.500	1	05/13/2020 12:24	WG1475072

JC 5/27/2020

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Volatile Organic Compounds (GC/MS) by Method 8260D

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Chlorobenzene	U		0.117	0.500	1	05/13/2020 12:24	WG1475072
Chlorodibromomethane	U		0.140	0.500	1	05/13/2020 12:24	WG1475072
Chloroethane	U		0.192	2.50	1	05/13/2020 12:24	WG1475072
Chloroform	U		0.111	0.500	1	05/13/2020 12:24	WG1475072
Chloromethane	U		0.960	1.25	1	05/13/2020 12:24	WG1475072
2-Chlorotoluene	U		0.106	0.500	1	05/13/2020 12:24	WG1475072
4-Chlorotoluene	U		0.114	0.500	1	05/13/2020 12:24	WG1475072
1,2-Dibromo-3-Chloropropane	U		0.276	2.50	1	05/13/2020 12:24	WG1475072
1,2-Dibromoethane	U		0.126	0.500	1	05/13/2020 12:24	WG1475072
Dibromomethane	U		0.122	0.500	1	05/13/2020 12:24	WG1475072
1,2-Dichlorobenzene	U		0.107	0.500	1	05/13/2020 12:24	WG1475072
1,3-Dichlorobenzene	U		0.299	0.500	1	05/13/2020 12:24	WG1475072
1,4-Dichlorobenzene	U		0.120	0.500	1	05/13/2020 12:24	WG1475072
Dichlorodifluoromethane	U		0.374	2.50	1	05/13/2020 12:24	WG1475072
1,1-Dichloroethane	U		0.100	0.500	1	05/13/2020 12:24	WG1475072
1,2-Dichloroethane	U		0.0819	0.500	1	05/13/2020 12:24	WG1475072
1,1-Dichloroethene	U		0.188	0.500	1	05/13/2020 12:24	WG1475072
cis-1,2-Dichloroethene	U		0.126	0.500	1	05/13/2020 12:24	WG1475072
trans-1,2-Dichloroethene	U		0.149	0.500	1	05/13/2020 12:24	WG1475072
1,2-Dichloropropane	U		0.149	0.500	1	05/13/2020 12:24	WG1475072
1,1-Dichloropropene	U		0.142	0.500	1	05/13/2020 12:24	WG1475072
1,3-Dichloropropane	U		0.109	1.00	1	05/13/2020 12:24	WG1475072
cis-1,3-Dichloropropene	U		0.111	0.500	1	05/13/2020 12:24	WG1475072
trans-1,3-Dichloropropene	U		0.118	0.500	1	05/13/2020 12:24	WG1475072
trans-1,4-Dichloro-2-butene	U		0.467	5.00	1	05/13/2020 12:24	WG1475072
2,2-Dichloropropane	U		0.161	0.500	1	05/13/2020 12:24	WG1475072
Di-isopropyl ether	U		0.105	0.500	1	05/13/2020 12:24	WG1475072
Ethylbenzene	U		0.137	0.500	1	05/13/2020 12:24	WG1475072
Hexachloro-1,3-butadiene	U		0.337	1.00	1	05/13/2020 12:24	WG1475072
2-Hexanone	U		0.787	5.00	1	05/13/2020 12:24	WG1475072
n-Hexane	U		0.749	5.00	1	05/13/2020 12:24	WG1475072
Iodomethane	U		0.554	5.00	1	05/13/2020 12:24	WG1475072
Isopropylbenzene	U		0.105	0.500	1	05/13/2020 12:24	WG1475072
p-Isopropyltoluene	U		0.120	0.500	1	05/13/2020 12:24	WG1475072
2-Butanone (MEK)	U		1.19	5.00	1	05/13/2020 12:24	WG1475072
Methylene Chloride	U		0.430	2.50	1	05/13/2020 12:24	WG1475072
4-Methyl-2-pentanone (MIBK)	U		0.478	5.00	1	05/13/2020 12:24	WG1475072
Methyl tert-butyl ether	U		0.101	0.500	1	05/13/2020 12:24	WG1475072
Naphthalene	0.184	J	0.174	2.50	1	05/13/2020 12:24	WG1475072
n-Propylbenzene	U		0.0993	0.500	1	05/13/2020 12:24	WG1475072
Styrene	U		0.118	0.500	1	05/13/2020 12:24	WG1475072
1,1,1,2-Tetrachloroethane	U		0.147	0.500	1	05/13/2020 12:24	WG1475072
1,1,2,2-Tetrachloroethane	U		0.133	0.500	1	05/13/2020 12:24	WG1475072
1,1,2-Trichlorotrifluoroethane	U		0.180	0.500	1	05/13/2020 12:24	WG1475072
Tetrachloroethene	U		0.300	0.500	1	05/13/2020 12:24	WG1475072
Toluene	U		0.278	0.500	1	05/13/2020 12:24	WG1475072
1,2,3-Trichlorobenzene	U		0.164	0.500	1	05/13/2020 12:24	WG1475072
1,2,4-Trichlorobenzene	U		0.481	1.00	1	05/13/2020 12:24	WG1475072
1,1,1-Trichloroethane	U		0.149	0.500	1	05/13/2020 12:24	WG1475072
1,1,2-Trichloroethane	U		0.158	0.500	1	05/13/2020 12:24	WG1475072
Trichloroethene	U		0.190	0.500	1	05/13/2020 12:24	WG1475072
Trichlorofluoromethane	U		0.160	2.50	1	05/13/2020 12:24	WG1475072
1,2,3-Trichloropropane	U		0.237	2.50	1	05/13/2020 12:24	WG1475072
1,2,4-Trimethylbenzene	U		0.322	0.500	1	05/13/2020 12:24	WG1475072
1,2,3-Trimethylbenzene	U		0.104	0.500	1	05/13/2020 12:24	WG1475072
1,3,5-Trimethylbenzene	U		0.104	0.500	1	05/13/2020 12:24	WG1475072

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Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Vinyl acetate	U		0.692	5.00	1	05/13/2020 12:24	WG1475072
Vinyl chloride	U		0.234	0.500	1	05/13/2020 12:24	WG1475072
Xylenes, Total	U		0.174	1.50	1	05/13/2020 12:24	WG1475072
(S) Toluene-d8	*108*			*80.0-120*		*05/13/2020 12:24*	WG1475072
(S) 4-Bromofluorobenzene	*108*			*77.0-126*		*05/13/2020 12:24*	WG1475072
(S) 1,2-Dichloroethane-d4	*115*			*70.0-130*		*05/13/2020 12:24*	WG1475072

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Wet Chemistry by Method 2320 B-2011

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Alkalinity	210000		8450	20000	1	05/19/2020 16:23	WG1475287

Sample Narrative:

L1217858-01 WG1475287: Endpoint pH 4.5

Wet Chemistry by Method 9056A

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Chloride	17900		379	1000	1	05/13/2020 16:54	WG1475245
Nitrate	2980		48.0	100	1	05/13/2020 16:54	WG1475245
Sulfate	87300		594	5000	1	05/13/2020 16:54	WG1475245

Wet Chemistry by Method 9060A

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
TOC (Total Organic Carbon)	3090		102	1000	1	05/16/2020 06:42	WG1476840

Metals (ICPMS) by Method 6020B

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Iron	533		48.9	100	1	05/15/2020 10:49	WG1475685
Manganese	86.5		1.32	5.00	1	05/15/2020 10:49	WG1475685

Volatile Organic Compounds (GC) by Method NWTPHGX

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Gasoline Range Organics-NWTPH	101	Z, J+ ~~B~~	31.6	100	1	05/19/2020 16:27	WG1478160
(S) a,a,a-Trifluorotoluene(FID)	*94.0*			*78.0-120*		*05/19/2020 16:27*	WG1478160

Volatile Organic Compounds (GC) by Method RSK175

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Methane	U		0.287	0.678	1	05/19/2020 11:18	WG1478419
Ethane	U		0.296	1.29	1	05/19/2020 11:18	WG1478419
Ethene	U		0.422	1.27	1	05/19/2020 11:18	WG1478419

Volatile Organic Compounds (GC/MS) by Method 8260D

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Acetone	U		11.3	25.0	1	05/16/2020 02:37	WG1477040
Acrylonitrile	U		0.671	5.00	1	05/16/2020 02:37	WG1477040
Benzene	U		0.0941	0.500	1	05/16/2020 02:37	WG1477040
Bromobenzene	U		0.118	0.500	1	05/16/2020 02:37	WG1477040
Bromodichloromethane	U		0.136	0.500	1	05/16/2020 02:37	WG1477040
Bromochloromethane	U		0.128	0.500	1	05/16/2020 02:37	WG1477040
Bromoform	U		0.129	0.500	1	05/16/2020 02:37	WG1477040
Bromomethane	U		0.605	2.50	1	05/16/2020 02:37	WG1477040
n-Butylbenzene	U		0.157	0.500	1	05/16/2020 02:37	WG1477040
sec-Butylbenzene	U		0.125	0.500	1	05/16/2020 02:37	WG1477040
tert-Butylbenzene	U		0.127	0.500	1	05/16/2020 02:37	WG1477040
Carbon disulfide	U		0.0962	0.500	1	05/16/2020 02:37	WG1477040
Carbon tetrachloride	U		0.128	0.500	1	05/16/2020 02:37	WG1477040

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Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chlorobenzene	U		0.117	0.500	1	05/16/2020 02:37	WG1477040
Chlorodibromomethane	U		0.140	0.500	1	05/16/2020 02:37	WG1477040
Chloroethane	U		0.192	2.50	1	05/16/2020 02:37	WG1477040
Chloroform	U		0.111	0.500	1	05/16/2020 02:37	WG1477040
Chloromethane	U		0.960	1.25	1	05/16/2020 02:37	WG1477040
2-Chlorotoluene	U		0.106	0.500	1	05/16/2020 02:37	WG1477040
4-Chlorotoluene	U		0.114	0.500	1	05/16/2020 02:37	WG1477040
1,2-Dibromo-3-Chloropropane	U		0.276	2.50	1	05/16/2020 02:37	WG1477040
1,2-Dibromoethane	U		0.126	0.500	1	05/16/2020 02:37	WG1477040
Dibromomethane	U		0.122	0.500	1	05/16/2020 02:37	WG1477040
1,2-Dichlorobenzene	U		0.107	0.500	1	05/16/2020 02:37	WG1477040
1,3-Dichlorobenzene	U		0.299	0.500	1	05/16/2020 02:37	WG1477040
1,4-Dichlorobenzene	U		0.120	0.500	1	05/16/2020 02:37	WG1477040
Dichlorodifluoromethane	U		0.374	2.50	1	05/16/2020 02:37	WG1477040
1,1-Dichloroethane	U		0.100	0.500	1	05/16/2020 02:37	WG1477040
1,2-Dichloroethane	U		0.0819	0.500	1	05/16/2020 02:37	WG1477040
1,1-Dichloroethene	U		0.188	0.500	1	05/16/2020 02:37	WG1477040
cis-1,2-Dichloroethene	17.6		0.126	0.500	1	05/16/2020 02:37	WG1477040
trans-1,2-Dichloroethene	0.282	J	0.149	0.500	1	05/16/2020 02:37	WG1477040
1,2-Dichloropropane	U		0.149	0.500	1	05/16/2020 02:37	WG1477040
1,1-Dichloropropene	U		0.142	0.500	1	05/16/2020 02:37	WG1477040
1,3-Dichloropropane	U		0.109	1.00	1	05/16/2020 02:37	WG1477040
cis-1,3-Dichloropropene	U		0.111	0.500	1	05/16/2020 02:37	WG1477040
trans-1,3-Dichloropropene	U		0.118	0.500	1	05/16/2020 02:37	WG1477040
trans-1,4-Dichloro-2-butene	U		0.467	5.00	1	05/16/2020 02:37	WG1477040
2,2-Dichloropropane	U		0.161	0.500	1	05/16/2020 02:37	WG1477040
Di-isopropyl ether	U		0.105	0.500	1	05/16/2020 02:37	WG1477040
Ethylbenzene	U		0.137	0.500	1	05/16/2020 02:37	WG1477040
Hexachloro-1,3-butadiene	U	UJ J0	0.337	1.00	1	05/16/2020 02:37	WG1477040
2-Hexanone	U		0.787	5.00	1	05/16/2020 02:37	WG1477040
n-Hexane	U		0.749	5.00	1	05/16/2020 02:37	WG1477040
Iodomethane	U		0.554	5.00	1	05/16/2020 02:37	WG1477040
Isopropylbenzene	U		0.105	0.500	1	05/16/2020 02:37	WG1477040
p-Isopropyltoluene	U		0.120	0.500	1	05/16/2020 02:37	WG1477040
2-Butanone (MEK)	U		1.19	5.00	1	05/16/2020 02:37	WG1477040
Methylene Chloride	U		0.430	2.50	1	05/16/2020 02:37	WG1477040
4-Methyl-2-pentanone (MIBK)	U		0.478	5.00	1	05/16/2020 02:37	WG1477040
Methyl tert-butyl ether	U		0.101	0.500	1	05/16/2020 02:37	WG1477040
Naphthalene	U	UJ J0	0.174	2.50	1	05/16/2020 02:37	WG1477040
n-Propylbenzene	U		0.0993	0.500	1	05/16/2020 02:37	WG1477040
Styrene	U		0.118	0.500	1	05/16/2020 02:37	WG1477040
1,1,1,2-Tetrachloroethane	U		0.147	0.500	1	05/16/2020 02:37	WG1477040
1,1,2,2-Tetrachloroethane	U	UJ J0	0.133	0.500	1	05/16/2020 02:37	WG1477040
1,1,2-Trichlorotrifluoroethane	U		0.180	0.500	1	05/16/2020 02:37	WG1477040
Tetrachloroethene	142		0.300	0.500	1	05/16/2020 02:37	WG1477040
Toluene	0.682		0.278	0.500	1	05/16/2020 02:37	WG1477040
1,2,3-Trichlorobenzene	U	UJ J0	0.164	0.500	1	05/16/2020 02:37	WG1477040
1,2,4-Trichlorobenzene	U	UJ J0	0.481	1.00	1	05/16/2020 02:37	WG1477040
1,1,1-Trichloroethane	U		0.149	0.500	1	05/16/2020 02:37	WG1477040
1,1,2-Trichloroethane	U		0.158	0.500	1	05/16/2020 02:37	WG1477040
Trichloroethene	30.8		0.190	0.500	1	05/16/2020 02:37	WG1477040
Trichlorofluoromethane	U		0.160	2.50	1	05/16/2020 02:37	WG1477040
1,2,3-Trichloropropane	U		0.237	2.50	1	05/16/2020 02:37	WG1477040
1,2,4-Trimethylbenzene	U		0.322	0.500	1	05/16/2020 02:37	WG1477040
1,2,3-Trimethylbenzene	U		0.104	0.500	1	05/16/2020 02:37	WG1477040
1,3,5-Trimethylbenzene	U		0.104	0.500	1	05/16/2020 02:37	WG1477040

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Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Vinyl acetate	U		0.692	5.00	1	05/16/2020 02:37	WG1477040
Vinyl chloride	U		0.234	0.500	1	05/16/2020 02:37	WG1477040
Xylenes, Total	0.387	J	0.174	1.50	1	05/16/2020 02:37	WG1477040
(S) Toluene-d8	*108*			*80.0-120*		*05/16/2020 02:37*	WG1477040
(S) 4-Bromofluorobenzene	*107*			*77.0-126*		*05/16/2020 02:37*	WG1477040
(S) 1,2-Dichloroethane-d4	*116*			*70.0-130*		*05/16/2020 02:37*	WG1477040

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Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	260000		8450	20000	1	05/19/2020 16:31	WG1475287

Sample Narrative:

L1217858-02 WG1475287: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	33500		379	1000	1	05/13/2020 18:09	WG1475245
Nitrate	U		48.0	100	1	05/13/2020 18:09	WG1475245
Sulfate	16300		594	5000	1	05/13/2020 18:09	WG1475245

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	3810		102	1000	1	05/16/2020 07:02	WG1476840

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	1960		48.9	100	1	05/15/2020 10:53	WG1475685
Manganese	854		1.32	5.00	1	05/15/2020 10:53	WG1475685

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	52.7	U ~~B J~~	31.6	100	1	05/19/2020 16:49	WG1478160
(S) a,a,a-Trifluorotoluene(FID)	*94.2*			*78.0-120*		*05/19/2020 16:49*	WG1478160

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	61.2		0.287	0.678	1	05/19/2020 11:20	WG1478419
Ethane	U		0.296	1.29	1	05/19/2020 11:20	WG1478419
Ethene	U		0.422	1.27	1	05/19/2020 11:20	WG1478419

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U		11.3	25.0	1	05/16/2020 02:56	WG1477040
Acrylonitrile	U		0.671	5.00	1	05/16/2020 02:56	WG1477040
Benzene	U		0.0941	0.500	1	05/16/2020 02:56	WG1477040
Bromobenzene	U		0.118	0.500	1	05/16/2020 02:56	WG1477040
Bromodichloromethane	U		0.136	0.500	1	05/16/2020 02:56	WG1477040
Bromochloromethane	U		0.128	0.500	1	05/16/2020 02:56	WG1477040
Bromoform	U		0.129	0.500	1	05/16/2020 02:56	WG1477040
Bromomethane	U		0.605	2.50	1	05/16/2020 02:56	WG1477040
n-Butylbenzene	U		0.157	0.500	1	05/16/2020 02:56	WG1477040
sec-Butylbenzene	U		0.125	0.500	1	05/16/2020 02:56	WG1477040
tert-Butylbenzene	U		0.127	0.500	1	05/16/2020 02:56	WG1477040
Carbon disulfide	U		0.0962	0.500	1	05/16/2020 02:56	WG1477040
Carbon tetrachloride	U		0.128	0.500	1	05/16/2020 02:56	WG1477040

JC 5/27/2020

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chlorobenzene	U		0.117	0.500	1	05/16/2020 02:56	WG1477040
Chlorodibromomethane	U		0.140	0.500	1	05/16/2020 02:56	WG1477040
Chloroethane	U		0.192	2.50	1	05/16/2020 02:56	WG1477040
Chloroform	U		0.111	0.500	1	05/16/2020 02:56	WG1477040
Chloromethane	U		0.960	1.25	1	05/16/2020 02:56	WG1477040
2-Chlorotoluene	U		0.106	0.500	1	05/16/2020 02:56	WG1477040
4-Chlorotoluene	U		0.114	0.500	1	05/16/2020 02:56	WG1477040
1,2-Dibromo-3-Chloropropane	U		0.276	2.50	1	05/16/2020 02:56	WG1477040
1,2-Dibromoethane	U		0.126	0.500	1	05/16/2020 02:56	WG1477040
Dibromomethane	U		0.122	0.500	1	05/16/2020 02:56	WG1477040
1,2-Dichlorobenzene	U		0.107	0.500	1	05/16/2020 02:56	WG1477040
1,3-Dichlorobenzene	U		0.299	0.500	1	05/16/2020 02:56	WG1477040
1,4-Dichlorobenzene	U		0.120	0.500	1	05/16/2020 02:56	WG1477040
Dichlorodifluoromethane	U		0.374	2.50	1	05/16/2020 02:56	WG1477040
1,1-Dichloroethane	U		0.100	0.500	1	05/16/2020 02:56	WG1477040
1,2-Dichloroethane	U		0.0819	0.500	1	05/16/2020 02:56	WG1477040
1,1-Dichloroethene	0.194	J	0.188	0.500	1	05/16/2020 02:56	WG1477040
cis-1,2-Dichloroethene	0.805		0.126	0.500	1	05/16/2020 02:56	WG1477040
trans-1,2-Dichloroethene	U		0.149	0.500	1	05/16/2020 02:56	WG1477040
1,2-Dichloropropane	U		0.149	0.500	1	05/16/2020 02:56	WG1477040
1,1-Dichloropropene	U		0.142	0.500	1	05/16/2020 02:56	WG1477040
1,3-Dichloropropane	U		0.109	1.00	1	05/16/2020 02:56	WG1477040
cis-1,3-Dichloropropene	U		0.111	0.500	1	05/16/2020 02:56	WG1477040
trans-1,3-Dichloropropene	U		0.118	0.500	1	05/16/2020 02:56	WG1477040
trans-1,4-Dichloro-2-butene	U		0.467	5.00	1	05/16/2020 02:56	WG1477040
2,2-Dichloropropane	U		0.161	0.500	1	05/16/2020 02:56	WG1477040
Di-isopropyl ether	U		0.105	0.500	1	05/16/2020 02:56	WG1477040
Ethylbenzene	U		0.137	0.500	1	05/16/2020 02:56	WG1477040
Hexachloro-1,3-butadiene	U UJ	J0	0.337	1.00	1	05/16/2020 02:56	WG1477040
2-Hexanone	U		0.787	5.00	1	05/16/2020 02:56	WG1477040
n-Hexane	U		0.749	5.00	1	05/16/2020 02:56	WG1477040
Iodomethane	U		0.554	5.00	1	05/16/2020 02:56	WG1477040
Isopropylbenzene	U		0.105	0.500	1	05/16/2020 02:56	WG1477040
p-Isopropyltoluene	U		0.120	0.500	1	05/16/2020 02:56	WG1477040
2-Butanone (MEK)	U UJ	J0	1.19	5.00	1	05/16/2020 02:56	WG1477040
Methylene Chloride	U		0.430	2.50	1	05/16/2020 02:56	WG1477040
4-Methyl-2-pentanone (MIBK)	U		0.478	5.00	1	05/16/2020 02:56	WG1477040
Methyl tert-butyl ether	U		0.101	0.500	1	05/16/2020 02:56	WG1477040
Naphthalene	U UJ	J0	0.174	2.50	1	05/16/2020 02:56	WG1477040
n-Propylbenzene	U		0.0993	0.500	1	05/16/2020 02:56	WG1477040
Styrene	U		0.118	0.500	1	05/16/2020 02:56	WG1477040
1,1,1,2-Tetrachloroethane	U		0.147	0.500	1	05/16/2020 02:56	WG1477040
1,1,2,2-Tetrachloroethane	U UJ	J0	0.133	0.500	1	05/16/2020 02:56	WG1477040
1,1,2-Trichlorotrifluoroethane	U		0.180	0.500	1	05/16/2020 02:56	WG1477040
Tetrachloroethene	U		0.300	0.500	1	05/16/2020 02:56	WG1477040
Toluene	0.635		0.278	0.500	1	05/16/2020 02:56	WG1477040
1,2,3-Trichlorobenzene	U UJ	J0	0.164	0.500	1	05/16/2020 02:56	WG1477040
1,2,4-Trichlorobenzene	U UJ	J0	0.481	1.00	1	05/16/2020 02:56	WG1477040
1,1,1-Trichloroethane	U		0.149	0.500	1	05/16/2020 02:56	WG1477040
1,1,2-Trichloroethane	U		0.158	0.500	1	05/16/2020 02:56	WG1477040
Trichloroethene	1.02		0.190	0.500	1	05/16/2020 02:56	WG1477040
Trichlorofluoromethane	U		0.160	2.50	1	05/16/2020 02:56	WG1477040
1,2,3-Trichloropropane	U		0.237	2.50	1	05/16/2020 02:56	WG1477040
1,2,4-Trimethylbenzene	U		0.322	0.500	1	05/16/2020 02:56	WG1477040
1,2,3-Trimethylbenzene	U		0.104	0.500	1	05/16/2020 02:56	WG1477040
1,3,5-Trimethylbenzene	U		0.104	0.500	1	05/16/2020 02:56	WG1477040

JC 5/27/2020

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Vinyl acetate	U		0.692	5.00	1	05/16/2020 02:56	WG1477040
Vinyl chloride	U		0.234	0.500	1	05/16/2020 02:56	WG1477040
Xylenes, Total	0.193	J	0.174	1.50	1	05/16/2020 02:56	WG1477040
(S) Toluene-d8	*105*			*80.0-120*		*05/16/2020 02:56*	WG1477040
(S) 4-Bromofluorobenzene	*103*			*77.0-126*		*05/16/2020 02:56*	WG1477040
(S) 1,2-Dichloroethane-d4	*117*			*70.0-130*		*05/16/2020 02:56*	WG1477040

JC 5/27/2020

Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Alkalinity	378000		8450	20000	1	05/19/2020 16:40	WG1475287

Sample Narrative:

L1217858-03 WG1475287: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chloride	19100		379	1000	1	05/13/2020 18:24	WG1475245
Nitrate	U		48.0	100	1	05/13/2020 18:24	WG1475245
Sulfate	16500		594	5000	1	05/13/2020 18:24	WG1475245

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
TOC (Total Organic Carbon)	4910		102	1000	1	05/16/2020 07:18	WG1476840

Metals (ICPMS) by Method 6020B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Iron	9230		48.9	100	1	05/15/2020 10:56	WG1475685
Manganese	819		1.32	5.00	1	05/15/2020 10:56	WG1475685

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Methane	1450		0.287	0.678	1	05/19/2020 11:23	WG1478419
Ethane	11.1		0.296	1.29	1	05/19/2020 11:23	WG1478419
Ethene	U		0.422	1.27	1	05/19/2020 11:23	WG1478419

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	U		11.3	25.0	1	05/16/2020 03:16	WG1477040
Acrylonitrile	U		0.671	5.00	1	05/16/2020 03:16	WG1477040
Benzene	16.2		0.0941	0.500	1	05/16/2020 03:16	WG1477040
Bromobenzene	U		0.118	0.500	1	05/16/2020 03:16	WG1477040
Bromodichloromethane	U		0.136	0.500	1	05/16/2020 03:16	WG1477040
Bromochloromethane	U		0.128	0.500	1	05/16/2020 03:16	WG1477040
Bromoform	U		0.129	0.500	1	05/16/2020 03:16	WG1477040
Bromomethane	U		0.605	2.50	1	05/16/2020 03:16	WG1477040
n-Butylbenzene	U		0.157	0.500	1	05/16/2020 03:16	WG1477040
sec-Butylbenzene	U		0.125	0.500	1	05/16/2020 03:16	WG1477040
tert-Butylbenzene	U		0.127	0.500	1	05/16/2020 03:16	WG1477040
Carbon disulfide	U		0.0962	0.500	1	05/16/2020 03:16	WG1477040
Carbon tetrachloride	U		0.128	0.500	1	05/16/2020 03:16	WG1477040
Chlorobenzene	U		0.117	0.500	1	05/16/2020 03:16	WG1477040
Chlorodibromomethane	U		0.140	0.500	1	05/16/2020 03:16	WG1477040
Chloroethane	U		0.192	2.50	1	05/16/2020 03:16	WG1477040
Chloroform	U		0.111	0.500	1	05/16/2020 03:16	WG1477040
Chloromethane	U		0.960	1.25	1	05/16/2020 03:16	WG1477040
2-Chlorotoluene	U		0.106	0.500	1	05/16/2020 03:16	WG1477040
4-Chlorotoluene	U		0.114	0.500	1	05/16/2020 03:16	WG1477040

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Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch	
1,2-Dibromo-3-Chloropropane	U		0.276	2.50	1	05/16/2020 03:16	WG1477040	
1,2-Dibromoethane	U		0.126	0.500	1	05/16/2020 03:16	WG1477040	
Dibromomethane	U		0.122	0.500	1	05/16/2020 03:16	WG1477040	
1,2-Dichlorobenzene	U		0.107	0.500	1	05/16/2020 03:16	WG1477040	
1,3-Dichlorobenzene	U		0.299	0.500	1	05/16/2020 03:16	WG1477040	
1,4-Dichlorobenzene	U		0.120	0.500	1	05/16/2020 03:16	WG1477040	
Dichlorodifluoromethane	U		0.374	2.50	1	05/16/2020 03:16	WG1477040	
1,1-Dichloroethane	U		0.100	0.500	1	05/16/2020 03:16	WG1477040	
1,2-Dichloroethane	U		0.0819	0.500	1	05/16/2020 03:16	WG1477040	
1,1-Dichloroethene	U		0.188	0.500	1	05/16/2020 03:16	WG1477040	
cis-1,2-Dichloroethene	41.4		0.126	0.500	1	05/16/2020 03:16	WG1477040	
trans-1,2-Dichloroethene	U		0.149	0.500	1	05/16/2020 03:16	WG1477040	
1,2-Dichloropropane	U		0.149	0.500	1	05/16/2020 03:16	WG1477040	
1,1-Dichloropropene	U		0.142	0.500	1	05/16/2020 03:16	WG1477040	
1,3-Dichloropropane	U		0.109	1.00	1	05/16/2020 03:16	WG1477040	
cis-1,3-Dichloropropene	U		0.111	0.500	1	05/16/2020 03:16	WG1477040	
trans-1,3-Dichloropropene	U		0.118	0.500	1	05/16/2020 03:16	WG1477040	
trans-1,4-Dichloro-2-butene	U		0.467	5.00	1	05/16/2020 03:16	WG1477040	
2,2-Dichloropropane	U		0.161	0.500	1	05/16/2020 03:16	WG1477040	
Di-isopropyl ether	0.179	J	0.105	0.500	1	05/16/2020 03:16	WG1477040	
Ethylbenzene	U		0.137	0.500	1	05/16/2020 03:16	WG1477040	
Hexachloro-1,3-butadiene	U	UJ J0	0.337	1.00	1	05/16/2020 03:16	WG1477040	
2-Hexanone	U		0.787	5.00	1	05/16/2020 03:16	WG1477040	
n-Hexane	U		0.749	5.00	1	05/16/2020 03:16	WG1477040	
Iodomethane	U		0.554	5.00	1	05/16/2020 03:16	WG1477040	
Isopropylbenzene	U		0.105	0.500	1	05/16/2020 03:16	WG1477040	
p-Isopropyltoluene	U		0.120	0.500	1	05/16/2020 03:16	WG1477040	
2-Butanone (MEK)	U		1.19	5.00	1	05/16/2020 03:16	WG1477040	
Methylene Chloride	U		0.430	2.50	1	05/16/2020 03:16	WG1477040	
4-Methyl-2-pentanone (MIBK)	U		0.478	5.00	1	05/16/2020 03:16	WG1477040	
Methyl tert-butyl ether	U		0.101	0.500	1	05/16/2020 03:16	WG1477040	
Naphthalene	U	UJ J0	0.174	2.50	1	05/16/2020 03:16	WG1477040	
n-Propylbenzene	U		0.0993	0.500	1	05/16/2020 03:16	WG1477040	
Styrene	U		0.118	0.500	1	05/16/2020 03:16	WG1477040	
1,1,1,2-Tetrachloroethane	U		0.147	0.500	1	05/16/2020 03:16	WG1477040	
1,1,2,2-Tetrachloroethane	U	UJ J0	0.133	0.500	1	05/16/2020 03:16	WG1477040	
1,1,2-Trichlorotrifluoroethane	U		0.180	0.500	1	05/16/2020 03:16	WG1477040	
Tetrachloroethene	U		0.300	0.500	1	05/16/2020 03:16	WG1477040	
Toluene	U		0.278	0.500	1	05/16/2020 03:16	WG1477040	
1,2,3-Trichlorobenzene	U	UJ J0	0.164	0.500	1	05/16/2020 03:16	WG1477040	
1,2,4-Trichlorobenzene	U	UJ J0	0.481	1.00	1	05/16/2020 03:16	WG1477040	
1,1,1-Trichloroethane	U		0.149	0.500	1	05/16/2020 03:16	WG1477040	
1,1,2-Trichloroethane	U		0.158	0.500	1	05/16/2020 03:16	WG1477040	
Trichloroethene	U		0.190	0.500	1	05/16/2020 03:16	WG1477040	
Trichlorofluoromethane	U		0.160	2.50	1	05/16/2020 03:16	WG1477040	
1,2,3-Trichloropropane	U		0.237	2.50	1	05/16/2020 03:16	WG1477040	
1,2,4-Trimethylbenzene	U		0.322	0.500	1	05/16/2020 03:16	WG1477040	
1,2,3-Trimethylbenzene	U		0.104	0.500	1	05/16/2020 03:16	WG1477040	
1,3,5-Trimethylbenzene	U		0.104	0.500	1	05/16/2020 03:16	WG1477040	
Vinyl acetate	U		0.692	5.00	1	05/16/2020 03:16	WG1477040	
Vinyl chloride	10.4		0.234	0.500	1	05/16/2020 03:16	WG1477040	
Xylenes, Total	U		0.174	1.50	1	05/16/2020 03:16	WG1477040	
(S) Toluene-d8	*109*			*80.0-120*		*05/16/2020 03:16*	WG1477040	
(S) 4-Bromofluorobenzene	*107*			*77.0-126*		*05/16/2020 03:16*	WG1477040	JC 5/27/2020
(S) 1,2-Dichloroethane-d4	*114*			*70.0-130*		*05/16/2020 03:16*	WG1477040	

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Wet Chemistry by Method 2320 B-2011

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Alkalinity	545000		8450	20000	1	05/19/2020 16:48	WG1475287

Sample Narrative:

L1217858-04 WG1475287: Endpoint pH 4.5

Wet Chemistry by Method 9056A

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Chloride	12800		379	1000	1	05/13/2020 18:39	WG1475245
Nitrate	U		48.0	100	1	05/13/2020 18:39	WG1475245
Sulfate	2310	J	594	5000	1	05/13/2020 18:39	WG1475245

Wet Chemistry by Method 9060A

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
TOC (Total Organic Carbon)	6540		102	1000	1	05/16/2020 07:33	WG1476840

Metals (ICPMS) by Method 6020B

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Iron	14200		48.9	100	1	05/15/2020 10:59	WG1475685
Manganese	1900		1.32	5.00	1	05/15/2020 10:59	WG1475685

Volatile Organic Compounds (GC) by Method RSK175

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Methane	19600		2.87	6.78	10	05/20/2020 10:43	WG1479116
Ethane	U		0.296	1.29	1	05/19/2020 11:32	WG1478419
Ethene	U		0.422	1.27	1	05/19/2020 11:32	WG1478419

Volatile Organic Compounds (GC/MS) by Method 8260D

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Acetone	U		11.3	25.0	1	05/16/2020 03:35	WG1477040
Acrylonitrile	U		0.671	5.00	1	05/16/2020 03:35	WG1477040
Benzene	U		0.0941	0.500	1	05/16/2020 03:35	WG1477040
Bromobenzene	U		0.118	0.500	1	05/16/2020 03:35	WG1477040
Bromodichloromethane	U		0.136	0.500	1	05/16/2020 03:35	WG1477040
Bromochloromethane	U		0.128	0.500	1	05/16/2020 03:35	WG1477040
Bromoform	U		0.129	0.500	1	05/16/2020 03:35	WG1477040
Bromomethane	U		0.605	2.50	1	05/16/2020 03:35	WG1477040
n-Butylbenzene	U		0.157	0.500	1	05/16/2020 03:35	WG1477040
sec-Butylbenzene	U		0.125	0.500	1	05/16/2020 03:35	WG1477040
tert-Butylbenzene	U		0.127	0.500	1	05/16/2020 03:35	WG1477040
Carbon disulfide	U		0.0962	0.500	1	05/16/2020 03:35	WG1477040
Carbon tetrachloride	U		0.128	0.500	1	05/16/2020 03:35	WG1477040
Chlorobenzene	U		0.117	0.500	1	05/16/2020 03:35	WG1477040
Chlorodibromomethane	U		0.140	0.500	1	05/16/2020 03:35	WG1477040
Chloroethane	U		0.192	2.50	1	05/16/2020 03:35	WG1477040
Chloroform	U		0.111	0.500	1	05/16/2020 03:35	WG1477040
Chloromethane	U		0.960	1.25	1	05/16/2020 03:35	WG1477040
2-Chlorotoluene	U		0.106	0.500	1	05/16/2020 03:35	WG1477040
4-Chlorotoluene	U		0.114	0.500	1	05/16/2020 03:35	WG1477040

JC 5/27/2020

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l		Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,2-Dibromo-3-Chloropropane	U			0.276	2.50	1	05/16/2020 03:35	WG1477040
1,2-Dibromoethane	U			0.126	0.500	1	05/16/2020 03:35	WG1477040
Dibromomethane	U			0.122	0.500	1	05/16/2020 03:35	WG1477040
1,2-Dichlorobenzene	U			0.107	0.500	1	05/16/2020 03:35	WG1477040
1,3-Dichlorobenzene	U			0.299	0.500	1	05/16/2020 03:35	WG1477040
1,4-Dichlorobenzene	U			0.120	0.500	1	05/16/2020 03:35	WG1477040
Dichlorodifluoromethane	U			0.374	2.50	1	05/16/2020 03:35	WG1477040
1,1-Dichloroethane	U			0.100	0.500	1	05/16/2020 03:35	WG1477040
1,2-Dichloroethane	U			0.0819	0.500	1	05/16/2020 03:35	WG1477040
1,1-Dichloroethene	U			0.188	0.500	1	05/16/2020 03:35	WG1477040
cis-1,2-Dichloroethene	U			0.126	0.500	1	05/16/2020 03:35	WG1477040
trans-1,2-Dichloroethene	U			0.149	0.500	1	05/16/2020 03:35	WG1477040
1,2-Dichloropropane	U			0.149	0.500	1	05/16/2020 03:35	WG1477040
1,1-Dichloropropene	U			0.142	0.500	1	05/16/2020 03:35	WG1477040
1,3-Dichloropropane	U			0.109	1.00	1	05/16/2020 03:35	WG1477040
cis-1,3-Dichloropropene	U			0.111	0.500	1	05/16/2020 03:35	WG1477040
trans-1,3-Dichloropropene	U			0.118	0.500	1	05/16/2020 03:35	WG1477040
trans-1,4-Dichloro-2-butene	U			0.467	5.00	1	05/16/2020 03:35	WG1477040
2,2-Dichloropropane	U			0.161	0.500	1	05/16/2020 03:35	WG1477040
Di-isopropyl ether	U			0.105	0.500	1	05/16/2020 03:35	WG1477040
Ethylbenzene	U			0.137	0.500	1	05/16/2020 03:35	WG1477040
Hexachloro-1,3-butadiene	U	UJ	J0	0.337	1.00	1	05/16/2020 03:35	WG1477040
2-Hexanone	U			0.787	5.00	1	05/16/2020 03:35	WG1477040
n-Hexane	U			0.749	5.00	1	05/16/2020 03:35	WG1477040
Iodomethane	U			0.554	5.00	1	05/16/2020 03:35	WG1477040
Isopropylbenzene	U			0.105	0.500	1	05/16/2020 03:35	WG1477040
p-Isopropyltoluene	U			0.120	0.500	1	05/16/2020 03:35	WG1477040
2-Butanone (MEK)	U			1.19	5.00	1	05/16/2020 03:35	WG1477040
Methylene Chloride	U			0.430	2.50	1	05/16/2020 03:35	WG1477040
4-Methyl-2-pentanone (MIBK)	U			0.478	5.00	1	05/16/2020 03:35	WG1477040
Methyl tert-butyl ether	U			0.101	0.500	1	05/16/2020 03:35	WG1477040
Naphthalene	U	UJ	J0	0.174	2.50	1	05/16/2020 03:35	WG1477040
n-Propylbenzene	U			0.0993	0.500	1	05/16/2020 03:35	WG1477040
Styrene	U			0.118	0.500	1	05/16/2020 03:35	WG1477040
1,1,1,2-Tetrachloroethane	U			0.147	0.500	1	05/16/2020 03:35	WG1477040
1,1,2,2-Tetrachloroethane	U	UJ	J0	0.133	0.500	1	05/16/2020 03:35	WG1477040
1,1,2-Trichlorotrifluoroethane	U			0.180	0.500	1	05/16/2020 03:35	WG1477040
Tetrachloroethene	U			0.300	0.500	1	05/16/2020 03:35	WG1477040
Toluene	0.428		J	0.278	0.500	1	05/16/2020 03:35	WG1477040
1,2,3-Trichlorobenzene	U	UJ	J0	0.164	0.500	1	05/16/2020 03:35	WG1477040
1,2,4-Trichlorobenzene	U	UJ	J0	0.481	1.00	1	05/16/2020 03:35	WG1477040
1,1,1-Trichloroethane	U			0.149	0.500	1	05/16/2020 03:35	WG1477040
1,1,2-Trichloroethane	U			0.158	0.500	1	05/16/2020 03:35	WG1477040
Trichloroethene	U			0.190	0.500	1	05/16/2020 03:35	WG1477040
Trichlorofluoromethane	U			0.160	2.50	1	05/16/2020 03:35	WG1477040
1,2,3-Trichloropropane	U			0.237	2.50	1	05/16/2020 03:35	WG1477040
1,2,4-Trimethylbenzene	U			0.322	0.500	1	05/16/2020 03:35	WG1477040
1,2,3-Trimethylbenzene	U			0.104	0.500	1	05/16/2020 03:35	WG1477040
1,3,5-Trimethylbenzene	U			0.104	0.500	1	05/16/2020 03:35	WG1477040
Vinyl acetate	U			0.692	5.00	1	05/16/2020 03:35	WG1477040
Vinyl chloride	U			0.234	0.500	1	05/16/2020 03:35	WG1477040
Xylenes, Total	0.635		J	0.174	1.50	1	05/16/2020 03:35	WG1477040
(S) Toluene-d8	*106*				*80.0-120*		*05/16/2020 03:35*	WG1477040
(S) 4-Bromofluorobenzene	*104*				*77.0-126*		*05/16/2020 03:35*	WG1477040
(S) 1,2-Dichloroethane-d4	*122*				*70.0-130*		*05/16/2020 03:35*	WG1477040

JC 5/27/2020

MW-931-051420

Collected date/time: 05/14/20 07:00

SAMPLE RESULTS - 01

L1218975

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	299000		8450	20000	1	05/21/2020 12:46	WG1477103

Sample Narrative:

L1218975-01 WG1477103: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	14800		379	1000	1	05/15/2020 16:08	WG1476644
Nitrate	U		48.0	100	1	05/15/2020 16:08	WG1476644
Sulfate	37800		594	5000	1	05/15/2020 16:08	WG1476644

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	3700	~~B~~	102	1000	1	05/20/2020 05:18	WG1478610

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	2610		244	500	5	05/20/2020 20:43	WG1476868
Manganese	829	~~V~~	1.32	5.00	1	05/20/2020 10:15	WG1476868

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	979	J	0.287	0.678	1	05/20/2020 12:53	WG1479119
Ethane	U		0.296	1.29	1	05/20/2020 12:53	WG1479119
Ethene	U		0.422	1.27	1	05/20/2020 12:53	WG1479119

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U		11.3	25.0	1	05/18/2020 23:15	WG1477940
Acrylonitrile	U		0.671	5.00	1	05/18/2020 23:15	WG1477940
Benzene	U		0.0941	0.500	1	05/18/2020 23:15	WG1477940
Bromobenzene	U		0.118	0.500	1	05/18/2020 23:15	WG1477940
Bromodichloromethane	U		0.136	0.500	1	05/18/2020 23:15	WG1477940
Bromochloromethane	U		0.128	0.500	1	05/18/2020 23:15	WG1477940
Bromoform	U	UJ J0	0.129	0.500	1	05/18/2020 23:15	WG1477940
Bromomethane	U		0.605	2.50	1	05/18/2020 23:15	WG1477940
n-Butylbenzene	U		0.157	0.500	1	05/18/2020 23:15	WG1477940
sec-Butylbenzene	U	~~J4~~	0.125	0.500	1	05/18/2020 23:15	WG1477940
tert-Butylbenzene	U		0.127	0.500	1	05/18/2020 23:15	WG1477940
Carbon disulfide	0.0964	J	0.0962	0.500	1	05/18/2020 23:15	WG1477940
Carbon tetrachloride	U		0.128	0.500	1	05/18/2020 23:15	WG1477940
Chlorobenzene	U		0.117	0.500	1	05/18/2020 23:15	WG1477940
Chlorodibromomethane	U		0.140	0.500	1	05/18/2020 23:15	WG1477940
Chloroethane	U		0.192	2.50	1	05/18/2020 23:15	WG1477940
Chloroform	U		0.111	0.500	1	05/18/2020 23:15	WG1477940
Chloromethane	U		0.960	1.25	1	05/18/2020 23:15	WG1477940
2-Chlorotoluene	U		0.106	0.500	1	05/18/2020 23:15	WG1477940
4-Chlorotoluene	U	~~J4~~	0.114	0.500	1	05/18/2020 23:15	WG1477940

JC 5/27/2020

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,2-Dibromo-3-Chloropropane	U	UJ J0	0.276	2.50	1	05/18/2020 23:15	WG1477940
1,2-Dibromoethane	U		0.126	0.500	1	05/18/2020 23:15	WG1477940
Dibromomethane	U		0.122	0.500	1	05/18/2020 23:15	WG1477940
1,2-Dichlorobenzene	U		0.107	0.500	1	05/18/2020 23:15	WG1477940
1,3-Dichlorobenzene	U		0.299	0.500	1	05/18/2020 23:15	WG1477940
1,4-Dichlorobenzene	U		0.120	0.500	1	05/18/2020 23:15	WG1477940
Dichlorodifluoromethane	U		0.374	2.50	1	05/18/2020 23:15	WG1477940
1,1-Dichloroethane	U		0.100	0.500	1	05/18/2020 23:15	WG1477940
1,2-Dichloroethane	U		0.0819	0.500	1	05/18/2020 23:15	WG1477940
1,1-Dichloroethene	U		0.188	0.500	1	05/18/2020 23:15	WG1477940
cis-1,2-Dichloroethene	U		0.126	0.500	1	05/18/2020 23:15	WG1477940
trans-1,2-Dichloroethene	U		0.149	0.500	1	05/18/2020 23:15	WG1477940
1,2-Dichloropropane	U		0.149	0.500	1	05/18/2020 23:15	WG1477940
1,1-Dichloropropene	U		0.142	0.500	1	05/18/2020 23:15	WG1477940
1,3-Dichloropropane	U		0.109	1.00	1	05/18/2020 23:15	WG1477940
cis-1,3-Dichloropropene	U		0.111	0.500	1	05/18/2020 23:15	WG1477940
trans-1,3-Dichloropropene	U		0.118	0.500	1	05/18/2020 23:15	WG1477940
trans-1,4-Dichloro-2-butene	U	UJ J0	0.467	5.00	1	05/18/2020 23:15	WG1477940
2,2-Dichloropropane	U		0.161	0.500	1	05/18/2020 23:15	WG1477940
Di-isopropyl ether	U		0.105	0.500	1	05/18/2020 23:15	WG1477940
Ethylbenzene	U		0.137	0.500	1	05/18/2020 23:15	WG1477940
Hexachloro-1,3-butadiene	U		0.337	1.00	1	05/18/2020 23:15	WG1477940
2-Hexanone	U		0.787	5.00	1	05/18/2020 23:15	WG1477940
n-Hexane	U		0.749	5.00	1	05/18/2020 23:15	WG1477940
Iodomethane	U		0.554	5.00	1	05/18/2020 23:15	WG1477940
Isopropylbenzene	U		0.105	0.500	1	05/18/2020 23:15	WG1477940
p-Isopropyltoluene	U		0.120	0.500	1	05/18/2020 23:15	WG1477940
2-Butanone (MEK)	U		1.19	5.00	1	05/18/2020 23:15	WG1477940
Methylene Chloride	U		0.430	2.50	1	05/18/2020 23:15	WG1477940
4-Methyl-2-pentanone (MIBK)	U		0.478	5.00	1	05/18/2020 23:15	WG1477940
Methyl tert-butyl ether	U		0.101	0.500	1	05/18/2020 23:15	WG1477940
Naphthalene	U	UJ J0 ~~J3~~	0.174	2.50	1	05/18/2020 23:15	WG1477940
n-Propylbenzene	U		0.0993	0.500	1	05/18/2020 23:15	WG1477940
Styrene	U		0.118	0.500	1	05/18/2020 23:15	WG1477940
1,1,1,2-Tetrachloroethane	U		0.147	0.500	1	05/18/2020 23:15	WG1477940
1,1,2,2-Tetrachloroethane	U		0.133	0.500	1	05/18/2020 23:15	WG1477940
1,1,2-Trichlorotrifluoroethane	U		0.180	0.500	1	05/18/2020 23:15	WG1477940
Tetrachloroethene	U		0.300	0.500	1	05/18/2020 23:15	WG1477940
Toluene	U		0.278	0.500	1	05/18/2020 23:15	WG1477940
1,2,3-Trichlorobenzene	U	UJ J0 ~~J3~~	0.164	0.500	1	05/18/2020 23:15	WG1477940
1,2,4-Trichlorobenzene	U		0.481	1.00	1	05/18/2020 23:15	WG1477940
1,1,1-Trichloroethane	U		0.149	0.500	1	05/18/2020 23:15	WG1477940
1,1,2-Trichloroethane	U		0.158	0.500	1	05/18/2020 23:15	WG1477940
Trichloroethene	U		0.190	0.500	1	05/18/2020 23:15	WG1477940
Trichlorofluoromethane	U		0.160	2.50	1	05/18/2020 23:15	WG1477940
1,2,3-Trichloropropane	U		0.237	2.50	1	05/18/2020 23:15	WG1477940
1,2,4-Trimethylbenzene	U		0.322	0.500	1	05/18/2020 23:15	WG1477940
1,2,3-Trimethylbenzene	U		0.104	0.500	1	05/18/2020 23:15	WG1477940
1,3,5-Trimethylbenzene	U		0.104	0.500	1	05/18/2020 23:15	WG1477940
Vinyl acetate	U		0.692	5.00	1	05/18/2020 23:15	WG1477940
Vinyl chloride	U		0.234	0.500	1	05/18/2020 23:15	WG1477940
Xylenes, Total	U		0.174	1.50	1	05/18/2020 23:15	WG1477940
(S) Toluene-d8	*103*			*80.0-120*		*05/18/2020 23:15*	WG1477940
(S) 4-Bromofluorobenzene	*103*			*77.0-126*		*05/18/2020 23:15*	WG1477940
(S) 1,2-Dichloroethane-d4	*117*			*70.0-130*		*05/18/2020 23:15*	WG1477940

JC 5/27/2020

FMW-143-051420
Collected date/time: 05/14/20 08:25

SAMPLE RESULTS - 02

L1218975

Wet Chemistry by Method 2320 B-2011

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Alkalinity	333000		8450	20000	1	05/21/2020 12:53	WG1477103

Sample Narrative:

L1218975-02 WG1477103: Endpoint pH 4.5

Wet Chemistry by Method 9056A

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Chloride	59400		379	1000	1	05/15/2020 16:19	WG1476644
Nitrate	U		48.0	100	1	05/15/2020 16:19	WG1476644
Sulfate	62700		594	5000	1	05/15/2020 16:19	WG1476644

Wet Chemistry by Method 9060A

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
TOC (Total Organic Carbon)	3990		102	1000	1	05/19/2020 23:08	WG1478998

Metals (ICPMS) by Method 6020B

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Iron	6170		244	500	5	05/20/2020 20:46	WG1476868
Manganese	7510		1.32	5.00	1	05/20/2020 13:30	WG1476868

Volatile Organic Compounds (GC) by Method RSK175

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Methane	404		0.287	0.678	1	05/20/2020 12:55	WG1479119
Ethane	U		0.296	1.29	1	05/20/2020 12:55	WG1479119
Ethene	U		0.422	1.27	1	05/20/2020 12:55	WG1479119

Volatile Organic Compounds (GC/MS) by Method 8260D

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Acetone	U		11.3	25.0	1	05/18/2020 23:36	WG1477940
Acrylonitrile	U		0.671	5.00	1	05/18/2020 23:36	WG1477940
Benzene	U		0.0941	0.500	1	05/18/2020 23:36	WG1477940
Bromobenzene	U		0.118	0.500	1	05/18/2020 23:36	WG1477940
Bromodichloromethane	U		0.136	0.500	1	05/18/2020 23:36	WG1477940
Bromochloromethane	U		0.128	0.500	1	05/18/2020 23:36	WG1477940
Bromoform	U	UJ J0	0.129	0.500	1	05/18/2020 23:36	WG1477940
Bromomethane	U		0.605	2.50	1	05/18/2020 23:36	WG1477940
n-Butylbenzene	U		0.157	0.500	1	05/18/2020 23:36	WG1477940
sec-Butylbenzene	U	~~J4~~	0.125	0.500	1	05/18/2020 23:36	WG1477940
tert-Butylbenzene	U		0.127	0.500	1	05/18/2020 23:36	WG1477940
Carbon disulfide	U		0.0962	0.500	1	05/18/2020 23:36	WG1477940
Carbon tetrachloride	U		0.128	0.500	1	05/18/2020 23:36	WG1477940
Chlorobenzene	U		0.117	0.500	1	05/18/2020 23:36	WG1477940
Chlorodibromomethane	U		0.140	0.500	1	05/18/2020 23:36	WG1477940
Chloroethane	U		0.192	2.50	1	05/18/2020 23:36	WG1477940
Chloroform	U		0.111	0.500	1	05/18/2020 23:36	WG1477940
Chloromethane	U		0.960	1.25	1	05/18/2020 23:36	WG1477940
2-Chlorotoluene	U		0.106	0.500	1	05/18/2020 23:36	WG1477940
4-Chlorotoluene	U	~~J4~~	0.114	0.500	1	05/18/2020 23:36	WG1477940

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Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l		Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,2-Dibromo-3-Chloropropane	U	UJ	J0	0.276	2.50	1	05/18/2020 23:36	WG1477940
1,2-Dibromoethane	U			0.126	0.500	1	05/18/2020 23:36	WG1477940
Dibromomethane	U			0.122	0.500	1	05/18/2020 23:36	WG1477940
1,2-Dichlorobenzene	U			0.107	0.500	1	05/18/2020 23:36	WG1477940
1,3-Dichlorobenzene	U			0.299	0.500	1	05/18/2020 23:36	WG1477940
1,4-Dichlorobenzene	U			0.120	0.500	1	05/18/2020 23:36	WG1477940
Dichlorodifluoromethane	U			0.374	2.50	1	05/18/2020 23:36	WG1477940
1,1-Dichloroethane	U			0.100	0.500	1	05/18/2020 23:36	WG1477940
1,2-Dichloroethane	U			0.0819	0.500	1	05/18/2020 23:36	WG1477940
1,1-Dichloroethene	U			0.188	0.500	1	05/18/2020 23:36	WG1477940
cis-1,2-Dichloroethene	U			0.126	0.500	1	05/18/2020 23:36	WG1477940
trans-1,2-Dichloroethene	U			0.149	0.500	1	05/18/2020 23:36	WG1477940
1,2-Dichloropropane	U			0.149	0.500	1	05/18/2020 23:36	WG1477940
1,1-Dichloropropene	U			0.142	0.500	1	05/18/2020 23:36	WG1477940
1,3-Dichloropropane	U			0.109	1.00	1	05/18/2020 23:36	WG1477940
cis-1,3-Dichloropropene	U			0.111	0.500	1	05/18/2020 23:36	WG1477940
trans-1,3-Dichloropropene	U			0.118	0.500	1	05/18/2020 23:36	WG1477940
trans-1,4-Dichloro-2-butene	U	UJ	J0	0.467	5.00	1	05/18/2020 23:36	WG1477940
2,2-Dichloropropane	U			0.161	0.500	1	05/18/2020 23:36	WG1477940
Di-isopropyl ether	U			0.105	0.500	1	05/18/2020 23:36	WG1477940
Ethylbenzene	U			0.137	0.500	1	05/18/2020 23:36	WG1477940
Hexachloro-1,3-butadiene	U			0.337	1.00	1	05/18/2020 23:36	WG1477940
2-Hexanone	U			0.787	5.00	1	05/18/2020 23:36	WG1477940
n-Hexane	U			0.749	5.00	1	05/18/2020 23:36	WG1477940
Iodomethane	U			0.554	5.00	1	05/18/2020 23:36	WG1477940
Isopropylbenzene	U			0.105	0.500	1	05/18/2020 23:36	WG1477940
p-Isopropyltoluene	U			0.120	0.500	1	05/18/2020 23:36	WG1477940
2-Butanone (MEK)	U			1.19	5.00	1	05/18/2020 23:36	WG1477940
Methylene Chloride	U			0.430	2.50	1	05/18/2020 23:36	WG1477940
4-Methyl-2-pentanone (MIBK)	U			0.478	5.00	1	05/18/2020 23:36	WG1477940
Methyl tert-butyl ether	U			0.101	0.500	1	05/18/2020 23:36	WG1477940
Naphthalene	U	UJ	J0 ~~J3~~	0.174	2.50	1	05/18/2020 23:36	WG1477940
n-Propylbenzene	U			0.0993	0.500	1	05/18/2020 23:36	WG1477940
Styrene	U			0.118	0.500	1	05/18/2020 23:36	WG1477940
1,1,1,2-Tetrachloroethane	U			0.147	0.500	1	05/18/2020 23:36	WG1477940
1,1,2,2-Tetrachloroethane	U			0.133	0.500	1	05/18/2020 23:36	WG1477940
1,1,2-Trichlorotrifluoroethane	U			0.180	0.500	1	05/18/2020 23:36	WG1477940
Tetrachloroethene	U			0.300	0.500	1	05/18/2020 23:36	WG1477940
Toluene	0.319		J	0.278	0.500	1	05/18/2020 23:36	WG1477940
1,2,3-Trichlorobenzene	U	UJ	J0 ~~J3~~	0.164	0.500	1	05/18/2020 23:36	WG1477940
1,2,4-Trichlorobenzene	U			0.481	1.00	1	05/18/2020 23:36	WG1477940
1,1,1-Trichloroethane	U			0.149	0.500	1	05/18/2020 23:36	WG1477940
1,1,2-Trichloroethane	U			0.158	0.500	1	05/18/2020 23:36	WG1477940
Trichloroethene	U			0.190	0.500	1	05/18/2020 23:36	WG1477940
Trichlorofluoromethane	U			0.160	2.50	1	05/18/2020 23:36	WG1477940
1,2,3-Trichloropropane	U			0.237	2.50	1	05/18/2020 23:36	WG1477940
1,2,4-Trimethylbenzene	U			0.322	0.500	1	05/18/2020 23:36	WG1477940
1,2,3-Trimethylbenzene	U			0.104	0.500	1	05/18/2020 23:36	WG1477940
1,3,5-Trimethylbenzene	U			0.104	0.500	1	05/18/2020 23:36	WG1477940
Vinyl acetate	U			0.692	5.00	1	05/18/2020 23:36	WG1477940
Vinyl chloride	U			0.234	0.500	1	05/18/2020 23:36	WG1477940
Xylenes, Total	0.201		J	0.174	1.50	1	05/18/2020 23:36	WG1477940
(S) Toluene-d8	*105*				*80.0-120*		*05/18/2020 23:36*	WG1477940
(S) 4-Bromofluorobenzene	*99.8*				*77.0-126*		*05/18/2020 23:36*	WG1477940
(S) 1,2-Dichloroethane-d4	*116*				*70.0-130*		*05/18/2020 23:36*	WG1477940

JC 5/27/2020

Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	298000		8450	20000	1	05/21/2020 13:00	WG1477103

Sample Narrative:

L1218975-03 WG1477103: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	14800		379	1000	1	05/15/2020 16:52	WG1476644
Nitrate	U		48.0	100	1	05/15/2020 16:52	WG1476644
Sulfate	36800		594	5000	1	05/15/2020 16:52	WG1476644

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	3010		102	1000	1	05/19/2020 23:29	WG1478998

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	2810		244	500	5	05/20/2020 20:50	WG1476868
Manganese	866		1.32	5.00	1	05/20/2020 13:33	WG1476868

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	1380	J	0.287	0.678	1	05/20/2020 12:58	WG1479119
Ethane	U		0.296	1.29	1	05/20/2020 12:58	WG1479119
Ethene	U		0.422	1.27	1	05/20/2020 12:58	WG1479119

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U		11.3	25.0	1	05/18/2020 23:56	WG1477940
Acrylonitrile	U		0.671	5.00	1	05/18/2020 23:56	WG1477940
Benzene	U		0.0941	0.500	1	05/18/2020 23:56	WG1477940
Bromobenzene	U		0.118	0.500	1	05/18/2020 23:56	WG1477940
Bromodichloromethane	U		0.136	0.500	1	05/18/2020 23:56	WG1477940
Bromochloromethane	U		0.128	0.500	1	05/18/2020 23:56	WG1477940
Bromoform	U	UJ J0	0.129	0.500	1	05/18/2020 23:56	WG1477940
Bromomethane	U		0.605	2.50	1	05/18/2020 23:56	WG1477940
n-Butylbenzene	U		0.157	0.500	1	05/18/2020 23:56	WG1477940
sec-Butylbenzene	U	~~J4~~	0.125	0.500	1	05/18/2020 23:56	WG1477940
tert-Butylbenzene	U		0.127	0.500	1	05/18/2020 23:56	WG1477940
Carbon disulfide	U		0.0962	0.500	1	05/18/2020 23:56	WG1477940
Carbon tetrachloride	U		0.128	0.500	1	05/18/2020 23:56	WG1477940
Chlorobenzene	U		0.117	0.500	1	05/18/2020 23:56	WG1477940
Chlorodibromomethane	U		0.140	0.500	1	05/18/2020 23:56	WG1477940
Chloroethane	U		0.192	2.50	1	05/18/2020 23:56	WG1477940
Chloroform	U		0.111	0.500	1	05/18/2020 23:56	WG1477940
Chloromethane	U		0.960	1.25	1	05/18/2020 23:56	WG1477940
2-Chlorotoluene	U		0.106	0.500	1	05/18/2020 23:56	WG1477940
4-Chlorotoluene	U	~~J4~~	0.114	0.500	1	05/18/2020 23:56	WG1477940

JC 5/27/2020

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,2-Dibromo-3-Chloropropane	U	UJ J0	0.276	2.50	1	05/18/2020 23:56	WG1477940
1,2-Dibromoethane	U		0.126	0.500	1	05/18/2020 23:56	WG1477940
Dibromomethane	U		0.122	0.500	1	05/18/2020 23:56	WG1477940
1,2-Dichlorobenzene	U		0.107	0.500	1	05/18/2020 23:56	WG1477940
1,3-Dichlorobenzene	U		0.299	0.500	1	05/18/2020 23:56	WG1477940
1,4-Dichlorobenzene	U		0.120	0.500	1	05/18/2020 23:56	WG1477940
Dichlorodifluoromethane	U		0.374	2.50	1	05/18/2020 23:56	WG1477940
1,1-Dichloroethane	U		0.100	0.500	1	05/18/2020 23:56	WG1477940
1,2-Dichloroethane	U		0.0819	0.500	1	05/18/2020 23:56	WG1477940
1,1-Dichloroethene	U		0.188	0.500	1	05/18/2020 23:56	WG1477940
cis-1,2-Dichloroethene	U		0.126	0.500	1	05/18/2020 23:56	WG1477940
trans-1,2-Dichloroethene	U		0.149	0.500	1	05/18/2020 23:56	WG1477940
1,2-Dichloropropane	U		0.149	0.500	1	05/18/2020 23:56	WG1477940
1,1-Dichloropropene	U		0.142	0.500	1	05/18/2020 23:56	WG1477940
1,3-Dichloropropane	U		0.109	1.00	1	05/18/2020 23:56	WG1477940
cis-1,3-Dichloropropene	U		0.111	0.500	1	05/18/2020 23:56	WG1477940
trans-1,3-Dichloropropene	U		0.118	0.500	1	05/18/2020 23:56	WG1477940
trans-1,4-Dichloro-2-butene	U	UJ J0	0.467	5.00	1	05/18/2020 23:56	WG1477940
2,2-Dichloropropane	U		0.161	0.500	1	05/18/2020 23:56	WG1477940
Di-isopropyl ether	U		0.105	0.500	1	05/18/2020 23:56	WG1477940
Ethylbenzene	U		0.137	0.500	1	05/18/2020 23:56	WG1477940
Hexachloro-1,3-butadiene	U		0.337	1.00	1	05/18/2020 23:56	WG1477940
2-Hexanone	U		0.787	5.00	1	05/18/2020 23:56	WG1477940
n-Hexane	U		0.749	5.00	1	05/18/2020 23:56	WG1477940
Iodomethane	U		0.554	5.00	1	05/18/2020 23:56	WG1477940
Isopropylbenzene	U		0.105	0.500	1	05/18/2020 23:56	WG1477940
p-Isopropyltoluene	U		0.120	0.500	1	05/18/2020 23:56	WG1477940
2-Butanone (MEK)	U		1.19	5.00	1	05/18/2020 23:56	WG1477940
Methylene Chloride	U		0.430	2.50	1	05/18/2020 23:56	WG1477940
4-Methyl-2-pentanone (MIBK)	U		0.478	5.00	1	05/18/2020 23:56	WG1477940
Methyl tert-butyl ether	U		0.101	0.500	1	05/18/2020 23:56	WG1477940
Naphthalene	U	UJ J0 ~~J3~~	0.174	2.50	1	05/18/2020 23:56	WG1477940
n-Propylbenzene	U		0.0993	0.500	1	05/18/2020 23:56	WG1477940
Styrene	U		0.118	0.500	1	05/18/2020 23:56	WG1477940
1,1,1,2-Tetrachloroethane	U		0.147	0.500	1	05/18/2020 23:56	WG1477940
1,1,2,2-Tetrachloroethane	U		0.133	0.500	1	05/18/2020 23:56	WG1477940
1,1,2-Trichlorotrifluoroethane	U		0.180	0.500	1	05/18/2020 23:56	WG1477940
Tetrachloroethene	U		0.300	0.500	1	05/18/2020 23:56	WG1477940
Toluene	U		0.278	0.500	1	05/18/2020 23:56	WG1477940
1,2,3-Trichlorobenzene	U	UJ J0 ~~J3~~	0.164	0.500	1	05/18/2020 23:56	WG1477940
1,2,4-Trichlorobenzene	U		0.481	1.00	1	05/18/2020 23:56	WG1477940
1,1,1-Trichloroethane	U		0.149	0.500	1	05/18/2020 23:56	WG1477940
1,1,2-Trichloroethane	U		0.158	0.500	1	05/18/2020 23:56	WG1477940
Trichloroethene	U		0.190	0.500	1	05/18/2020 23:56	WG1477940
Trichlorofluoromethane	U		0.160	2.50	1	05/18/2020 23:56	WG1477940
1,2,3-Trichloropropane	U		0.237	2.50	1	05/18/2020 23:56	WG1477940
1,2,4-Trimethylbenzene	U		0.322	0.500	1	05/18/2020 23:56	WG1477940
1,2,3-Trimethylbenzene	U		0.104	0.500	1	05/18/2020 23:56	WG1477940
1,3,5-Trimethylbenzene	U		0.104	0.500	1	05/18/2020 23:56	WG1477940
Vinyl acetate	U		0.692	5.00	1	05/18/2020 23:56	WG1477940
Vinyl chloride	U		0.234	0.500	1	05/18/2020 23:56	WG1477940
Xylenes, Total	U		0.174	1.50	1	05/18/2020 23:56	WG1477940
(S) Toluene-d8	*106*			*80.0-120*		*05/18/2020 23:56*	WG1477940
(S) 4-Bromofluorobenzene	*101*			*77.0-126*		*05/18/2020 23:56*	WG1477940
(S) 1,2-Dichloroethane-d4	*116*			*70.0-130*		*05/18/2020 23:56*	WG1477940

JC 5/27/2020

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Wet Chemistry by Method 2320 B-2011

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Alkalinity	156000		8450	20000	1	05/21/2020 13:07	WG1477103

Sample Narrative:

L1218975-04 WG1477103: Endpoint pH 4.5

Wet Chemistry by Method 9056A

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Chloride	11100		379	1000	1	05/15/2020 17:24	WG1476644
Nitrate	U		48.0	100	1	05/15/2020 17:24	WG1476644
Sulfate	48300		594	5000	1	05/15/2020 17:24	WG1476644

Wet Chemistry by Method 9060A

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
TOC (Total Organic Carbon)	1460	~~B~~	102	1000	1	05/19/2020 23:44	WG1478998

Metals (ICPMS) by Method 6020B

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Iron	2200		48.9	100	1	05/20/2020 13:37	WG1476868
Manganese	836		1.32	5.00	1	05/20/2020 13:37	WG1476868

Volatile Organic Compounds (GC) by Method NWTPHGX

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Gasoline Range Organics-NWTPH	U		31.6	100	1	05/20/2020 14:23	WG1479186
(S) a,a,a-Trifluorotoluene(FID)	*96.4*			*78.0-120*		*05/20/2020 14:23*	WG1479186

Volatile Organic Compounds (GC) by Method RSK175

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Methane	46.5 J		0.287	0.678	1	05/20/2020 13:00	WG1479119
Ethane	U		0.296	1.29	1	05/20/2020 13:00	WG1479119
Ethene	U		0.422	1.27	1	05/20/2020 13:00	WG1479119

Volatile Organic Compounds (GC/MS) by Method 8260D

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Acetone	U		11.3	25.0	1	05/19/2020 00:16	WG1477940
Acrylonitrile	U		0.671	5.00	1	05/19/2020 00:16	WG1477940
Benzene	U		0.0941	0.500	1	05/19/2020 00:16	WG1477940
Bromobenzene	U		0.118	0.500	1	05/19/2020 00:16	WG1477940
Bromodichloromethane	U		0.136	0.500	1	05/19/2020 00:16	WG1477940
Bromochloromethane	U		0.128	0.500	1	05/19/2020 00:16	WG1477940
Bromoform	U UJ	J0	0.129	0.500	1	05/19/2020 00:16	WG1477940
Bromomethane	U		0.605	2.50	1	05/19/2020 00:16	WG1477940
n-Butylbenzene	U		0.157	0.500	1	05/19/2020 00:16	WG1477940
sec-Butylbenzene	U	~~J4~~	0.125	0.500	1	05/19/2020 00:16	WG1477940
tert-Butylbenzene	U		0.127	0.500	1	05/19/2020 00:16	WG1477940
Carbon disulfide	0.142	J	0.0962	0.500	1	05/19/2020 00:16	WG1477940
Carbon tetrachloride	U		0.128	0.500	1	05/19/2020 00:16	WG1477940

JC 5/27/2020

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chlorobenzene	U		0.117	0.500	1	05/19/2020 00:16	WG1477940
Chlorodibromomethane	U		0.140	0.500	1	05/19/2020 00:16	WG1477940
Chloroethane	U		0.192	2.50	1	05/19/2020 00:16	WG1477940
Chloroform	U		0.111	0.500	1	05/19/2020 00:16	WG1477940
Chloromethane	U		0.960	1.25	1	05/19/2020 00:16	WG1477940
2-Chlorotoluene	U		0.106	0.500	1	05/19/2020 00:16	WG1477940
4-Chlorotoluene	U	~~J4~~	0.114	0.500	1	05/19/2020 00:16	WG1477940
1,2-Dibromo-3-Chloropropane	U	UJ J0	0.276	2.50	1	05/19/2020 00:16	WG1477940
1,2-Dibromoethane	U		0.126	0.500	1	05/19/2020 00:16	WG1477940
Dibromomethane	U		0.122	0.500	1	05/19/2020 00:16	WG1477940
1,2-Dichlorobenzene	U		0.107	0.500	1	05/19/2020 00:16	WG1477940
1,3-Dichlorobenzene	U		0.299	0.500	1	05/19/2020 00:16	WG1477940
1,4-Dichlorobenzene	U		0.120	0.500	1	05/19/2020 00:16	WG1477940
Dichlorodifluoromethane	U		0.374	2.50	1	05/19/2020 00:16	WG1477940
1,1-Dichloroethane	U		0.100	0.500	1	05/19/2020 00:16	WG1477940
1,2-Dichloroethane	U		0.0819	0.500	1	05/19/2020 00:16	WG1477940
1,1-Dichloroethene	U		0.188	0.500	1	05/19/2020 00:16	WG1477940
cis-1,2-Dichloroethene	U		0.126	0.500	1	05/19/2020 00:16	WG1477940
trans-1,2-Dichloroethene	U		0.149	0.500	1	05/19/2020 00:16	WG1477940
1,2-Dichloropropane	U		0.149	0.500	1	05/19/2020 00:16	WG1477940
1,1-Dichloropropene	U		0.142	0.500	1	05/19/2020 00:16	WG1477940
1,3-Dichloropropane	U		0.109	1.00	1	05/19/2020 00:16	WG1477940
cis-1,3-Dichloropropene	U		0.111	0.500	1	05/19/2020 00:16	WG1477940
trans-1,3-Dichloropropene	U		0.118	0.500	1	05/19/2020 00:16	WG1477940
trans-1,4-Dichloro-2-butene	U	UJ J0	0.467	5.00	1	05/19/2020 00:16	WG1477940
2,2-Dichloropropane	U		0.161	0.500	1	05/19/2020 00:16	WG1477940
Di-isopropyl ether	U		0.105	0.500	1	05/19/2020 00:16	WG1477940
Ethylbenzene	U		0.137	0.500	1	05/19/2020 00:16	WG1477940
Hexachloro-1,3-butadiene	U		0.337	1.00	1	05/19/2020 00:16	WG1477940
2-Hexanone	U		0.787	5.00	1	05/19/2020 00:16	WG1477940
n-Hexane	U		0.749	5.00	1	05/19/2020 00:16	WG1477940
Iodomethane	U		0.554	5.00	1	05/19/2020 00:16	WG1477940
Isopropylbenzene	U		0.105	0.500	1	05/19/2020 00:16	WG1477940
p-Isopropyltoluene	U		0.120	0.500	1	05/19/2020 00:16	WG1477940
2-Butanone (MEK)	U		1.19	5.00	1	05/19/2020 00:16	WG1477940
Methylene Chloride	U		0.430	2.50	1	05/19/2020 00:16	WG1477940
4-Methyl-2-pentanone (MIBK)	U		0.478	5.00	1	05/19/2020 00:16	WG1477940
Methyl tert-butyl ether	U		0.101	0.500	1	05/19/2020 00:16	WG1477940
Naphthalene	U	UJ J0 ~~J3~~	0.174	2.50	1	05/19/2020 00:16	WG1477940
n-Propylbenzene	U		0.0993	0.500	1	05/19/2020 00:16	WG1477940
Styrene	U		0.118	0.500	1	05/19/2020 00:16	WG1477940
1,1,1,2-Tetrachloroethane	U		0.147	0.500	1	05/19/2020 00:16	WG1477940
1,1,2,2-Tetrachloroethane	U		0.133	0.500	1	05/19/2020 00:16	WG1477940
1,1,2-Trichlorotrifluoroethane	U		0.180	0.500	1	05/19/2020 00:16	WG1477940
Tetrachloroethene	U		0.300	0.500	1	05/19/2020 00:16	WG1477940
Toluene	0.547		0.278	0.500	1	05/19/2020 00:16	WG1477940
1,2,3-Trichlorobenzene	U	UJ J0 ~~J3~~	0.164	0.500	1	05/19/2020 00:16	WG1477940
1,2,4-Trichlorobenzene	U		0.481	1.00	1	05/19/2020 00:16	WG1477940
1,1,1-Trichloroethane	U		0.149	0.500	1	05/19/2020 00:16	WG1477940
1,1,2-Trichloroethane	U		0.158	0.500	1	05/19/2020 00:16	WG1477940
Trichloroethene	U		0.190	0.500	1	05/19/2020 00:16	WG1477940
Trichlorofluoromethane	U		0.160	2.50	1	05/19/2020 00:16	WG1477940
1,2,3-Trichloropropane	U		0.237	2.50	1	05/19/2020 00:16	WG1477940
1,2,4-Trimethylbenzene	U		0.322	0.500	1	05/19/2020 00:16	WG1477940
1,2,3-Trimethylbenzene	U		0.104	0.500	1	05/19/2020 00:16	WG1477940
1,3,5-Trimethylbenzene	U		0.104	0.500	1	05/19/2020 00:16	WG1477940

JC 5/27/2020

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Vinyl acetate	U		0.692	5.00	1	05/19/2020 00:16	WG1477940
Vinyl chloride	U		0.234	0.500	1	05/19/2020 00:16	WG1477940
Xylenes, Total	0.278	J	0.174	1.50	1	05/19/2020 00:16	WG1477940
(S) Toluene-d8	*105*			*80.0-120*		*05/19/2020 00:16*	WG1477940
(S) 4-Bromofluorobenzene	*98.2*			*77.0-126*		*05/19/2020 00:16*	WG1477940
(S) 1,2-Dichloroethane-d4	*115*			*70.0-130*		*05/19/2020 00:16*	WG1477940

JC 5/27/2020

MW-330-051420
Collected date/time: 05/14/20 14:15

SAMPLE RESULTS - 05

L1218975

Wet Chemistry by Method 2320 B-2011

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Alkalinity	156000		8450	20000	1	05/21/2020 13:15	WG1477103

Sample Narrative:

L1218975-05 WG1477103: Endpoint pH 4.5

Wet Chemistry by Method 9056A

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Chloride	11300		379	1000	1	05/15/2020 17:35	WG1476644
Nitrate	U		48.0	100	1	05/15/2020 17:35	WG1476644
Sulfate	48000		594	5000	1	05/15/2020 17:35	WG1476644

Wet Chemistry by Method 9060A

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
TOC (Total Organic Carbon)	1420	~~B~~	102	1000	1	05/19/2020 23:56	WG1478998

Metals (ICPMS) by Method 6020B

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Iron	2900		48.9	100	1	05/21/2020 13:22	WG1476869
Manganese	841		1.32	5.00	1	05/21/2020 13:22	WG1476869

Volatile Organic Compounds (GC) by Method NWTPHGX

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Gasoline Range Organics-NWTPH	U		31.6	100	1	05/20/2020 14:44	WG1479186
(S) a,a,a-Trifluorotoluene(FID)	*96.2*			*78.0-120*		*05/20/2020 14:44*	WG1479186

Volatile Organic Compounds (GC) by Method RSK175

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Methane	31.7	J	0.287	0.678	1	05/20/2020 13:02	WG1479119
Ethane	U		0.296	1.29	1	05/20/2020 13:02	WG1479119
Ethene	U		0.422	1.27	1	05/20/2020 13:02	WG1479119

Volatile Organic Compounds (GC/MS) by Method 8260D

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Acetone	U		11.3	25.0	1	05/19/2020 00:36	WG1477940
Acrylonitrile	U		0.671	5.00	1	05/19/2020 00:36	WG1477940
Benzene	U		0.0941	0.500	1	05/19/2020 00:36	WG1477940
Bromobenzene	U		0.118	0.500	1	05/19/2020 00:36	WG1477940
Bromodichloromethane	U		0.136	0.500	1	05/19/2020 00:36	WG1477940
Bromochloromethane	U		0.128	0.500	1	05/19/2020 00:36	WG1477940
Bromoform	U	UJ J0	0.129	0.500	1	05/19/2020 00:36	WG1477940
Bromomethane	U		0.605	2.50	1	05/19/2020 00:36	WG1477940
n-Butylbenzene	U		0.157	0.500	1	05/19/2020 00:36	WG1477940
sec-Butylbenzene	U	~~J4~~	0.125	0.500	1	05/19/2020 00:36	WG1477940
tert-Butylbenzene	U		0.127	0.500	1	05/19/2020 00:36	WG1477940
Carbon disulfide	0.125	J	0.0962	0.500	1	05/19/2020 00:36	WG1477940
Carbon tetrachloride	U		0.128	0.500	1	05/19/2020 00:36	WG1477940

JC 5/27/2020

MW-330-051420

Collected date/time: 05/14/20 14:15

SAMPLE RESULTS - 05

L1218975

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chlorobenzene	U		0.117	0.500	1	05/19/2020 00:36	WG1477940
Chlorodibromomethane	U		0.140	0.500	1	05/19/2020 00:36	WG1477940
Chloroethane	U		0.192	2.50	1	05/19/2020 00:36	WG1477940
Chloroform	U		0.111	0.500	1	05/19/2020 00:36	WG1477940
Chloromethane	U		0.960	1.25	1	05/19/2020 00:36	WG1477940
2-Chlorotoluene	U		0.106	0.500	1	05/19/2020 00:36	WG1477940
4-Chlorotoluene	U	~~J4~~	0.114	0.500	1	05/19/2020 00:36	WG1477940
1,2-Dibromo-3-Chloropropane	U	UJ J0	0.276	2.50	1	05/19/2020 00:36	WG1477940
1,2-Dibromoethane	U		0.126	0.500	1	05/19/2020 00:36	WG1477940
Dibromomethane	U		0.122	0.500	1	05/19/2020 00:36	WG1477940
1,2-Dichlorobenzene	U		0.107	0.500	1	05/19/2020 00:36	WG1477940
1,3-Dichlorobenzene	U		0.299	0.500	1	05/19/2020 00:36	WG1477940
1,4-Dichlorobenzene	U		0.120	0.500	1	05/19/2020 00:36	WG1477940
Dichlorodifluoromethane	U		0.374	2.50	1	05/19/2020 00:36	WG1477940
1,1-Dichloroethane	U		0.100	0.500	1	05/19/2020 00:36	WG1477940
1,2-Dichloroethane	U		0.0819	0.500	1	05/19/2020 00:36	WG1477940
1,1-Dichloroethene	U		0.188	0.500	1	05/19/2020 00:36	WG1477940
cis-1,2-Dichloroethene	U		0.126	0.500	1	05/19/2020 00:36	WG1477940
trans-1,2-Dichloroethene	U		0.149	0.500	1	05/19/2020 00:36	WG1477940
1,2-Dichloropropane	U		0.149	0.500	1	05/19/2020 00:36	WG1477940
1,1-Dichloropropene	U		0.142	0.500	1	05/19/2020 00:36	WG1477940
1,3-Dichloropropane	U		0.109	1.00	1	05/19/2020 00:36	WG1477940
cis-1,3-Dichloropropene	U		0.111	0.500	1	05/19/2020 00:36	WG1477940
trans-1,3-Dichloropropene	U		0.118	0.500	1	05/19/2020 00:36	WG1477940
trans-1,4-Dichloro-2-butene	U	UJ J0	0.467	5.00	1	05/19/2020 00:36	WG1477940
2,2-Dichloropropane	U		0.161	0.500	1	05/19/2020 00:36	WG1477940
Di-isopropyl ether	U		0.105	0.500	1	05/19/2020 00:36	WG1477940
Ethylbenzene	U		0.137	0.500	1	05/19/2020 00:36	WG1477940
Hexachloro-1,3-butadiene	U		0.337	1.00	1	05/19/2020 00:36	WG1477940
2-Hexanone	U		0.787	5.00	1	05/19/2020 00:36	WG1477940
n-Hexane	U		0.749	5.00	1	05/19/2020 00:36	WG1477940
Iodomethane	U		0.554	5.00	1	05/19/2020 00:36	WG1477940
Isopropylbenzene	U		0.105	0.500	1	05/19/2020 00:36	WG1477940
p-Isopropyltoluene	U		0.120	0.500	1	05/19/2020 00:36	WG1477940
2-Butanone (MEK)	U		1.19	5.00	1	05/19/2020 00:36	WG1477940
Methylene Chloride	U		0.430	2.50	1	05/19/2020 00:36	WG1477940
4-Methyl-2-pentanone (MIBK)	U		0.478	5.00	1	05/19/2020 00:36	WG1477940
Methyl tert-butyl ether	U		0.101	0.500	1	05/19/2020 00:36	WG1477940
Naphthalene	U	UJ J0 ~~J3~~	0.174	2.50	1	05/19/2020 00:36	WG1477940
n-Propylbenzene	U		0.0993	0.500	1	05/19/2020 00:36	WG1477940
Styrene	U		0.118	0.500	1	05/19/2020 00:36	WG1477940
1,1,1,2-Tetrachloroethane	U		0.147	0.500	1	05/19/2020 00:36	WG1477940
1,1,2,2-Tetrachloroethane	U		0.133	0.500	1	05/19/2020 00:36	WG1477940
1,1,2-Trichlorotrifluoroethane	U		0.180	0.500	1	05/19/2020 00:36	WG1477940
Tetrachloroethene	U		0.300	0.500	1	05/19/2020 00:36	WG1477940
Toluene	0.580		0.278	0.500	1	05/19/2020 00:36	WG1477940
1,2,3-Trichlorobenzene	U	UJ J0 ~~J3~~	0.164	0.500	1	05/19/2020 00:36	WG1477940
1,2,4-Trichlorobenzene	U		0.481	1.00	1	05/19/2020 00:36	WG1477940
1,1,1-Trichloroethane	U		0.149	0.500	1	05/19/2020 00:36	WG1477940
1,1,2-Trichloroethane	U		0.158	0.500	1	05/19/2020 00:36	WG1477940
Trichloroethene	U		0.190	0.500	1	05/19/2020 00:36	WG1477940
Trichlorofluoromethane	U		0.160	2.50	1	05/19/2020 00:36	WG1477940
1,2,3-Trichloropropane	U		0.237	2.50	1	05/19/2020 00:36	WG1477940
1,2,4-Trimethylbenzene	U		0.322	0.500	1	05/19/2020 00:36	WG1477940
1,2,3-Trimethylbenzene	U		0.104	0.500	1	05/19/2020 00:36	WG1477940
1,3,5-Trimethylbenzene	U		0.104	0.500	1	05/19/2020 00:36	WG1477940

JC 5/27/2020

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Vinyl acetate	U		0.692	5.00	1	05/19/2020 00:36	WG1477940
Vinyl chloride	U		0.234	0.500	1	05/19/2020 00:36	WG1477940
Xylenes, Total	0.278	J	0.174	1.50	1	05/19/2020 00:36	WG1477940
(S) Toluene-d8	*108*			*80.0-120*		*05/19/2020 00:36*	WG1477940
(S) 4-Bromofluorobenzene	*101*			*77.0-126*		*05/19/2020 00:36*	WG1477940
(S) 1,2-Dichloroethane-d4	*116*			*70.0-130*		*05/19/2020 00:36*	WG1477940

JC 5/27/2020

MEMORANDUM

TO: Project File **DATE:** May 29, 2020

FROM: Jessie Compeau

SUBJECT: Laboratory Data Validation Review

PROJECT: American Linen Data Validation

PROJECT #: 1413.001.02.501B

TASK: EIM Data Validation Level EPA2A for Remedial Investigation (RI) Well Drilling and Installation. April and May 2020 Soil Samples.

LAB: Pace Sample Delivery Groups (SDGs): L1209078, L1210278, L1212082, L1214576, and L1215745

One hundred and four (104) soil samples, including five (5) field duplicates, and four (4) trip blanks were collected on April 13,14, 16, 17, 20, and 22, May 1 and 4, 2020 as part of the RI effort at the Former American Linen Supply Site, in Seattle, Washington. The samples were delivered to Pace Analytical (Pace) of Mount Juliet, TN for laboratory analysis. Selected samples were analyzed for the following parameters:

- Volatile organic compounds (VOCs) by United States Environmental Protection Agency (USEPA) Method 8260D;
- Total petroleum hydrocarbons (TPH) as gasoline (TPH-Gx) by NWTPH-GX per analytical methods stipulated by Washington State Department of Ecology; and
- Total Solids by Standard Methods (SM) 2540 G-2011.

The RI Well Drilling and Installation sampling results are reported in multiple SDGs from Pace. Analytical results are reported in Pace SDGs L1209078, L1210278, L1212082, L1214576, and L1215745. The quality assurance review of the laboratory data associated with these SDGs are summarized below.

DATA QUALIFICATIONS

Guidelines established by USEPA for review of analytical data were used to validate the data. The comments presented in this memorandum refer to the laboratory's performance in meeting the quality control criteria outlined in the USEPA Contract Laboratory Program National Functional Guidelines for Organic Superfund Methods Data Review (USEPA, 2017). Following Guidelines, non-project-specific laboratory duplicates and matrix spike results were not evaluated as part of this data validation.

DATA VALIDATION

Sample Receipt, Preservation and Handling

The samples were collected and delivered to the laboratory by courier. The samples were delivered to the project laboratory in coolers under standard chain-of-custody protocols. Review of Pace's chain of custody (COC) notes indicate that all samples were received in good condition below the recommended preservation temperature 6.0°C. No data qualifications were assigned due to sample receipt or temperature preservation issues.

Holding Times

USEPA Method 8260D:
All samples were analyzed for VOCs within the USEPA recommended holding time of fourteen days for soils and waters (trip blanks) from the date of sample collection. All holding time criteria are met.

NWTPH-Gx Method:
All samples were analyzed for gasoline within the USEPA recommended holding time of fourteen days for preserved soils from the date of sample collection. All holding time criteria were met.

Total Solids by SM 2540 G-2011:
Samples were analyzed within the USEPA recommended holding time of seven days for total solids.

Initial and Continuing Calibration

Calibration data for this project are not required for this deliverable however PACE’s notes indicate the following:

- Multiple SDGs - *USEPA Method 8260D:* Continuing calibration verification (CCV) issues were noted by Pace for multiple compounds associated with analytical batches in each SDG. These compounds are qualified by the laboratory “J0” to indicate that percent difference CCV is outside of laboratory acceptance criteria. **Associated sample results with laboratory qualified (J0) results are estimated and qualified (J/UJ).**

Method Blank Results

USEPA Method 8260D:
Laboratory method blanks are included with the analytical batches per method requirement. The target analytes are not detected in the method blanks at or above the method detection limit (MDLs) or the reporting detection limit (RDLs) with the following exceptions:

- SDG L1209078: Several compounds are detected below the RDLs in the method blank associated with the trip blank (analytical batch WG1461987). No action is taken since associated samples are not impacted.

- SDG L1210278: Chloroform, 1,1,1,2-tetrachloroethane, and 1,2,4-trichlorobenzene are detected below the RDL in the method blank (analytical batch WG1464831). A**ssociated chloroform detections (samples MW-334-17, MW-334-63, and MW-332-25) are detected below the RDL and are qualified as not detected (U) due to blank contamination.** No action is required for 1,1,1,2-tetrachloroethane, and 1,2,4-trichlorobenzene because these compounds are not detected in the associated samples.

- SDG L1212082: 1,2,3-Trichlorobenzene is detected below the RDL in the method blank (analytical batch WG1466619). No action is taken since this compound is not detected in the associated trip blank sample.

- SDG L1146028: Chloroform, trans-1,2-dichloroethene, and methylene chloride are detected below the RDLs in the method blank (analytical batch WG1361775). No action was necessary since these compounds are not detected in the associated sample MW-2014-65.

- SDG L1214576: 2-Butanone (MEK) is detected below the RDL in the method blank (analytical batch WG1473272). No action was necessary since these compounds were not detected in the associated samples.

- SDG L1147037: Chloroform, trans-1,2-dichloroethene, 2-butanone (MEK), and methylene chloride are detected below the RDLs in the method blank (analytical batch WG1361818). **All associated chloroform, trans-1,2-dichloroethene, 2-butanone (MEK), and methylene chloride detections below the RDL and are qualified as not detected (U) due to blank contamination.**

- SDG L1147037: 2-Butanone (MEK), methylene chloride, and 1,2,4-trimethylbenzene are detected below the RDLs in the method blank (analytical batch WG1362726). **All associated 2-butanone (MEK), methylene chloride, and 1,2,4-trimethylbenzene detections below the RDL and are qualified as not detected (U) due to blank contamination.**

NWTPH-Gx Method:
A laboratory method blank was included with the analytical batch per method requirement. The target analyte (gasoline) is not detected in the method blanks at a concentration at or above the RDL with the following exceptions:

- SDG L1210278: Gasoline is detected below the RDL in the method blank (analytical batch WG1465276). All associated gasoline detections (samples MW-334-10, MW-334-13, MW-334-17, and MW-334-23) are detected above the RDL and no action is taken on this basis.

Trip Blank Results

USEPA Method 8260D:
Three trip blanks (TB-041420, TB-042320, and TB-050520) were collected and analyzed. The target analytes were not detected in the trip blanks at or above the MDLs or RDLs with the following exceptions:

- SDG L1215745: A low level of naphthalene (below the RDL) is detected in the trip blank TB-050520. No action is required as naphthalene is not detected in the associated samples.

Field, Rinsate, or Equipment Blank Results

Field, rinsate or equipment blanks were not collected.

Field Duplicate Analyses

Field duplicate sample pairs are as follows:

- SDG L1209078: Samples MW-343-102 and MW-2017-102;
- SDG L1210278: Samples MW-331-35 and W-2018-35;
- SDG L1212082: Samples MW-336-11.5 and MW-2019-11.5;
- SDG L1212082: Samples MW-336-95 and MW-2020-95; and
- SDG L1215745: Samples MW-341-85 and MW-2021-85.

Field duplicate pairs were submitted and analyzed for VOCs and percent solids. Percent solids and VOC target analyte results are comparable and within a relative percent difference (RPD) of 30% (± 2x RDL for soil results <5X the RDL) for the field duplicates with the following exception:

- SDG L1212082: Samples MW-336-11.5 and MW-2019-11.5 – Isopropyltoluene RPD is greater than the acceptance criteria and results are estimated and qualified (J).

Laboratory Duplicate Analyses

USEPA Method 8260D:
Laboratory duplicate analyses were not performed. Refer to laboratory control samples, field duplicate samples, or matrix spike results for precision data.

NWTPH-Gx Method:
Laboratory duplicate analyses were not performed. Refer to matrix spike results for precision data.

Total Solids by SM 2540 G-2011:
Laboratory duplicate samples were performed on client and non-client samples associated with the analytical batches. The RPDs for percent moisture are within the laboratory control limit of 20% RPD.

Surrogate Recoveries

USEPA Method 8260D:
The surrogate recovery results for the samples, laboratory control samples, matrix spike samples, and the method blanks are within the laboratory surrogate control limits for all the analyses.

NWTPH-Gx Method:
The surrogate recovery results for the samples, matrix spike samples, laboratory control sample, and the method blank are within the laboratory surrogate control limits for all the analyses.

Matrix Spike/ Matrix Spike Duplicates

USEPA Method 8260D:
Matrix spike/matrix spike duplicate (MS/MSD) analyses were performed on non-client samples within the analytical batch. In cases where MS/MSDs were not performed refer to laboratory control samples, field duplicate data for accuracy and precision data. The MS/MSD %R's and RPDs for the target compounds are within the laboratory control criteria for soil and waters with the following discussion:

- SDG L1215745: Matrix spike analyses (associated with the Trip Blank) was performed on two non-client samples within the analytical batch. Multiple RPDs are outside of laboratory control limit criteria. No action is taken since the spikes was performed on a non-client sample. Refer to laboratory control sample results for additional quality control data.

NWTPH-Gx Method:
MS/MSD analyses were performed on a non-client soil sample within the analytical batch. MS/MSD spike recoveries and RPD are within laboratory control limit criteria.

Laboratory Control Samples

USEPA Method 8260D:
Laboratory control sample/laboratory control sample duplicates (LCS/LCSD) were analyzed by USEPA Method 8260D. In some cases, only an LCS was analyzed. For precision data refer to laboratory duplicate or field duplicate results. The LCS or LCS/LCSD %R's and RPDs for the target compounds are within the laboratory control criteria for soils with the following discussion:

- SDG L1209078: LCS/LCSD (analytical batch WG1461987) recoveries for several compounds are recovered wide with elevated RPDs and laboratory qualified (J3). No action is taken since the associated sample is the trip blank (TB-041420).

- SDG L1209078: LCS (analytical batch WG1462208) recoveries for acetone and 1,2-dichloropropane are detected above criteria and laboratory qualified (J4). No action is taken since these compounds are not detected in the associated samples.

- SDG L1209078: LCS (analytical batch WG1462349) recoveries for 2-chlorotoluene and 1,4-dichlorobenzene are detected below criteria and laboratory qualified (J4). No action is taken with 2-chlorotoluene as the recovery is 74.7% and the control limit criteria is 75-124%. **All four associated sample results (MW-343-102, MW-343-106, MW-343-108, and MW-2017-102) for 1,4-dichlorobenzene are estimated and qualified UJ/J.**

- SDG L1210278: LCS (analytical batch WG1464831) recovery for chlorodibromomethane, 2,2-dichloropropane, and vinyl chloride are detected above criteria and laboratory qualified (J4). No action is taken since these compounds are not detected in the associated samples.

- SDG L1210278: LCSD (analytical batch WG1464913) recovery for bromochloromethane is detected below detected below criteria and laboratory qualified (J4). **All associated bromochloromethane detections are estimated and qualified (UJ/J).**

- SDG L1212082: LCS (analytical batch WG1467660) recoveries for multiple compounds (1,2-dichloropropane, 2-hexanone, 4-methyl-2-pentanone (MIBK), styrene, vinyl acetate, and vinyl chloride) are detected above detected criteria and laboratory qualified (J4). No action is needed since all associated results are non-detected for these compounds.

- SDG L1212082: LCS (analytical batch WG1467916) recoveries for chloromethane, trans-1,4-dichloro-2-butene, and vinyl chloride are detected above detected criteria and laboratory qualified (J4). No action is needed since all associated results are non-detected.

- SDG L1215745: LCS (analytical batch WG1474179) recovery for bromochloromethane is detected above detected criteria and laboratory qualified (J4). No action is needed since all associated results are non-detected.

NWTPH-Gx Method:
LCS were analyzed by NWTPH-GX. For precision data refer matrix spike results. The LCS %R's for the target compounds are within the laboratory control criteria for soils.

Moisture by Method 8000D:
LCS were analyzed within the analytical batch. For precision data refer to laboratory or field duplicate results. The LCS %Rs for the target compound is within the laboratory control criteria for soils.

Other Quality Control Issues

No laboratory quality control issues were identified in the laboratory reports.

- SDG L1210278: Sample narrative indicated that VOC results for sample MW-334-13 'NT too high to run lower' meaning that non-targets were too high to run at a lower dilution. Pace clarified that interferences include elevated gasoline range organics and non-target unidentified peaks were detected in sample MW-334-13 during the VOC analysis.

- SDG L1210278: Sample narratives for gasoline results indicate that no discernible petroleum pattern is present for samples MW-334-10, MW-334-13, MW-334-17, MW-334-23, MW-331-11, MW-331-16, and MW-334-10. No action is taken in these cases other than to note that no discernible petroleum patterns are present.
- SDG L1210278: The sample narrative for the gasoline result indicates no discernable petroleum pattern present for sample MW-331-7. In addition, the sample narrative indicates that there is an elevated RDL due to limited sample volume. No action is taken in this case other than to note that no discernible petroleum pattern is present.
- Electronic data deliverables (EDDs) for these Work Orders were provided by the laboratory and data validator qualifiers were entered, as appropriate, into the EDDs.

Quantitation Limits

Results of all analyses were reported based on standard laboratory RLs. The reported RLs are considered appropriate for this project.

Completeness

The samples were collected and analyzed as requested. Data completeness is 100%.

Data Assessment

The laboratory data reported for this project were reviewed based on laboratory control limit acceptance criteria and criteria outlined in:

- USEPA Contract Laboratory Program National Functional Guidelines for Organic Superfund Methods Data Review (USEPA, 2017)

Data qualifiers are assigned and laboratory report pages with qualifiers are attached. All data, including qualified data, are judged to be acceptable for their intended use.

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	88.5		1	04/21/2020 13:29	WG1463616

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	U	~~J4~~	0.0412	0.0565	1	04/17/2020 14:04	WG1462208
Acrylonitrile	U		0.00408	0.0141	1	04/17/2020 14:04	WG1462208
Benzene	0.119		0.000528	0.00113	1	04/17/2020 14:04	WG1462208
Bromobenzene	U		0.00102	0.0141	1	04/17/2020 14:04	WG1462208
Bromodichloromethane	U		0.000819	0.00282	1	04/17/2020 14:04	WG1462208
Bromochloromethane	U		0.000637	0.00565	1	04/17/2020 14:04	WG1462208
Bromoform	U		0.00132	0.0282	1	04/17/2020 14:04	WG1462208
Bromomethane	U		0.00223	0.0141	1	04/17/2020 14:04	WG1462208
n-Butylbenzene	U		0.00593	0.0141	1	04/17/2020 14:04	WG1462208
sec-Butylbenzene	U		0.00325	0.0141	1	04/17/2020 14:04	WG1462208
tert-Butylbenzene	U		0.00220	0.00565	1	04/17/2020 14:04	WG1462208
Carbon disulfide	0.00147	J	0.000791	0.0141	1	04/17/2020 14:04	WG1462208
Carbon tetrachloride	U		0.00101	0.00565	1	04/17/2020 14:04	WG1462208
Chlorobenzene	U		0.000237	0.00282	1	04/17/2020 14:04	WG1462208
Chlorodibromomethane	U		0.000691	0.00282	1	04/17/2020 14:04	WG1462208
Chloroethane	U		0.00192	0.00565	1	04/17/2020 14:04	WG1462208
Chloroform	U		0.00116	0.00282	1	04/17/2020 14:04	WG1462208
Chloromethane	U		0.00491	0.0141	1	04/17/2020 14:04	WG1462208
2-Chlorotoluene	U		0.000977	0.00282	1	04/17/2020 14:04	WG1462208
4-Chlorotoluene	U		0.000508	0.00565	1	04/17/2020 14:04	WG1462208
1,2-Dibromo-3-Chloropropane	U		0.00441	0.0282	1	04/17/2020 14:04	WG1462208
1,2-Dibromoethane	U		0.000732	0.00282	1	04/17/2020 14:04	WG1462208
Dibromomethane	U		0.000847	0.00565	1	04/17/2020 14:04	WG1462208
1,2-Dichlorobenzene	U		0.000480	0.00565	1	04/17/2020 14:04	WG1462208
1,3-Dichlorobenzene	U		0.000678	0.00565	1	04/17/2020 14:04	WG1462208
1,4-Dichlorobenzene	U		0.000791	0.00565	1	04/17/2020 14:04	WG1462208
Dichlorodifluoromethane	U		0.00182	0.00282	1	04/17/2020 14:04	WG1462208
1,1-Dichloroethane	U		0.000555	0.00282	1	04/17/2020 14:04	WG1462208
1,2-Dichloroethane	U		0.000733	0.00282	1	04/17/2020 14:04	WG1462208
1,1-Dichloroethene	U		0.000685	0.00282	1	04/17/2020 14:04	WG1462208
cis-1,2-Dichloroethene	U		0.000829	0.00282	1	04/17/2020 14:04	WG1462208
trans-1,2-Dichloroethene	U		0.00117	0.00565	1	04/17/2020 14:04	WG1462208
1,2-Dichloropropane	U	~~J4~~	0.00160	0.00565	1	04/17/2020 14:04	WG1462208
1,1-Dichloropropene	U		0.000914	0.00282	1	04/17/2020 14:04	WG1462208
1,3-Dichloropropane	U		0.000566	0.00565	1	04/17/2020 14:04	WG1462208
cis-1,3-Dichloropropene	U		0.000855	0.00282	1	04/17/2020 14:04	WG1462208
trans-1,3-Dichloropropene	U		0.00129	0.00565	1	04/17/2020 14:04	WG1462208
trans-1,4-Dichloro-2-butene	U		0.00210	0.00565	1	04/17/2020 14:04	WG1462208
2,2-Dichloropropane	U		0.00156	0.00282	1	04/17/2020 14:04	WG1462208
Di-isopropyl ether	U		0.000463	0.00113	1	04/17/2020 14:04	WG1462208
Ethylbenzene	0.0348		0.000833	0.00282	1	04/17/2020 14:04	WG1462208
Hexachloro-1,3-butadiene	U		0.00678	0.0282	1	04/17/2020 14:04	WG1462208
2-Hexanone	U		0.00380	0.0282	1	04/17/2020 14:04	WG1462208
n-Hexane	0.0198		0.00255	0.00565	1	04/17/2020 14:04	WG1462208
Iodomethane	U		0.00262	0.0141	1	04/17/2020 14:04	WG1462208
Isopropylbenzene	0.00181	J	0.000480	0.00282	1	04/17/2020 14:04	WG1462208
p-Isopropyltoluene	0.00439	J	0.00288	0.00565	1	04/17/2020 14:04	WG1462208
2-Butanone (MEK)	U		0.0717	0.113	1	04/17/2020 14:04	WG1462208
Methylene Chloride	U		0.00750	0.0282	1	04/17/2020 14:04	WG1462208
4-Methyl-2-pentanone (MIBK)	U		0.00258	0.0282	1	04/17/2020 14:04	WG1462208

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Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.000395	0.00113	1	04/17/2020 14:04	WG1462208
Naphthalene	U		0.00551	0.0141	1	04/17/2020 14:04	WG1462208
n-Propylbenzene	U		0.00107	0.00565	1	04/17/2020 14:04	WG1462208
Styrene	U		0.000259	0.0141	1	04/17/2020 14:04	WG1462208
1,1,1,2-Tetrachloroethane	U		0.00107	0.00282	1	04/17/2020 14:04	WG1462208
1,1,2,2-Tetrachloroethane	U		0.000785	0.00282	1	04/17/2020 14:04	WG1462208
1,1,2-Trichlorotrifluoroethane	U		0.000852	0.00282	1	04/17/2020 14:04	WG1462208
Tetrachloroethene	U		0.00101	0.00282	1	04/17/2020 14:04	WG1462208
Toluene	0.0154		0.00147	0.00565	1	04/17/2020 14:04	WG1462208
1,2,3-Trichlorobenzene	U		0.00828	0.0141	1	04/17/2020 14:04	WG1462208
1,2,4-Trichlorobenzene	U		0.00497	0.0141	1	04/17/2020 14:04	WG1462208
1,1,1-Trichloroethane	U		0.00104	0.00282	1	04/17/2020 14:04	WG1462208
1,1,2-Trichloroethane	U		0.000674	0.00282	1	04/17/2020 14:04	WG1462208
Trichloroethene	U		0.000660	0.00113	1	04/17/2020 14:04	WG1462208
Trichlorofluoromethane	U		0.000934	0.00282	1	04/17/2020 14:04	WG1462208
1,2,3-Trichloropropane	U		0.00183	0.0141	1	04/17/2020 14:04	WG1462208
1,2,4-Trimethylbenzene	0.00503	J	0.00178	0.00565	1	04/17/2020 14:04	WG1462208
1,2,3-Trimethylbenzene	0.00293	J	0.00178	0.00565	1	04/17/2020 14:04	WG1462208
1,3,5-Trimethylbenzene	0.00291	J	0.00226	0.00565	1	04/17/2020 14:04	WG1462208
Vinyl acetate	U		0.00287	0.0141	1	04/17/2020 14:04	WG1462208
Vinyl chloride	U		0.00131	0.00282	1	04/17/2020 14:04	WG1462208
Xylenes, Total	0.0811		0.000994	0.00734	1	04/17/2020 14:04	WG1462208
(S) Toluene-d8	*105*			*75.0-131*		*04/17/2020 14:04*	WG1462208
(S) 4-Bromofluorobenzene	*101*			*67.0-138*		*04/17/2020 14:04*	WG1462208
(S) 1,2-Dichloroethane-d4	*100*			*70.0-130*		*04/17/2020 14:04*	WG1462208

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	84.5		1	04/21/2020 13:29	WG1463616

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	U	~~J4~~	0.0432	0.0592	1	04/17/2020 14:23	WG1462208
Acrylonitrile	U		0.00427	0.0148	1	04/17/2020 14:23	WG1462208
Benzene	0.0536		0.000553	0.00118	1	04/17/2020 14:23	WG1462208
Bromobenzene	U		0.00107	0.0148	1	04/17/2020 14:23	WG1462208
Bromodichloromethane	U		0.000858	0.00296	1	04/17/2020 14:23	WG1462208
Bromochloromethane	U		0.000668	0.00592	1	04/17/2020 14:23	WG1462208
Bromoform	U		0.00139	0.0296	1	04/17/2020 14:23	WG1462208
Bromomethane	U		0.00233	0.0148	1	04/17/2020 14:23	WG1462208
n-Butylbenzene	U		0.00622	0.0148	1	04/17/2020 14:23	WG1462208
sec-Butylbenzene	U		0.00341	0.0148	1	04/17/2020 14:23	WG1462208
tert-Butylbenzene	U		0.00231	0.00592	1	04/17/2020 14:23	WG1462208
Carbon disulfide	0.00176	J	0.000829	0.0148	1	04/17/2020 14:23	WG1462208
Carbon tetrachloride	U		0.00106	0.00592	1	04/17/2020 14:23	WG1462208
Chlorobenzene	U		0.000249	0.00296	1	04/17/2020 14:23	WG1462208
Chlorodibromomethane	U		0.000725	0.00296	1	04/17/2020 14:23	WG1462208
Chloroethane	U		0.00201	0.00592	1	04/17/2020 14:23	WG1462208
Chloroform	U		0.00122	0.00296	1	04/17/2020 14:23	WG1462208
Chloromethane	U		0.00515	0.0148	1	04/17/2020 14:23	WG1462208
2-Chlorotoluene	U		0.00102	0.00296	1	04/17/2020 14:23	WG1462208
4-Chlorotoluene	U		0.000533	0.00592	1	04/17/2020 14:23	WG1462208
1,2-Dibromo-3-Chloropropane	U		0.00462	0.0296	1	04/17/2020 14:23	WG1462208
1,2-Dibromoethane	U		0.000767	0.00296	1	04/17/2020 14:23	WG1462208
Dibromomethane	U		0.000888	0.00592	1	04/17/2020 14:23	WG1462208
1,2-Dichlorobenzene	U		0.000503	0.00592	1	04/17/2020 14:23	WG1462208
1,3-Dichlorobenzene	U		0.000710	0.00592	1	04/17/2020 14:23	WG1462208
1,4-Dichlorobenzene	U		0.000829	0.00592	1	04/17/2020 14:23	WG1462208
Dichlorodifluoromethane	U		0.00191	0.00296	1	04/17/2020 14:23	WG1462208
1,1-Dichloroethane	U		0.000581	0.00296	1	04/17/2020 14:23	WG1462208
1,2-Dichloroethane	U		0.000768	0.00296	1	04/17/2020 14:23	WG1462208
1,1-Dichloroethene	U		0.000717	0.00296	1	04/17/2020 14:23	WG1462208
cis-1,2-Dichloroethene	U		0.000869	0.00296	1	04/17/2020 14:23	WG1462208
trans-1,2-Dichloroethene	U		0.00123	0.00592	1	04/17/2020 14:23	WG1462208
1,2-Dichloropropane	U	~~J4~~	0.00168	0.00592	1	04/17/2020 14:23	WG1462208
1,1-Dichloropropene	U		0.000958	0.00296	1	04/17/2020 14:23	WG1462208
1,3-Dichloropropane	U		0.000593	0.00592	1	04/17/2020 14:23	WG1462208
cis-1,3-Dichloropropene	U		0.000896	0.00296	1	04/17/2020 14:23	WG1462208
trans-1,3-Dichloropropene	U		0.00135	0.00592	1	04/17/2020 14:23	WG1462208
trans-1,4-Dichloro-2-butene	U		0.00220	0.00592	1	04/17/2020 14:23	WG1462208
2,2-Dichloropropane	U		0.00163	0.00296	1	04/17/2020 14:23	WG1462208
Di-isopropyl ether	U		0.000485	0.00118	1	04/17/2020 14:23	WG1462208
Ethylbenzene	0.00373		0.000873	0.00296	1	04/17/2020 14:23	WG1462208
Hexachloro-1,3-butadiene	U		0.00710	0.0296	1	04/17/2020 14:23	WG1462208
2-Hexanone	U		0.00398	0.0296	1	04/17/2020 14:23	WG1462208
n-Hexane	0.0152		0.00268	0.00592	1	04/17/2020 14:23	WG1462208
Iodomethane	U		0.00275	0.0148	1	04/17/2020 14:23	WG1462208
Isopropylbenzene	0.00136	J	0.000503	0.00296	1	04/17/2020 14:23	WG1462208
p-Isopropyltoluene	U		0.00302	0.00592	1	04/17/2020 14:23	WG1462208
2-Butanone (MEK)	U		0.0752	0.118	1	04/17/2020 14:23	WG1462208
Methylene Chloride	U		0.00786	0.0296	1	04/17/2020 14:23	WG1462208
4-Methyl-2-pentanone (MIBK)	U		0.00270	0.0296	1	04/17/2020 14:23	WG1462208

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Volatile Organic Compounds (GC/MS) by Method 8260D

	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg		date / time	
Methyl tert-butyl ether	U		0.000414	0.00118	1	04/17/2020 14:23	WG1462208
Naphthalene	0.00772	J	0.00578	0.0148	1	04/17/2020 14:23	WG1462208
n-Propylbenzene	U		0.00112	0.00592	1	04/17/2020 14:23	WG1462208
Styrene	U		0.000271	0.0148	1	04/17/2020 14:23	WG1462208
1,1,1,2-Tetrachloroethane	U		0.00112	0.00296	1	04/17/2020 14:23	WG1462208
1,1,2,2-Tetrachloroethane	U		0.000823	0.00296	1	04/17/2020 14:23	WG1462208
1,1,2-Trichlorotrifluoroethane	U		0.000893	0.00296	1	04/17/2020 14:23	WG1462208
Tetrachloroethene	U		0.00106	0.00296	1	04/17/2020 14:23	WG1462208
Toluene	0.00605		0.00154	0.00592	1	04/17/2020 14:23	WG1462208
1,2,3-Trichlorobenzene	U		0.00868	0.0148	1	04/17/2020 14:23	WG1462208
1,2,4-Trichlorobenzene	U		0.00521	0.0148	1	04/17/2020 14:23	WG1462208
1,1,1-Trichloroethane	U		0.00109	0.00296	1	04/17/2020 14:23	WG1462208
1,1,2-Trichloroethane	U		0.000707	0.00296	1	04/17/2020 14:23	WG1462208
Trichloroethene	U		0.000691	0.00118	1	04/17/2020 14:23	WG1462208
Trichlorofluoromethane	U		0.000979	0.00296	1	04/17/2020 14:23	WG1462208
1,2,3-Trichloropropane	U		0.00192	0.0148	1	04/17/2020 14:23	WG1462208
1,2,4-Trimethylbenzene	U		0.00187	0.00592	1	04/17/2020 14:23	WG1462208
1,2,3-Trimethylbenzene	U		0.00187	0.00592	1	04/17/2020 14:23	WG1462208
1,3,5-Trimethylbenzene	U		0.00237	0.00592	1	04/17/2020 14:23	WG1462208
Vinyl acetate	U		0.00301	0.0148	1	04/17/2020 14:23	WG1462208
Vinyl chloride	U		0.00137	0.00296	1	04/17/2020 14:23	WG1462208
Xylenes, Total	0.00855		0.00104	0.00770	1	04/17/2020 14:23	WG1462208
(S) Toluene-d8	*105*			*75.0-131*		*04/17/2020 14:23*	WG1462208
(S) 4-Bromofluorobenzene	*98.8*			*67.0-138*		*04/17/2020 14:23*	WG1462208
(S) 1,2-Dichloroethane-d4	*97.8*			*70.0-130*		*04/17/2020 14:23*	WG1462208

JC 5/28/2020

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Total Solids by Method 2540 G-2011

	Result	Qualifier	Dilution	Analysis	Batch
Analyte	%			date / time	
Total Solids	81.5		1	04/21/2020 13:29	WG1463616

Volatile Organic Compounds (GC/MS) by Method 8260D

	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg		date / time	
Acetone	U	~~J4~~	0.0448	0.0613	1	04/17/2020 14:42	WG1462208
Acrylonitrile	U		0.00443	0.0153	1	04/17/2020 14:42	WG1462208
Benzene	U		0.000573	0.00123	1	04/17/2020 14:42	WG1462208
Bromobenzene	U		0.00110	0.0153	1	04/17/2020 14:42	WG1462208
Bromodichloromethane	U		0.000890	0.00307	1	04/17/2020 14:42	WG1462208
Bromochloromethane	U		0.000692	0.00613	1	04/17/2020 14:42	WG1462208
Bromoform	U		0.00144	0.0307	1	04/17/2020 14:42	WG1462208
Bromomethane	U		0.00242	0.0153	1	04/17/2020 14:42	WG1462208
n-Butylbenzene	U		0.00644	0.0153	1	04/17/2020 14:42	WG1462208
sec-Butylbenzene	U		0.00353	0.0153	1	04/17/2020 14:42	WG1462208
tert-Butylbenzene	U		0.00239	0.00613	1	04/17/2020 14:42	WG1462208
Carbon disulfide	U		0.000859	0.0153	1	04/17/2020 14:42	WG1462208
Carbon tetrachloride	U		0.00110	0.00613	1	04/17/2020 14:42	WG1462208
Chlorobenzene	U		0.000258	0.00307	1	04/17/2020 14:42	WG1462208
Chlorodibromomethane	U		0.000751	0.00307	1	04/17/2020 14:42	WG1462208
Chloroethane	U		0.00209	0.00613	1	04/17/2020 14:42	WG1462208
Chloroform	U		0.00126	0.00307	1	04/17/2020 14:42	WG1462208
Chloromethane	U		0.00534	0.0153	1	04/17/2020 14:42	WG1462208
2-Chlorotoluene	U		0.00106	0.00307	1	04/17/2020 14:42	WG1462208
4-Chlorotoluene	U		0.000552	0.00613	1	04/17/2020 14:42	WG1462208
1,2-Dibromo-3-Chloropropane	U		0.00479	0.0307	1	04/17/2020 14:42	WG1462208
1,2-Dibromoethane	U		0.000795	0.00307	1	04/17/2020 14:42	WG1462208
Dibromomethane	U		0.000920	0.00613	1	04/17/2020 14:42	WG1462208
1,2-Dichlorobenzene	U		0.000521	0.00613	1	04/17/2020 14:42	WG1462208
1,3-Dichlorobenzene	U		0.000736	0.00613	1	04/17/2020 14:42	WG1462208
1,4-Dichlorobenzene	U		0.000859	0.00613	1	04/17/2020 14:42	WG1462208
Dichlorodifluoromethane	U		0.00198	0.00307	1	04/17/2020 14:42	WG1462208
1,1-Dichloroethane	U		0.000602	0.00307	1	04/17/2020 14:42	WG1462208
1,2-Dichloroethane	U		0.000796	0.00307	1	04/17/2020 14:42	WG1462208
1,1-Dichloroethene	U		0.000744	0.00307	1	04/17/2020 14:42	WG1462208
cis-1,2-Dichloroethene	U		0.000901	0.00307	1	04/17/2020 14:42	WG1462208
trans-1,2-Dichloroethene	U		0.00128	0.00613	1	04/17/2020 14:42	WG1462208
1,2-Dichloropropane	U	~~J4~~	0.00174	0.00613	1	04/17/2020 14:42	WG1462208
1,1-Dichloropropene	U		0.000993	0.00307	1	04/17/2020 14:42	WG1462208
1,3-Dichloropropane	U		0.000615	0.00613	1	04/17/2020 14:42	WG1462208
cis-1,3-Dichloropropene	U		0.000929	0.00307	1	04/17/2020 14:42	WG1462208
trans-1,3-Dichloropropene	U		0.00140	0.00613	1	04/17/2020 14:42	WG1462208
trans-1,4-Dichloro-2-butene	U		0.00228	0.00613	1	04/17/2020 14:42	WG1462208
2,2-Dichloropropane	U		0.00169	0.00307	1	04/17/2020 14:42	WG1462208
Di-isopropyl ether	U		0.000503	0.00123	1	04/17/2020 14:42	WG1462208
Ethylbenzene	U		0.000904	0.00307	1	04/17/2020 14:42	WG1462208
Hexachloro-1,3-butadiene	U		0.00736	0.0307	1	04/17/2020 14:42	WG1462208
2-Hexanone	U		0.00412	0.0307	1	04/17/2020 14:42	WG1462208
n-Hexane	U		0.00277	0.00613	1	04/17/2020 14:42	WG1462208
Iodomethane	U		0.00285	0.0153	1	04/17/2020 14:42	WG1462208
Isopropylbenzene	U		0.000521	0.00307	1	04/17/2020 14:42	WG1462208
p-Isopropyltoluene	U		0.00313	0.00613	1	04/17/2020 14:42	WG1462208
2-Butanone (MEK)	U		0.0779	0.123	1	04/17/2020 14:42	WG1462208
Methylene Chloride	U		0.00815	0.0307	1	04/17/2020 14:42	WG1462208
4-Methyl-2-pentanone (MIBK)	U		0.00280	0.0307	1	04/17/2020 14:42	WG1462208

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Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.000429	0.00123	1	04/17/2020 14:42	WG1462208
Naphthalene	U		0.00599	0.0153	1	04/17/2020 14:42	WG1462208
n-Propylbenzene	U		0.00117	0.00613	1	04/17/2020 14:42	WG1462208
Styrene	U		0.000281	0.0153	1	04/17/2020 14:42	WG1462208
1,1,1,2-Tetrachloroethane	U		0.00116	0.00307	1	04/17/2020 14:42	WG1462208
1,1,2,2-Tetrachloroethane	U		0.000853	0.00307	1	04/17/2020 14:42	WG1462208
1,1,2-Trichlorotrifluoroethane	U		0.000925	0.00307	1	04/17/2020 14:42	WG1462208
Tetrachloroethene	U		0.00110	0.00307	1	04/17/2020 14:42	WG1462208
Toluene	U		0.00160	0.00613	1	04/17/2020 14:42	WG1462208
1,2,3-Trichlorobenzene	U		0.00899	0.0153	1	04/17/2020 14:42	WG1462208
1,2,4-Trichlorobenzene	U		0.00540	0.0153	1	04/17/2020 14:42	WG1462208
1,1,1-Trichloroethane	U		0.00113	0.00307	1	04/17/2020 14:42	WG1462208
1,1,2-Trichloroethane	U		0.000732	0.00307	1	04/17/2020 14:42	WG1462208
Trichloroethene	U		0.000717	0.00123	1	04/17/2020 14:42	WG1462208
Trichlorofluoromethane	U		0.00101	0.00307	1	04/17/2020 14:42	WG1462208
1,2,3-Trichloropropane	U		0.00199	0.0153	1	04/17/2020 14:42	WG1462208
1,2,4-Trimethylbenzene	U		0.00194	0.00613	1	04/17/2020 14:42	WG1462208
1,2,3-Trimethylbenzene	U		0.00194	0.00613	1	04/17/2020 14:42	WG1462208
1,3,5-Trimethylbenzene	U		0.00245	0.00613	1	04/17/2020 14:42	WG1462208
Vinyl acetate	U		0.00312	0.0153	1	04/17/2020 14:42	WG1462208
Vinyl chloride	U		0.00142	0.00307	1	04/17/2020 14:42	WG1462208
Xylenes, Total	U		0.00108	0.00798	1	04/17/2020 14:42	WG1462208
(S) Toluene-d8	*106*			*75.0-131*		*04/17/2020 14:42*	WG1462208
(S) 4-Bromofluorobenzene	*97.2*			*67.0-138*		*04/17/2020 14:42*	WG1462208
(S) 1,2-Dichloroethane-d4	*99.9*			*70.0-130*		*04/17/2020 14:42*	WG1462208

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Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	86.9		1	04/21/2020 13:29	WG1463616

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	U	~~J4~~	0.0420	0.0575	1	04/17/2020 15:01	WG1462208
Acrylonitrile	U		0.00415	0.0144	1	04/17/2020 15:01	WG1462208
Benzene	U		0.000537	0.00115	1	04/17/2020 15:01	WG1462208
Bromobenzene	U		0.00104	0.0144	1	04/17/2020 15:01	WG1462208
Bromodichloromethane	U		0.000834	0.00288	1	04/17/2020 15:01	WG1462208
Bromochloromethane	U		0.000649	0.00575	1	04/17/2020 15:01	WG1462208
Bromoform	U		0.00135	0.0288	1	04/17/2020 15:01	WG1462208
Bromomethane	U		0.00227	0.0144	1	04/17/2020 15:01	WG1462208
n-Butylbenzene	U		0.00604	0.0144	1	04/17/2020 15:01	WG1462208
sec-Butylbenzene	U		0.00331	0.0144	1	04/17/2020 15:01	WG1462208
tert-Butylbenzene	U		0.00224	0.00575	1	04/17/2020 15:01	WG1462208
Carbon disulfide	U		0.000805	0.0144	1	04/17/2020 15:01	WG1462208
Carbon tetrachloride	U		0.00103	0.00575	1	04/17/2020 15:01	WG1462208
Chlorobenzene	U		0.000242	0.00288	1	04/17/2020 15:01	WG1462208
Chlorodibromomethane	U		0.000704	0.00288	1	04/17/2020 15:01	WG1462208
Chloroethane	U		0.00196	0.00575	1	04/17/2020 15:01	WG1462208
Chloroform	U		0.00119	0.00288	1	04/17/2020 15:01	WG1462208
Chloromethane	U		0.00500	0.0144	1	04/17/2020 15:01	WG1462208
2-Chlorotoluene	U		0.000995	0.00288	1	04/17/2020 15:01	WG1462208
4-Chlorotoluene	U		0.000518	0.00575	1	04/17/2020 15:01	WG1462208
1,2-Dibromo-3-Chloropropane	U		0.00449	0.0288	1	04/17/2020 15:01	WG1462208
1,2-Dibromoethane	U		0.000746	0.00288	1	04/17/2020 15:01	WG1462208
Dibromomethane	U		0.000863	0.00575	1	04/17/2020 15:01	WG1462208
1,2-Dichlorobenzene	U		0.000489	0.00575	1	04/17/2020 15:01	WG1462208
1,3-Dichlorobenzene	U		0.000690	0.00575	1	04/17/2020 15:01	WG1462208
1,4-Dichlorobenzene	U		0.000805	0.00575	1	04/17/2020 15:01	WG1462208
Dichlorodifluoromethane	U		0.00185	0.00288	1	04/17/2020 15:01	WG1462208
1,1-Dichloroethane	U		0.000565	0.00288	1	04/17/2020 15:01	WG1462208
1,2-Dichloroethane	U		0.000747	0.00288	1	04/17/2020 15:01	WG1462208
1,1-Dichloroethene	U		0.000697	0.00288	1	04/17/2020 15:01	WG1462208
cis-1,2-Dichloroethene	U		0.000844	0.00288	1	04/17/2020 15:01	WG1462208
trans-1,2-Dichloroethene	U		0.00120	0.00575	1	04/17/2020 15:01	WG1462208
1,2-Dichloropropane	U	~~J4~~	0.00163	0.00575	1	04/17/2020 15:01	WG1462208
1,1-Dichloropropene	U		0.000931	0.00288	1	04/17/2020 15:01	WG1462208
1,3-Dichloropropane	U		0.000576	0.00575	1	04/17/2020 15:01	WG1462208
cis-1,3-Dichloropropene	U		0.000871	0.00288	1	04/17/2020 15:01	WG1462208
trans-1,3-Dichloropropene	U		0.00131	0.00575	1	04/17/2020 15:01	WG1462208
trans-1,4-Dichloro-2-butene	U		0.00214	0.00575	1	04/17/2020 15:01	WG1462208
2,2-Dichloropropane	U		0.00159	0.00288	1	04/17/2020 15:01	WG1462208
Di-isopropyl ether	U		0.000472	0.00115	1	04/17/2020 15:01	WG1462208
Ethylbenzene	U		0.000848	0.00288	1	04/17/2020 15:01	WG1462208
Hexachloro-1,3-butadiene	U		0.00690	0.0288	1	04/17/2020 15:01	WG1462208
2-Hexanone	U		0.00387	0.0288	1	04/17/2020 15:01	WG1462208
n-Hexane	U		0.00260	0.00575	1	04/17/2020 15:01	WG1462208
Iodomethane	U		0.00267	0.0144	1	04/17/2020 15:01	WG1462208
Isopropylbenzene	U		0.000489	0.00288	1	04/17/2020 15:01	WG1462208
p-Isopropyltoluene	U		0.00293	0.00575	1	04/17/2020 15:01	WG1462208
2-Butanone (MEK)	0.0872 J	J J0	0.0731	0.115	1	04/17/2020 15:01	WG1462208
Methylene Chloride	U		0.00764	0.0288	1	04/17/2020 15:01	WG1462208
4-Methyl-2-pentanone (MIBK)	U		0.00262	0.0288	1	04/17/2020 15:01	WG1462208

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Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.000403	0.00115	1	04/17/2020 15:01	WG1462208
Naphthalene	0.00810	J	0.00561	0.0144	1	04/17/2020 15:01	WG1462208
n-Propylbenzene	U		0.00109	0.00575	1	04/17/2020 15:01	WG1462208
Styrene	U		0.000263	0.0144	1	04/17/2020 15:01	WG1462208
1,1,1,2-Tetrachloroethane	U		0.00109	0.00288	1	04/17/2020 15:01	WG1462208
1,1,2,2-Tetrachloroethane	U		0.000800	0.00288	1	04/17/2020 15:01	WG1462208
1,1,2-Trichlorotrifluoroethane	U		0.000867	0.00288	1	04/17/2020 15:01	WG1462208
Tetrachloroethene	U		0.00103	0.00288	1	04/17/2020 15:01	WG1462208
Toluene	0.00795		0.00150	0.00575	1	04/17/2020 15:01	WG1462208
1,2,3-Trichlorobenzene	U		0.00843	0.0144	1	04/17/2020 15:01	WG1462208
1,2,4-Trichlorobenzene	U		0.00506	0.0144	1	04/17/2020 15:01	WG1462208
1,1,1-Trichloroethane	U		0.00106	0.00288	1	04/17/2020 15:01	WG1462208
1,1,2-Trichloroethane	U		0.000687	0.00288	1	04/17/2020 15:01	WG1462208
Trichloroethene	U		0.000672	0.00115	1	04/17/2020 15:01	WG1462208
Trichlorofluoromethane	U		0.000951	0.00288	1	04/17/2020 15:01	WG1462208
1,2,3-Trichloropropane	U		0.00186	0.0144	1	04/17/2020 15:01	WG1462208
1,2,4-Trimethylbenzene	U		0.00182	0.00575	1	04/17/2020 15:01	WG1462208
1,2,3-Trimethylbenzene	U		0.00182	0.00575	1	04/17/2020 15:01	WG1462208
1,3,5-Trimethylbenzene	U		0.00230	0.00575	1	04/17/2020 15:01	WG1462208
Vinyl acetate	U		0.00292	0.0144	1	04/17/2020 15:01	WG1462208
Vinyl chloride	U		0.00133	0.00288	1	04/17/2020 15:01	WG1462208
Xylenes, Total	U		0.00101	0.00748	1	04/17/2020 15:01	WG1462208
(S) Toluene-d8	*104*			*75.0-131*		*04/17/2020 15:01*	WG1462208
(S) 4-Bromofluorobenzene	*103*			*67.0-138*		*04/17/2020 15:01*	WG1462208
(S) 1,2-Dichloroethane-d4	*102*			*70.0-130*		*04/17/2020 15:01*	WG1462208

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MW-343-24

Collected date/time: 04/13/20 11:05

SAMPLE RESULTS - 05

L1209078

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	86.7		1	04/21/2020 13:29	WG1463616

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	U	~~J4~~	0.0421	0.0577	1	04/17/2020 15:20	WG1462208
Acrylonitrile	U		0.00416	0.0144	1	04/17/2020 15:20	WG1462208
Benzene	0.00400		0.000539	0.00115	1	04/17/2020 15:20	WG1462208
Bromobenzene	U		0.00104	0.0144	1	04/17/2020 15:20	WG1462208
Bromodichloromethane	U		0.000836	0.00288	1	04/17/2020 15:20	WG1462208
Bromochloromethane	U		0.000650	0.00577	1	04/17/2020 15:20	WG1462208
Bromoform	U		0.00135	0.0288	1	04/17/2020 15:20	WG1462208
Bromomethane	U		0.00227	0.0144	1	04/17/2020 15:20	WG1462208
n-Butylbenzene	U		0.00605	0.0144	1	04/17/2020 15:20	WG1462208
sec-Butylbenzene	U		0.00332	0.0144	1	04/17/2020 15:20	WG1462208
tert-Butylbenzene	U		0.00225	0.00577	1	04/17/2020 15:20	WG1462208
Carbon disulfide	0.00340	J	0.000807	0.0144	1	04/17/2020 15:20	WG1462208
Carbon tetrachloride	U		0.00104	0.00577	1	04/17/2020 15:20	WG1462208
Chlorobenzene	U		0.000242	0.00288	1	04/17/2020 15:20	WG1462208
Chlorodibromomethane	U		0.000706	0.00288	1	04/17/2020 15:20	WG1462208
Chloroethane	U		0.00196	0.00577	1	04/17/2020 15:20	WG1462208
Chloroform	U		0.00119	0.00288	1	04/17/2020 15:20	WG1462208
Chloromethane	U		0.00502	0.0144	1	04/17/2020 15:20	WG1462208
2-Chlorotoluene	U		0.000997	0.00288	1	04/17/2020 15:20	WG1462208
4-Chlorotoluene	U		0.000519	0.00577	1	04/17/2020 15:20	WG1462208
1,2-Dibromo-3-Chloropropane	U		0.00450	0.0288	1	04/17/2020 15:20	WG1462208
1,2-Dibromoethane	U		0.000747	0.00288	1	04/17/2020 15:20	WG1462208
Dibromomethane	U		0.000865	0.00577	1	04/17/2020 15:20	WG1462208
1,2-Dichlorobenzene	U		0.000490	0.00577	1	04/17/2020 15:20	WG1462208
1,3-Dichlorobenzene	U		0.000692	0.00577	1	04/17/2020 15:20	WG1462208
1,4-Dichlorobenzene	U		0.000807	0.00577	1	04/17/2020 15:20	WG1462208
Dichlorodifluoromethane	U		0.00186	0.00288	1	04/17/2020 15:20	WG1462208
1,1-Dichloroethane	U		0.000566	0.00288	1	04/17/2020 15:20	WG1462208
1,2-Dichloroethane	U		0.000748	0.00288	1	04/17/2020 15:20	WG1462208
1,1-Dichloroethene	U		0.000699	0.00288	1	04/17/2020 15:20	WG1462208
cis-1,2-Dichloroethene	U		0.000846	0.00288	1	04/17/2020 15:20	WG1462208
trans-1,2-Dichloroethene	U		0.00120	0.00577	1	04/17/2020 15:20	WG1462208
1,2-Dichloropropane	U	~~J4~~	0.00164	0.00577	1	04/17/2020 15:20	WG1462208
1,1-Dichloropropene	U		0.000933	0.00288	1	04/17/2020 15:20	WG1462208
1,3-Dichloropropane	U		0.000578	0.00577	1	04/17/2020 15:20	WG1462208
cis-1,3-Dichloropropene	U		0.000873	0.00288	1	04/17/2020 15:20	WG1462208
trans-1,3-Dichloropropene	U		0.00131	0.00577	1	04/17/2020 15:20	WG1462208
trans-1,4-Dichloro-2-butene	U		0.00214	0.00577	1	04/17/2020 15:20	WG1462208
2,2-Dichloropropane	U		0.00159	0.00288	1	04/17/2020 15:20	WG1462208
Di-isopropyl ether	U		0.000473	0.00115	1	04/17/2020 15:20	WG1462208
Ethylbenzene	0.00166	J	0.000850	0.00288	1	04/17/2020 15:20	WG1462208
Hexachloro-1,3-butadiene	U		0.00692	0.0288	1	04/17/2020 15:20	WG1462208
2-Hexanone	U		0.00387	0.0288	1	04/17/2020 15:20	WG1462208
n-Hexane	U		0.00261	0.00577	1	04/17/2020 15:20	WG1462208
Iodomethane	U		0.00268	0.0144	1	04/17/2020 15:20	WG1462208
Isopropylbenzene	0.000965	J	0.000490	0.00288	1	04/17/2020 15:20	WG1462208
p-Isopropyltoluene	0.00319	J	0.00294	0.00577	1	04/17/2020 15:20	WG1462208
2-Butanone (MEK)	U		0.0732	0.115	1	04/17/2020 15:20	WG1462208
Methylene Chloride	U		0.00766	0.0288	1	04/17/2020 15:20	WG1462208
4-Methyl-2-pentanone (MIBK)	U		0.00263	0.0288	1	04/17/2020 15:20	WG1462208

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Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.000404	0.00115	1	04/17/2020 15:20	WG1462208
Naphthalene	0.0156		0.00563	0.0144	1	04/17/2020 15:20	WG1462208
n-Propylbenzene	U		0.00110	0.00577	1	04/17/2020 15:20	WG1462208
Styrene	U		0.000264	0.0144	1	04/17/2020 15:20	WG1462208
1,1,1,2-Tetrachloroethane	U		0.00109	0.00288	1	04/17/2020 15:20	WG1462208
1,1,2,2-Tetrachloroethane	U		0.000801	0.00288	1	04/17/2020 15:20	WG1462208
1,1,2-Trichlorotrifluoroethane	U		0.000869	0.00288	1	04/17/2020 15:20	WG1462208
Tetrachloroethene	U		0.00103	0.00288	1	04/17/2020 15:20	WG1462208
Toluene	0.0190		0.00150	0.00577	1	04/17/2020 15:20	WG1462208
1,2,3-Trichlorobenzene	U		0.00845	0.0144	1	04/17/2020 15:20	WG1462208
1,2,4-Trichlorobenzene	U		0.00507	0.0144	1	04/17/2020 15:20	WG1462208
1,1,1-Trichloroethane	U		0.00106	0.00288	1	04/17/2020 15:20	WG1462208
1,1,2-Trichloroethane	U		0.000688	0.00288	1	04/17/2020 15:20	WG1462208
Trichloroethene	U		0.000673	0.00115	1	04/17/2020 15:20	WG1462208
Trichlorofluoromethane	U		0.000954	0.00288	1	04/17/2020 15:20	WG1462208
1,2,3-Trichloropropane	U		0.00187	0.0144	1	04/17/2020 15:20	WG1462208
1,2,4-Trimethylbenzene	U		0.00182	0.00577	1	04/17/2020 15:20	WG1462208
1,2,3-Trimethylbenzene	0.00201	J	0.00182	0.00577	1	04/17/2020 15:20	WG1462208
1,3,5-Trimethylbenzene	U		0.00231	0.00577	1	04/17/2020 15:20	WG1462208
Vinyl acetate	U		0.00293	0.0144	1	04/17/2020 15:20	WG1462208
Vinyl chloride	U		0.00134	0.00288	1	04/17/2020 15:20	WG1462208
Xylenes, Total	0.00490	J	0.00101	0.00750	1	04/17/2020 15:20	WG1462208
(S) Toluene-d8	*108*			*75.0-131*		*04/17/2020 15:20*	WG1462208
(S) 4-Bromofluorobenzene	*97.6*			*67.0-138*		*04/17/2020 15:20*	WG1462208
(S) 1,2-Dichloroethane-d4	*97.8*			*70.0-130*		*04/17/2020 15:20*	WG1462208

JC 5/28/2020

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	80.8		1	04/21/2020 13:18	WG1463617

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	U	~~J4~~	0.0452	0.0619	1	04/17/2020 15:38	WG1462208
Acrylonitrile	U		0.00447	0.0155	1	04/17/2020 15:38	WG1462208
Benzene	0.00116	J	0.000578	0.00124	1	04/17/2020 15:38	WG1462208
Bromobenzene	U		0.00111	0.0155	1	04/17/2020 15:38	WG1462208
Bromodichloromethane	U		0.000897	0.00309	1	04/17/2020 15:38	WG1462208
Bromochloromethane	U		0.000698	0.00619	1	04/17/2020 15:38	WG1462208
Bromoform	U		0.00145	0.0309	1	04/17/2020 15:38	WG1462208
Bromomethane	U		0.00244	0.0155	1	04/17/2020 15:38	WG1462208
n-Butylbenzene	U		0.00649	0.0155	1	04/17/2020 15:38	WG1462208
sec-Butylbenzene	U		0.00356	0.0155	1	04/17/2020 15:38	WG1462208
tert-Butylbenzene	U		0.00241	0.00619	1	04/17/2020 15:38	WG1462208
Carbon disulfide	U		0.000866	0.0155	1	04/17/2020 15:38	WG1462208
Carbon tetrachloride	U		0.00111	0.00619	1	04/17/2020 15:38	WG1462208
Chlorobenzene	U		0.000260	0.00309	1	04/17/2020 15:38	WG1462208
Chlorodibromomethane	U		0.000757	0.00309	1	04/17/2020 15:38	WG1462208
Chloroethane	U		0.00210	0.00619	1	04/17/2020 15:38	WG1462208
Chloroform	U		0.00127	0.00309	1	04/17/2020 15:38	WG1462208
Chloromethane	U		0.00538	0.0155	1	04/17/2020 15:38	WG1462208
2-Chlorotoluene	U		0.00107	0.00309	1	04/17/2020 15:38	WG1462208
4-Chlorotoluene	U		0.000557	0.00619	1	04/17/2020 15:38	WG1462208
1,2-Dibromo-3-Chloropropane	U		0.00482	0.0309	1	04/17/2020 15:38	WG1462208
1,2-Dibromoethane	U		0.000802	0.00309	1	04/17/2020 15:38	WG1462208
Dibromomethane	U		0.000928	0.00619	1	04/17/2020 15:38	WG1462208
1,2-Dichlorobenzene	U		0.000526	0.00619	1	04/17/2020 15:38	WG1462208
1,3-Dichlorobenzene	U		0.000742	0.00619	1	04/17/2020 15:38	WG1462208
1,4-Dichlorobenzene	U		0.000866	0.00619	1	04/17/2020 15:38	WG1462208
Dichlorodifluoromethane	U		0.00199	0.00309	1	04/17/2020 15:38	WG1462208
1,1-Dichloroethane	U		0.000607	0.00309	1	04/17/2020 15:38	WG1462208
1,2-Dichloroethane	U		0.000803	0.00309	1	04/17/2020 15:38	WG1462208
1,1-Dichloroethene	U		0.000750	0.00309	1	04/17/2020 15:38	WG1462208
cis-1,2-Dichloroethene	U		0.000908	0.00309	1	04/17/2020 15:38	WG1462208
trans-1,2-Dichloroethene	U		0.00129	0.00619	1	04/17/2020 15:38	WG1462208
1,2-Dichloropropane	U	~~J4~~	0.00176	0.00619	1	04/17/2020 15:38	WG1462208
1,1-Dichloropropene	U		0.00100	0.00309	1	04/17/2020 15:38	WG1462208
1,3-Dichloropropane	U		0.000620	0.00619	1	04/17/2020 15:38	WG1462208
cis-1,3-Dichloropropene	U		0.000936	0.00309	1	04/17/2020 15:38	WG1462208
trans-1,3-Dichloropropene	U		0.00141	0.00619	1	04/17/2020 15:38	WG1462208
trans-1,4-Dichloro-2-butene	U		0.00230	0.00619	1	04/17/2020 15:38	WG1462208
2,2-Dichloropropane	U		0.00171	0.00309	1	04/17/2020 15:38	WG1462208
Di-isopropyl ether	U		0.000507	0.00124	1	04/17/2020 15:38	WG1462208
Ethylbenzene	U		0.000912	0.00309	1	04/17/2020 15:38	WG1462208
Hexachloro-1,3-butadiene	U		0.00742	0.0309	1	04/17/2020 15:38	WG1462208
2-Hexanone	U		0.00416	0.0309	1	04/17/2020 15:38	WG1462208
n-Hexane	U		0.00280	0.00619	1	04/17/2020 15:38	WG1462208
Iodomethane	U		0.00287	0.0155	1	04/17/2020 15:38	WG1462208
Isopropylbenzene	0.000898	J	0.000526	0.00309	1	04/17/2020 15:38	WG1462208
p-Isopropyltoluene	0.0107		0.00315	0.00619	1	04/17/2020 15:38	WG1462208
2-Butanone (MEK)	U		0.0786	0.124	1	04/17/2020 15:38	WG1462208
Methylene Chloride	U		0.00821	0.0309	1	04/17/2020 15:38	WG1462208
4-Methyl-2-pentanone (MIBK)	U		0.00282	0.0309	1	04/17/2020 15:38	WG1462208

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Volatile Organic Compounds (GC/MS) by Method 8260D

	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg		date / time	
Methyl tert-butyl ether	U		0.000433	0.00124	1	04/17/2020 15:38	WG1462208
Naphthalene	0.0117	J	0.00604	0.0155	1	04/17/2020 15:38	WG1462208
n-Propylbenzene	U		0.00118	0.00619	1	04/17/2020 15:38	WG1462208
Styrene	U		0.000283	0.0155	1	04/17/2020 15:38	WG1462208
1,1,1,2-Tetrachloroethane	U		0.00117	0.00309	1	04/17/2020 15:38	WG1462208
1,1,2,2-Tetrachloroethane	U		0.000860	0.00309	1	04/17/2020 15:38	WG1462208
1,1,2-Trichlorotrifluoroethane	U		0.000933	0.00309	1	04/17/2020 15:38	WG1462208
Tetrachloroethene	U		0.00111	0.00309	1	04/17/2020 15:38	WG1462208
Toluene	0.0209		0.00161	0.00619	1	04/17/2020 15:38	WG1462208
1,2,3-Trichlorobenzene	U		0.00907	0.0155	1	04/17/2020 15:38	WG1462208
1,2,4-Trichlorobenzene	U		0.00544	0.0155	1	04/17/2020 15:38	WG1462208
1,1,1-Trichloroethane	U		0.00114	0.00309	1	04/17/2020 15:38	WG1462208
1,1,2-Trichloroethane	U		0.000739	0.00309	1	04/17/2020 15:38	WG1462208
Trichloroethene	U		0.000722	0.00124	1	04/17/2020 15:38	WG1462208
Trichlorofluoromethane	U		0.00102	0.00309	1	04/17/2020 15:38	WG1462208
1,2,3-Trichloropropane	U		0.00200	0.0155	1	04/17/2020 15:38	WG1462208
1,2,4-Trimethylbenzene	U		0.00195	0.00619	1	04/17/2020 15:38	WG1462208
1,2,3-Trimethylbenzene	U		0.00195	0.00619	1	04/17/2020 15:38	WG1462208
1,3,5-Trimethylbenzene	U		0.00247	0.00619	1	04/17/2020 15:38	WG1462208
Vinyl acetate	U		0.00314	0.0155	1	04/17/2020 15:38	WG1462208
Vinyl chloride	U		0.00143	0.00309	1	04/17/2020 15:38	WG1462208
Xylenes, Total	U		0.00109	0.00804	1	04/17/2020 15:38	WG1462208
(S) Toluene-d8	*106*			*75.0-131*		*04/17/2020 15:38*	WG1462208
(S) 4-Bromofluorobenzene	*99.4*			*67.0-138*		*04/17/2020 15:38*	WG1462208
(S) 1,2-Dichloroethane-d4	*94.1*			*70.0-130*		*04/17/2020 15:38*	WG1462208

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1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	79.9		1	04/21/2020 13:18	WG1463617

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	U	~~J4~~	0.0457	0.0626	1	04/17/2020 15:57	WG1462208
Acrylonitrile	U		0.00452	0.0156	1	04/17/2020 15:57	WG1462208
Benzene	U		0.000584	0.00125	1	04/17/2020 15:57	WG1462208
Bromobenzene	U		0.00113	0.0156	1	04/17/2020 15:57	WG1462208
Bromodichloromethane	U		0.000907	0.00313	1	04/17/2020 15:57	WG1462208
Bromochloromethane	U		0.000706	0.00626	1	04/17/2020 15:57	WG1462208
Bromoform	U		0.00146	0.0313	1	04/17/2020 15:57	WG1462208
Bromomethane	U		0.00247	0.0156	1	04/17/2020 15:57	WG1462208
n-Butylbenzene	U		0.00657	0.0156	1	04/17/2020 15:57	WG1462208
sec-Butylbenzene	U		0.00360	0.0156	1	04/17/2020 15:57	WG1462208
tert-Butylbenzene	U		0.00244	0.00626	1	04/17/2020 15:57	WG1462208
Carbon disulfide	U		0.000876	0.0156	1	04/17/2020 15:57	WG1462208
Carbon tetrachloride	U		0.00112	0.00626	1	04/17/2020 15:57	WG1462208
Chlorobenzene	U		0.000263	0.00313	1	04/17/2020 15:57	WG1462208
Chlorodibromomethane	U		0.000766	0.00313	1	04/17/2020 15:57	WG1462208
Chloroethane	U		0.00213	0.00626	1	04/17/2020 15:57	WG1462208
Chloroform	U		0.00129	0.00313	1	04/17/2020 15:57	WG1462208
Chloromethane	U		0.00544	0.0156	1	04/17/2020 15:57	WG1462208
2-Chlorotoluene	U		0.00108	0.00313	1	04/17/2020 15:57	WG1462208
4-Chlorotoluene	U		0.000563	0.00626	1	04/17/2020 15:57	WG1462208
1,2-Dibromo-3-Chloropropane	U		0.00488	0.0313	1	04/17/2020 15:57	WG1462208
1,2-Dibromoethane	U		0.000811	0.00313	1	04/17/2020 15:57	WG1462208
Dibromomethane	U		0.000938	0.00626	1	04/17/2020 15:57	WG1462208
1,2-Dichlorobenzene	U		0.000532	0.00626	1	04/17/2020 15:57	WG1462208
1,3-Dichlorobenzene	U		0.000751	0.00626	1	04/17/2020 15:57	WG1462208
1,4-Dichlorobenzene	U		0.000876	0.00626	1	04/17/2020 15:57	WG1462208
Dichlorodifluoromethane	U		0.00201	0.00313	1	04/17/2020 15:57	WG1462208
1,1-Dichloroethane	U		0.000614	0.00313	1	04/17/2020 15:57	WG1462208
1,2-Dichloroethane	U		0.000812	0.00313	1	04/17/2020 15:57	WG1462208
1,1-Dichloroethene	U		0.000758	0.00313	1	04/17/2020 15:57	WG1462208
cis-1,2-Dichloroethene	U		0.000918	0.00313	1	04/17/2020 15:57	WG1462208
trans-1,2-Dichloroethene	U		0.00130	0.00626	1	04/17/2020 15:57	WG1462208
1,2-Dichloropropane	U	~~J4~~	0.00178	0.00626	1	04/17/2020 15:57	WG1462208
1,1-Dichloropropene	U		0.00101	0.00313	1	04/17/2020 15:57	WG1462208
1,3-Dichloropropane	U		0.000627	0.00626	1	04/17/2020 15:57	WG1462208
cis-1,3-Dichloropropene	U		0.000947	0.00313	1	04/17/2020 15:57	WG1462208
trans-1,3-Dichloropropene	U		0.00143	0.00626	1	04/17/2020 15:57	WG1462208
trans-1,4-Dichloro-2-butene	U		0.00233	0.00626	1	04/17/2020 15:57	WG1462208
2,2-Dichloropropane	U		0.00173	0.00313	1	04/17/2020 15:57	WG1462208
Di-isopropyl ether	U		0.000513	0.00125	1	04/17/2020 15:57	WG1462208
Ethylbenzene	U		0.000922	0.00313	1	04/17/2020 15:57	WG1462208
Hexachloro-1,3-butadiene	U		0.00751	0.0313	1	04/17/2020 15:57	WG1462208
2-Hexanone	U		0.00420	0.0313	1	04/17/2020 15:57	WG1462208
n-Hexane	U		0.00283	0.00626	1	04/17/2020 15:57	WG1462208
Iodomethane	U		0.00290	0.0156	1	04/17/2020 15:57	WG1462208
Isopropylbenzene	U		0.000532	0.00313	1	04/17/2020 15:57	WG1462208
p-Isopropyltoluene	U		0.00319	0.00626	1	04/17/2020 15:57	WG1462208
2-Butanone (MEK)	U		0.0795	0.125	1	04/17/2020 15:57	WG1462208
Methylene Chloride	U		0.00831	0.0313	1	04/17/2020 15:57	WG1462208
4-Methyl-2-pentanone (MIBK)	U		0.00285	0.0313	1	04/17/2020 15:57	WG1462208

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Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.000438	0.00125	1	04/17/2020 15:57	WG1462208
Naphthalene	U		0.00611	0.0156	1	04/17/2020 15:57	WG1462208
n-Propylbenzene	U		0.00119	0.00626	1	04/17/2020 15:57	WG1462208
Styrene	U		0.000287	0.0156	1	04/17/2020 15:57	WG1462208
1,1,1,2-Tetrachloroethane	U		0.00119	0.00313	1	04/17/2020 15:57	WG1462208
1,1,2,2-Tetrachloroethane	U		0.000870	0.00313	1	04/17/2020 15:57	WG1462208
1,1,2-Trichlorotrifluoroethane	U		0.000943	0.00313	1	04/17/2020 15:57	WG1462208
Tetrachloroethene	U		0.00112	0.00313	1	04/17/2020 15:57	WG1462208
Toluene	0.00277	J	0.00163	0.00626	1	04/17/2020 15:57	WG1462208
1,2,3-Trichlorobenzene	U		0.00917	0.0156	1	04/17/2020 15:57	WG1462208
1,2,4-Trichlorobenzene	U		0.00551	0.0156	1	04/17/2020 15:57	WG1462208
1,1,1-Trichloroethane	U		0.00115	0.00313	1	04/17/2020 15:57	WG1462208
1,1,2-Trichloroethane	U		0.000747	0.00313	1	04/17/2020 15:57	WG1462208
Trichloroethene	U		0.000731	0.00125	1	04/17/2020 15:57	WG1462208
Trichlorofluoromethane	U		0.00103	0.00313	1	04/17/2020 15:57	WG1462208
1,2,3-Trichloropropane	U		0.00203	0.0156	1	04/17/2020 15:57	WG1462208
1,2,4-Trimethylbenzene	U		0.00198	0.00626	1	04/17/2020 15:57	WG1462208
1,2,3-Trimethylbenzene	U		0.00198	0.00626	1	04/17/2020 15:57	WG1462208
1,3,5-Trimethylbenzene	U		0.00250	0.00626	1	04/17/2020 15:57	WG1462208
Vinyl acetate	U		0.00318	0.0156	1	04/17/2020 15:57	WG1462208
Vinyl chloride	U		0.00145	0.00313	1	04/17/2020 15:57	WG1462208
Xylenes, Total	U		0.00110	0.00813	1	04/17/2020 15:57	WG1462208
(S) Toluene-d8	*104*			*75.0-131*		*04/17/2020 15:57*	WG1462208
(S) 4-Bromofluorobenzene	*97.1*			*67.0-138*		*04/17/2020 15:57*	WG1462208
(S) 1,2-Dichloroethane-d4	*99.5*			*70.0-130*		*04/17/2020 15:57*	WG1462208

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Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	85.5		1	04/21/2020 13:18	WG1463617

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	U	~~J4~~	0.0427	0.0585	1	04/17/2020 16:16	WG1462208
Acrylonitrile	U		0.00422	0.0146	1	04/17/2020 16:16	WG1462208
Benzene	U		0.000546	0.00117	1	04/17/2020 16:16	WG1462208
Bromobenzene	U		0.00105	0.0146	1	04/17/2020 16:16	WG1462208
Bromodichloromethane	U		0.000848	0.00292	1	04/17/2020 16:16	WG1462208
Bromochloromethane	U		0.000660	0.00585	1	04/17/2020 16:16	WG1462208
Bromoform	U		0.00137	0.0292	1	04/17/2020 16:16	WG1462208
Bromomethane	U		0.00230	0.0146	1	04/17/2020 16:16	WG1462208
n-Butylbenzene	U		0.00614	0.0146	1	04/17/2020 16:16	WG1462208
sec-Butylbenzene	U		0.00337	0.0146	1	04/17/2020 16:16	WG1462208
tert-Butylbenzene	U		0.00228	0.00585	1	04/17/2020 16:16	WG1462208
Carbon disulfide	U		0.000819	0.0146	1	04/17/2020 16:16	WG1462208
Carbon tetrachloride	U		0.00105	0.00585	1	04/17/2020 16:16	WG1462208
Chlorobenzene	U		0.000246	0.00292	1	04/17/2020 16:16	WG1462208
Chlorodibromomethane	U		0.000716	0.00292	1	04/17/2020 16:16	WG1462208
Chloroethane	U		0.00199	0.00585	1	04/17/2020 16:16	WG1462208
Chloroform	U		0.00120	0.00292	1	04/17/2020 16:16	WG1462208
Chloromethane	U		0.00509	0.0146	1	04/17/2020 16:16	WG1462208
2-Chlorotoluene	U		0.00101	0.00292	1	04/17/2020 16:16	WG1462208
4-Chlorotoluene	U		0.000526	0.00585	1	04/17/2020 16:16	WG1462208
1,2-Dibromo-3-Chloropropane	U		0.00456	0.0292	1	04/17/2020 16:16	WG1462208
1,2-Dibromoethane	U		0.000758	0.00292	1	04/17/2020 16:16	WG1462208
Dibromomethane	U		0.000877	0.00585	1	04/17/2020 16:16	WG1462208
1,2-Dichlorobenzene	U		0.000497	0.00585	1	04/17/2020 16:16	WG1462208
1,3-Dichlorobenzene	U		0.000702	0.00585	1	04/17/2020 16:16	WG1462208
1,4-Dichlorobenzene	U		0.000819	0.00585	1	04/17/2020 16:16	WG1462208
Dichlorodifluoromethane	U		0.00188	0.00292	1	04/17/2020 16:16	WG1462208
1,1-Dichloroethane	U		0.000574	0.00292	1	04/17/2020 16:16	WG1462208
1,2-Dichloroethane	U		0.000759	0.00292	1	04/17/2020 16:16	WG1462208
1,1-Dichloroethene	U		0.000709	0.00292	1	04/17/2020 16:16	WG1462208
cis-1,2-Dichloroethene	U		0.000859	0.00292	1	04/17/2020 16:16	WG1462208
trans-1,2-Dichloroethene	U		0.00122	0.00585	1	04/17/2020 16:16	WG1462208
1,2-Dichloropropane	U	~~J4~~	0.00166	0.00585	1	04/17/2020 16:16	WG1462208
1,1-Dichloropropene	U		0.000946	0.00292	1	04/17/2020 16:16	WG1462208
1,3-Dichloropropane	U		0.000586	0.00585	1	04/17/2020 16:16	WG1462208
cis-1,3-Dichloropropene	U		0.000886	0.00292	1	04/17/2020 16:16	WG1462208
trans-1,3-Dichloropropene	U		0.00133	0.00585	1	04/17/2020 16:16	WG1462208
trans-1,4-Dichloro-2-butene	U		0.00218	0.00585	1	04/17/2020 16:16	WG1462208
2,2-Dichloropropane	U		0.00161	0.00292	1	04/17/2020 16:16	WG1462208
Di-isopropyl ether	U		0.000480	0.00117	1	04/17/2020 16:16	WG1462208
Ethylbenzene	U		0.000862	0.00292	1	04/17/2020 16:16	WG1462208
Hexachloro-1,3-butadiene	U		0.00702	0.0292	1	04/17/2020 16:16	WG1462208
2-Hexanone	U		0.00393	0.0292	1	04/17/2020 16:16	WG1462208
n-Hexane	U		0.00264	0.00585	1	04/17/2020 16:16	WG1462208
Iodomethane	U		0.00271	0.0146	1	04/17/2020 16:16	WG1462208
Isopropylbenzene	U		0.000497	0.00292	1	04/17/2020 16:16	WG1462208
p-Isopropyltoluene	U		0.00298	0.00585	1	04/17/2020 16:16	WG1462208
2-Butanone (MEK)	U		0.0743	0.117	1	04/17/2020 16:16	WG1462208
Methylene Chloride	U		0.00777	0.0292	1	04/17/2020 16:16	WG1462208
4-Methyl-2-pentanone (MIBK)	U		0.00267	0.0292	1	04/17/2020 16:16	WG1462208

JC 5/28/2020

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.000409	0.00117	1	04/17/2020 16:16	WG1462208
Naphthalene	U		0.00571	0.0146	1	04/17/2020 16:16	WG1462208
n-Propylbenzene	U		0.00111	0.00585	1	04/17/2020 16:16	WG1462208
Styrene	U		0.000268	0.0146	1	04/17/2020 16:16	WG1462208
1,1,1,2-Tetrachloroethane	U		0.00111	0.00292	1	04/17/2020 16:16	WG1462208
1,1,2,2-Tetrachloroethane	U		0.000813	0.00292	1	04/17/2020 16:16	WG1462208
1,1,2-Trichlorotrifluoroethane	U		0.000882	0.00292	1	04/17/2020 16:16	WG1462208
Tetrachloroethene	U		0.00105	0.00292	1	04/17/2020 16:16	WG1462208
Toluene	U		0.00152	0.00585	1	04/17/2020 16:16	WG1462208
1,2,3-Trichlorobenzene	U		0.00857	0.0146	1	04/17/2020 16:16	WG1462208
1,2,4-Trichlorobenzene	U		0.00515	0.0146	1	04/17/2020 16:16	WG1462208
1,1,1-Trichloroethane	U		0.00108	0.00292	1	04/17/2020 16:16	WG1462208
1,1,2-Trichloroethane	U		0.000698	0.00292	1	04/17/2020 16:16	WG1462208
Trichloroethene	U		0.000683	0.00117	1	04/17/2020 16:16	WG1462208
Trichlorofluoromethane	U		0.000967	0.00292	1	04/17/2020 16:16	WG1462208
1,2,3-Trichloropropane	U		0.00190	0.0146	1	04/17/2020 16:16	WG1462208
1,2,4-Trimethylbenzene	U		0.00185	0.00585	1	04/17/2020 16:16	WG1462208
1,2,3-Trimethylbenzene	U		0.00185	0.00585	1	04/17/2020 16:16	WG1462208
1,3,5-Trimethylbenzene	U		0.00234	0.00585	1	04/17/2020 16:16	WG1462208
Vinyl acetate	U		0.00297	0.0146	1	04/17/2020 16:16	WG1462208
Vinyl chloride	U		0.00136	0.00292	1	04/17/2020 16:16	WG1462208
Xylenes, Total	U		0.00103	0.00760	1	04/17/2020 16:16	WG1462208
(S) Toluene-d8	*104*			*75.0-131*		*04/17/2020 16:16*	WG1462208
(S) 4-Bromofluorobenzene	*97.7*			*67.0-138*		*04/17/2020 16:16*	WG1462208
(S) 1,2-Dichloroethane-d4	*98.6*			*70.0-130*		*04/17/2020 16:16*	WG1462208

JC 5/28/2020

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	90.7		1	04/21/2020 13:18	WG1463617

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	U	~~J4~~	0.0402	0.0551	1	04/17/2020 16:35	WG1462208
Acrylonitrile	U		0.00398	0.0138	1	04/17/2020 16:35	WG1462208
Benzene	U		0.000515	0.00110	1	04/17/2020 16:35	WG1462208
Bromobenzene	U		0.000992	0.0138	1	04/17/2020 16:35	WG1462208
Bromodichloromethane	U		0.000799	0.00276	1	04/17/2020 16:35	WG1462208
Bromochloromethane	U		0.000622	0.00551	1	04/17/2020 16:35	WG1462208
Bromoform	U		0.00129	0.0276	1	04/17/2020 16:35	WG1462208
Bromomethane	U		0.00217	0.0138	1	04/17/2020 16:35	WG1462208
n-Butylbenzene	U		0.00579	0.0138	1	04/17/2020 16:35	WG1462208
sec-Butylbenzene	U		0.00317	0.0138	1	04/17/2020 16:35	WG1462208
tert-Butylbenzene	U		0.00215	0.00551	1	04/17/2020 16:35	WG1462208
Carbon disulfide	U		0.000772	0.0138	1	04/17/2020 16:35	WG1462208
Carbon tetrachloride	U		0.000990	0.00551	1	04/17/2020 16:35	WG1462208
Chlorobenzene	U		0.000231	0.00276	1	04/17/2020 16:35	WG1462208
Chlorodibromomethane	U		0.000675	0.00276	1	04/17/2020 16:35	WG1462208
Chloroethane	U		0.00187	0.00551	1	04/17/2020 16:35	WG1462208
Chloroform	U		0.00114	0.00276	1	04/17/2020 16:35	WG1462208
Chloromethane	U		0.00479	0.0138	1	04/17/2020 16:35	WG1462208
2-Chlorotoluene	U		0.000953	0.00276	1	04/17/2020 16:35	WG1462208
4-Chlorotoluene	U		0.000496	0.00551	1	04/17/2020 16:35	WG1462208
1,2-Dibromo-3-Chloropropane	U		0.00430	0.0276	1	04/17/2020 16:35	WG1462208
1,2-Dibromoethane	U		0.000714	0.00276	1	04/17/2020 16:35	WG1462208
Dibromomethane	U		0.000827	0.00551	1	04/17/2020 16:35	WG1462208
1,2-Dichlorobenzene	U		0.000468	0.00551	1	04/17/2020 16:35	WG1462208
1,3-Dichlorobenzene	U		0.000661	0.00551	1	04/17/2020 16:35	WG1462208
1,4-Dichlorobenzene	U		0.000772	0.00551	1	04/17/2020 16:35	WG1462208
Dichlorodifluoromethane	U		0.00177	0.00276	1	04/17/2020 16:35	WG1462208
1,1-Dichloroethane	U		0.000541	0.00276	1	04/17/2020 16:35	WG1462208
1,2-Dichloroethane	U		0.000715	0.00276	1	04/17/2020 16:35	WG1462208
1,1-Dichloroethene	U		0.000668	0.00276	1	04/17/2020 16:35	WG1462208
cis-1,2-Dichloroethene	U		0.000809	0.00276	1	04/17/2020 16:35	WG1462208
trans-1,2-Dichloroethene	U		0.00115	0.00551	1	04/17/2020 16:35	WG1462208
1,2-Dichloropropane	U	~~J4~~	0.00157	0.00551	1	04/17/2020 16:35	WG1462208
1,1-Dichloropropene	U		0.000892	0.00276	1	04/17/2020 16:35	WG1462208
1,3-Dichloropropane	U		0.000552	0.00551	1	04/17/2020 16:35	WG1462208
cis-1,3-Dichloropropene	U		0.000834	0.00276	1	04/17/2020 16:35	WG1462208
trans-1,3-Dichloropropene	U		0.00126	0.00551	1	04/17/2020 16:35	WG1462208
trans-1,4-Dichloro-2-butene	U		0.00205	0.00551	1	04/17/2020 16:35	WG1462208
2,2-Dichloropropane	U		0.00152	0.00276	1	04/17/2020 16:35	WG1462208
Di-isopropyl ether	U		0.000452	0.00110	1	04/17/2020 16:35	WG1462208
Ethylbenzene	U		0.000812	0.00276	1	04/17/2020 16:35	WG1462208
Hexachloro-1,3-butadiene	U		0.00661	0.0276	1	04/17/2020 16:35	WG1462208
2-Hexanone	U		0.00370	0.0276	1	04/17/2020 16:35	WG1462208
n-Hexane	U		0.00249	0.00551	1	04/17/2020 16:35	WG1462208
Iodomethane	U		0.00256	0.0138	1	04/17/2020 16:35	WG1462208
Isopropylbenzene	U		0.000468	0.00276	1	04/17/2020 16:35	WG1462208
p-Isopropyltoluene	U		0.00281	0.00551	1	04/17/2020 16:35	WG1462208
2-Butanone (MEK)	U		0.0700	0.110	1	04/17/2020 16:35	WG1462208
Methylene Chloride	U		0.00732	0.0276	1	04/17/2020 16:35	WG1462208
4-Methyl-2-pentanone (MIBK)	U		0.00251	0.0276	1	04/17/2020 16:35	WG1462208

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Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.000386	0.00110	1	04/17/2020 16:35	WG1462208
Naphthalene	U		0.00538	0.0138	1	04/17/2020 16:35	WG1462208
n-Propylbenzene	U		0.00105	0.00551	1	04/17/2020 16:35	WG1462208
Styrene	U		0.000252	0.0138	1	04/17/2020 16:35	WG1462208
1,1,1,2-Tetrachloroethane	U		0.00104	0.00276	1	04/17/2020 16:35	WG1462208
1,1,2,2-Tetrachloroethane	U		0.000766	0.00276	1	04/17/2020 16:35	WG1462208
1,1,2-Trichlorotrifluoroethane	U		0.000831	0.00276	1	04/17/2020 16:35	WG1462208
Tetrachloroethene	U		0.000988	0.00276	1	04/17/2020 16:35	WG1462208
Toluene	U		0.00143	0.00551	1	04/17/2020 16:35	WG1462208
1,2,3-Trichlorobenzene	U		0.00808	0.0138	1	04/17/2020 16:35	WG1462208
1,2,4-Trichlorobenzene	U		0.00485	0.0138	1	04/17/2020 16:35	WG1462208
1,1,1-Trichloroethane	U		0.00102	0.00276	1	04/17/2020 16:35	WG1462208
1,1,2-Trichloroethane	U		0.000658	0.00276	1	04/17/2020 16:35	WG1462208
Trichloroethene	U		0.000644	0.00110	1	04/17/2020 16:35	WG1462208
Trichlorofluoromethane	U		0.000912	0.00276	1	04/17/2020 16:35	WG1462208
1,2,3-Trichloropropane	U		0.00179	0.0138	1	04/17/2020 16:35	WG1462208
1,2,4-Trimethylbenzene	U		0.00174	0.00551	1	04/17/2020 16:35	WG1462208
1,2,3-Trimethylbenzene	U		0.00174	0.00551	1	04/17/2020 16:35	WG1462208
1,3,5-Trimethylbenzene	U		0.00220	0.00551	1	04/17/2020 16:35	WG1462208
Vinyl acetate	U		0.00280	0.0138	1	04/17/2020 16:35	WG1462208
Vinyl chloride	U		0.00128	0.00276	1	04/17/2020 16:35	WG1462208
Xylenes, Total	U		0.000970	0.00716	1	04/17/2020 16:35	WG1462208
(S) Toluene-d8	*106*			*75.0-131*		*04/17/2020 16:35*	WG1462208
(S) 4-Bromofluorobenzene	*95.0*			*67.0-138*		*04/17/2020 16:35*	WG1462208
(S) 1,2-Dichloroethane-d4	*97.6*			*70.0-130*		*04/17/2020 16:35*	WG1462208

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

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Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	80.3		1	04/21/2020 13:18	WG1463617

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	U	~~J4~~	0.0454	0.0622	1	04/17/2020 16:54	WG1462208
Acrylonitrile	U		0.00449	0.0156	1	04/17/2020 16:54	WG1462208
Benzene	U		0.000581	0.00124	1	04/17/2020 16:54	WG1462208
Bromobenzene	U		0.00112	0.0156	1	04/17/2020 16:54	WG1462208
Bromodichloromethane	U		0.000902	0.00311	1	04/17/2020 16:54	WG1462208
Bromochloromethane	U		0.000702	0.00622	1	04/17/2020 16:54	WG1462208
Bromoform	U		0.00146	0.0311	1	04/17/2020 16:54	WG1462208
Bromomethane	U		0.00245	0.0156	1	04/17/2020 16:54	WG1462208
n-Butylbenzene	U		0.00654	0.0156	1	04/17/2020 16:54	WG1462208
sec-Butylbenzene	U		0.00359	0.0156	1	04/17/2020 16:54	WG1462208
tert-Butylbenzene	U		0.00243	0.00622	1	04/17/2020 16:54	WG1462208
Carbon disulfide	U		0.000871	0.0156	1	04/17/2020 16:54	WG1462208
Carbon tetrachloride	U		0.00112	0.00622	1	04/17/2020 16:54	WG1462208
Chlorobenzene	U		0.000261	0.00311	1	04/17/2020 16:54	WG1462208
Chlorodibromomethane	U		0.000762	0.00311	1	04/17/2020 16:54	WG1462208
Chloroethane	U		0.00212	0.00622	1	04/17/2020 16:54	WG1462208
Chloroform	U		0.00128	0.00311	1	04/17/2020 16:54	WG1462208
Chloromethane	U		0.00541	0.0156	1	04/17/2020 16:54	WG1462208
2-Chlorotoluene	U		0.00108	0.00311	1	04/17/2020 16:54	WG1462208
4-Chlorotoluene	U		0.000560	0.00622	1	04/17/2020 16:54	WG1462208
1,2-Dibromo-3-Chloropropane	U		0.00485	0.0311	1	04/17/2020 16:54	WG1462208
1,2-Dibromoethane	U		0.000807	0.00311	1	04/17/2020 16:54	WG1462208
Dibromomethane	U		0.000934	0.00622	1	04/17/2020 16:54	WG1462208
1,2-Dichlorobenzene	U		0.000529	0.00622	1	04/17/2020 16:54	WG1462208
1,3-Dichlorobenzene	U		0.000747	0.00622	1	04/17/2020 16:54	WG1462208
1,4-Dichlorobenzene	U		0.000871	0.00622	1	04/17/2020 16:54	WG1462208
Dichlorodifluoromethane	U		0.00200	0.00311	1	04/17/2020 16:54	WG1462208
1,1-Dichloroethane	U		0.000611	0.00311	1	04/17/2020 16:54	WG1462208
1,2-Dichloroethane	U		0.000808	0.00311	1	04/17/2020 16:54	WG1462208
1,1-Dichloroethene	U		0.000754	0.00311	1	04/17/2020 16:54	WG1462208
cis-1,2-Dichloroethene	U		0.000914	0.00311	1	04/17/2020 16:54	WG1462208
trans-1,2-Dichloroethene	U		0.00129	0.00622	1	04/17/2020 16:54	WG1462208
1,2-Dichloropropane	U	~~J4~~	0.00177	0.00622	1	04/17/2020 16:54	WG1462208
1,1-Dichloropropene	U		0.00101	0.00311	1	04/17/2020 16:54	WG1462208
1,3-Dichloropropane	U		0.000624	0.00622	1	04/17/2020 16:54	WG1462208
cis-1,3-Dichloropropene	U		0.000942	0.00311	1	04/17/2020 16:54	WG1462208
trans-1,3-Dichloropropene	U		0.00142	0.00622	1	04/17/2020 16:54	WG1462208
trans-1,4-Dichloro-2-butene	U		0.00232	0.00622	1	04/17/2020 16:54	WG1462208
2,2-Dichloropropane	U		0.00172	0.00311	1	04/17/2020 16:54	WG1462208
Di-isopropyl ether	U		0.000510	0.00124	1	04/17/2020 16:54	WG1462208
Ethylbenzene	U		0.000917	0.00311	1	04/17/2020 16:54	WG1462208
Hexachloro-1,3-butadiene	U		0.00747	0.0311	1	04/17/2020 16:54	WG1462208
2-Hexanone	U		0.00418	0.0311	1	04/17/2020 16:54	WG1462208
n-Hexane	U		0.00281	0.00622	1	04/17/2020 16:54	WG1462208
Iodomethane	U		0.00289	0.0156	1	04/17/2020 16:54	WG1462208
Isopropylbenzene	U		0.000529	0.00311	1	04/17/2020 16:54	WG1462208
p-Isopropyltoluene	U		0.00317	0.00622	1	04/17/2020 16:54	WG1462208
2-Butanone (MEK)	U		0.0790	0.124	1	04/17/2020 16:54	WG1462208
Methylene Chloride	U		0.00827	0.0311	1	04/17/2020 16:54	WG1462208
4-Methyl-2-pentanone (MIBK)	U		0.00284	0.0311	1	04/17/2020 16:54	WG1462208

JC 5/28/2020

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.000436	0.00124	1	04/17/2020 16:54	WG1462208
Naphthalene	U		0.00607	0.0156	1	04/17/2020 16:54	WG1462208
n-Propylbenzene	U		0.00118	0.00622	1	04/17/2020 16:54	WG1462208
Styrene	U		0.000285	0.0156	1	04/17/2020 16:54	WG1462208
1,1,1,2-Tetrachloroethane	U		0.00118	0.00311	1	04/17/2020 16:54	WG1462208
1,1,2,2-Tetrachloroethane	U		0.000865	0.00311	1	04/17/2020 16:54	WG1462208
1,1,2-Trichlorotrifluoroethane	U		0.000939	0.00311	1	04/17/2020 16:54	WG1462208
Tetrachloroethene	U		0.00112	0.00311	1	04/17/2020 16:54	WG1462208
Toluene	U		0.00162	0.00622	1	04/17/2020 16:54	WG1462208
1,2,3-Trichlorobenzene	U		0.00912	0.0156	1	04/17/2020 16:54	WG1462208
1,2,4-Trichlorobenzene	U		0.00548	0.0156	1	04/17/2020 16:54	WG1462208
1,1,1-Trichloroethane	U		0.00115	0.00311	1	04/17/2020 16:54	WG1462208
1,1,2-Trichloroethane	U		0.000743	0.00311	1	04/17/2020 16:54	WG1462208
Trichloroethene	U		0.000727	0.00124	1	04/17/2020 16:54	WG1462208
Trichlorofluoromethane	U		0.00103	0.00311	1	04/17/2020 16:54	WG1462208
1,2,3-Trichloropropane	U		0.00202	0.0156	1	04/17/2020 16:54	WG1462208
1,2,4-Trimethylbenzene	U		0.00197	0.00622	1	04/17/2020 16:54	WG1462208
1,2,3-Trimethylbenzene	U		0.00197	0.00622	1	04/17/2020 16:54	WG1462208
1,3,5-Trimethylbenzene	U		0.00249	0.00622	1	04/17/2020 16:54	WG1462208
Vinyl acetate	U		0.00316	0.0156	1	04/17/2020 16:54	WG1462208
Vinyl chloride	U		0.00144	0.00311	1	04/17/2020 16:54	WG1462208
Xylenes, Total	U		0.00110	0.00809	1	04/17/2020 16:54	WG1462208
(S) Toluene-d8	*105*			*75.0-131*		*04/17/2020 16:54*	WG1462208
(S) 4-Bromofluorobenzene	*95.9*			*67.0-138*		*04/17/2020 16:54*	WG1462208
(S) 1,2-Dichloroethane-d4	*97.0*			*70.0-130*		*04/17/2020 16:54*	WG1462208

JC
5/28/2020

MW-343-51
Collected date/time: 04/13/20 13:55

SAMPLE RESULTS - 11

L1209078

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	89.9		1	04/21/2020 13:18	WG1463617

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	U	~~J4~~	0.0406	0.0556	1	04/17/2020 17:13	WG1462208
Acrylonitrile	U		0.00402	0.0139	1	04/17/2020 17:13	WG1462208
Benzene	U		0.000520	0.00111	1	04/17/2020 17:13	WG1462208
Bromobenzene	U		0.00100	0.0139	1	04/17/2020 17:13	WG1462208
Bromodichloromethane	U		0.000807	0.00278	1	04/17/2020 17:13	WG1462208
Bromochloromethane	U		0.000627	0.00556	1	04/17/2020 17:13	WG1462208
Bromoform	U		0.00130	0.0278	1	04/17/2020 17:13	WG1462208
Bromomethane	U		0.00219	0.0139	1	04/17/2020 17:13	WG1462208
n-Butylbenzene	U		0.00584	0.0139	1	04/17/2020 17:13	WG1462208
sec-Butylbenzene	U		0.00320	0.0139	1	04/17/2020 17:13	WG1462208
tert-Butylbenzene	U		0.00217	0.00556	1	04/17/2020 17:13	WG1462208
Carbon disulfide	U		0.000779	0.0139	1	04/17/2020 17:13	WG1462208
Carbon tetrachloride	U		0.000999	0.00556	1	04/17/2020 17:13	WG1462208
Chlorobenzene	U		0.000234	0.00278	1	04/17/2020 17:13	WG1462208
Chlorodibromomethane	U		0.000681	0.00278	1	04/17/2020 17:13	WG1462208
Chloroethane	U		0.00189	0.00556	1	04/17/2020 17:13	WG1462208
Chloroform	U		0.00115	0.00278	1	04/17/2020 17:13	WG1462208
Chloromethane	U		0.00484	0.0139	1	04/17/2020 17:13	WG1462208
2-Chlorotoluene	U		0.000962	0.00278	1	04/17/2020 17:13	WG1462208
4-Chlorotoluene	U		0.000501	0.00556	1	04/17/2020 17:13	WG1462208
1,2-Dibromo-3-Chloropropane	U		0.00434	0.0278	1	04/17/2020 17:13	WG1462208
1,2-Dibromoethane	U		0.000721	0.00278	1	04/17/2020 17:13	WG1462208
Dibromomethane	U		0.000834	0.00556	1	04/17/2020 17:13	WG1462208
1,2-Dichlorobenzene	U		0.000473	0.00556	1	04/17/2020 17:13	WG1462208
1,3-Dichlorobenzene	U		0.000668	0.00556	1	04/17/2020 17:13	WG1462208
1,4-Dichlorobenzene	U		0.000779	0.00556	1	04/17/2020 17:13	WG1462208
Dichlorodifluoromethane	U		0.00179	0.00278	1	04/17/2020 17:13	WG1462208
1,1-Dichloroethane	U		0.000546	0.00278	1	04/17/2020 17:13	WG1462208
1,2-Dichloroethane	U		0.000722	0.00278	1	04/17/2020 17:13	WG1462208
1,1-Dichloroethene	U		0.000674	0.00278	1	04/17/2020 17:13	WG1462208
cis-1,2-Dichloroethene	U		0.000817	0.00278	1	04/17/2020 17:13	WG1462208
trans-1,2-Dichloroethene	U		0.00116	0.00556	1	04/17/2020 17:13	WG1462208
1,2-Dichloropropane	U	~~J4~~	0.00158	0.00556	1	04/17/2020 17:13	WG1462208
1,1-Dichloropropene	U		0.000900	0.00278	1	04/17/2020 17:13	WG1462208
1,3-Dichloropropane	U		0.000557	0.00556	1	04/17/2020 17:13	WG1462208
cis-1,3-Dichloropropene	U		0.000842	0.00278	1	04/17/2020 17:13	WG1462208
trans-1,3-Dichloropropene	U		0.00127	0.00556	1	04/17/2020 17:13	WG1462208
trans-1,4-Dichloro-2-butene	U		0.00207	0.00556	1	04/17/2020 17:13	WG1462208
2,2-Dichloropropane	U		0.00154	0.00278	1	04/17/2020 17:13	WG1462208
Di-isopropyl ether	U		0.000456	0.00111	1	04/17/2020 17:13	WG1462208
Ethylbenzene	U		0.000820	0.00278	1	04/17/2020 17:13	WG1462208
Hexachloro-1,3-butadiene	U		0.00668	0.0278	1	04/17/2020 17:13	WG1462208
2-Hexanone	U		0.00374	0.0278	1	04/17/2020 17:13	WG1462208
n-Hexane	U		0.00251	0.00556	1	04/17/2020 17:13	WG1462208
Iodomethane	U		0.00258	0.0139	1	04/17/2020 17:13	WG1462208
Isopropylbenzene	U		0.000473	0.00278	1	04/17/2020 17:13	WG1462208
p-Isopropyltoluene	U		0.00284	0.00556	1	04/17/2020 17:13	WG1462208
2-Butanone (MEK)	U		0.0706	0.111	1	04/17/2020 17:13	WG1462208
Methylene Chloride	U		0.00739	0.0278	1	04/17/2020 17:13	WG1462208
4-Methyl-2-pentanone (MIBK)	U		0.00254	0.0278	1	04/17/2020 17:13	WG1462208

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Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.000389	0.00111	1	04/17/2020 17:13	WG1462208
Naphthalene	U		0.00543	0.0139	1	04/17/2020 17:13	WG1462208
n-Propylbenzene	U		0.00106	0.00556	1	04/17/2020 17:13	WG1462208
Styrene	U		0.000255	0.0139	1	04/17/2020 17:13	WG1462208
1,1,1,2-Tetrachloroethane	U		0.00105	0.00278	1	04/17/2020 17:13	WG1462208
1,1,2,2-Tetrachloroethane	U		0.000773	0.00278	1	04/17/2020 17:13	WG1462208
1,1,2-Trichlorotrifluoroethane	U		0.000839	0.00278	1	04/17/2020 17:13	WG1462208
Tetrachloroethene	U		0.000997	0.00278	1	04/17/2020 17:13	WG1462208
Toluene	U		0.00145	0.00556	1	04/17/2020 17:13	WG1462208
1,2,3-Trichlorobenzene	U		0.00816	0.0139	1	04/17/2020 17:13	WG1462208
1,2,4-Trichlorobenzene	U		0.00490	0.0139	1	04/17/2020 17:13	WG1462208
1,1,1-Trichloroethane	U		0.00103	0.00278	1	04/17/2020 17:13	WG1462208
1,1,2-Trichloroethane	U		0.000664	0.00278	1	04/17/2020 17:13	WG1462208
Trichloroethene	U		0.000650	0.00111	1	04/17/2020 17:13	WG1462208
Trichlorofluoromethane	U		0.000920	0.00278	1	04/17/2020 17:13	WG1462208
1,2,3-Trichloropropane	U		0.00180	0.0139	1	04/17/2020 17:13	WG1462208
1,2,4-Trimethylbenzene	U		0.00176	0.00556	1	04/17/2020 17:13	WG1462208
1,2,3-Trimethylbenzene	U		0.00176	0.00556	1	04/17/2020 17:13	WG1462208
1,3,5-Trimethylbenzene	U		0.00223	0.00556	1	04/17/2020 17:13	WG1462208
Vinyl acetate	U		0.00283	0.0139	1	04/17/2020 17:13	WG1462208
Vinyl chloride	U		0.00129	0.00278	1	04/17/2020 17:13	WG1462208
Xylenes, Total	U		0.000979	0.00723	1	04/17/2020 17:13	WG1462208
(S) Toluene-d8	*106*			*75.0-131*		*04/17/2020 17:13*	WG1462208
(S) 4-Bromofluorobenzene	*95.6*			*67.0-138*		*04/17/2020 17:13*	WG1462208
(S) 1,2-Dichloroethane-d4	*100*			*70.0-130*		*04/17/2020 17:13*	WG1462208

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

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Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	87.9		1	04/21/2020 13:18	WG1463617

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	U	~~J4~~	0.0415	0.0569	1	04/17/2020 17:32	WG1462208
Acrylonitrile	U		0.00411	0.0142	1	04/17/2020 17:32	WG1462208
Benzene	U		0.000531	0.00114	1	04/17/2020 17:32	WG1462208
Bromobenzene	U		0.00102	0.0142	1	04/17/2020 17:32	WG1462208
Bromodichloromethane	U		0.000824	0.00284	1	04/17/2020 17:32	WG1462208
Bromochloromethane	U		0.000641	0.00569	1	04/17/2020 17:32	WG1462208
Bromoform	U		0.00133	0.0284	1	04/17/2020 17:32	WG1462208
Bromomethane	U		0.00224	0.0142	1	04/17/2020 17:32	WG1462208
n-Butylbenzene	U		0.00597	0.0142	1	04/17/2020 17:32	WG1462208
sec-Butylbenzene	U		0.00327	0.0142	1	04/17/2020 17:32	WG1462208
tert-Butylbenzene	U		0.00222	0.00569	1	04/17/2020 17:32	WG1462208
Carbon disulfide	U		0.000796	0.0142	1	04/17/2020 17:32	WG1462208
Carbon tetrachloride	U		0.00102	0.00569	1	04/17/2020 17:32	WG1462208
Chlorobenzene	U		0.000239	0.00284	1	04/17/2020 17:32	WG1462208
Chlorodibromomethane	U		0.000696	0.00284	1	04/17/2020 17:32	WG1462208
Chloroethane	U		0.00193	0.00569	1	04/17/2020 17:32	WG1462208
Chloroform	U		0.00117	0.00284	1	04/17/2020 17:32	WG1462208
Chloromethane	U		0.00495	0.0142	1	04/17/2020 17:32	WG1462208
2-Chlorotoluene	U		0.000984	0.00284	1	04/17/2020 17:32	WG1462208
4-Chlorotoluene	U		0.000512	0.00569	1	04/17/2020 17:32	WG1462208
1,2-Dibromo-3-Chloropropane	U		0.00443	0.0284	1	04/17/2020 17:32	WG1462208
1,2-Dibromoethane	U		0.000737	0.00284	1	04/17/2020 17:32	WG1462208
Dibromomethane	U		0.000853	0.00569	1	04/17/2020 17:32	WG1462208
1,2-Dichlorobenzene	U		0.000483	0.00569	1	04/17/2020 17:32	WG1462208
1,3-Dichlorobenzene	U		0.000682	0.00569	1	04/17/2020 17:32	WG1462208
1,4-Dichlorobenzene	U		0.000796	0.00569	1	04/17/2020 17:32	WG1462208
Dichlorodifluoromethane	U		0.00183	0.00284	1	04/17/2020 17:32	WG1462208
1,1-Dichloroethane	U		0.000558	0.00284	1	04/17/2020 17:32	WG1462208
1,2-Dichloroethane	U		0.000738	0.00284	1	04/17/2020 17:32	WG1462208
1,1-Dichloroethene	U		0.000689	0.00284	1	04/17/2020 17:32	WG1462208
cis-1,2-Dichloroethene	0.00202	J	0.000835	0.00284	1	04/17/2020 17:32	WG1462208
trans-1,2-Dichloroethene	U		0.00118	0.00569	1	04/17/2020 17:32	WG1462208
1,2-Dichloropropane	U	~~J4~~	0.00161	0.00569	1	04/17/2020 17:32	WG1462208
1,1-Dichloropropene	U		0.000920	0.00284	1	04/17/2020 17:32	WG1462208
1,3-Dichloropropane	U		0.000570	0.00569	1	04/17/2020 17:32	WG1462208
cis-1,3-Dichloropropene	U		0.000861	0.00284	1	04/17/2020 17:32	WG1462208
trans-1,3-Dichloropropene	U		0.00130	0.00569	1	04/17/2020 17:32	WG1462208
trans-1,4-Dichloro-2-butene	U		0.00212	0.00569	1	04/17/2020 17:32	WG1462208
2,2-Dichloropropane	U		0.00157	0.00284	1	04/17/2020 17:32	WG1462208
Di-isopropyl ether	U		0.000466	0.00114	1	04/17/2020 17:32	WG1462208
Ethylbenzene	U		0.000838	0.00284	1	04/17/2020 17:32	WG1462208
Hexachloro-1,3-butadiene	U		0.00682	0.0284	1	04/17/2020 17:32	WG1462208
2-Hexanone	U		0.00382	0.0284	1	04/17/2020 17:32	WG1462208
n-Hexane	U		0.00257	0.00569	1	04/17/2020 17:32	WG1462208
Iodomethane	U		0.00264	0.0142	1	04/17/2020 17:32	WG1462208
Isopropylbenzene	U		0.000483	0.00284	1	04/17/2020 17:32	WG1462208
p-Isopropyltoluene	U		0.00290	0.00569	1	04/17/2020 17:32	WG1462208
2-Butanone (MEK)	U		0.0722	0.114	1	04/17/2020 17:32	WG1462208
Methylene Chloride	U		0.00755	0.0284	1	04/17/2020 17:32	WG1462208
4-Methyl-2-pentanone (MIBK)	U		0.00259	0.0284	1	04/17/2020 17:32	WG1462208

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Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.000398	0.00114	1	04/17/2020 17:32	WG1462208
Naphthalene	U		0.00555	0.0142	1	04/17/2020 17:32	WG1462208
n-Propylbenzene	U		0.00108	0.00569	1	04/17/2020 17:32	WG1462208
Styrene	U		0.000260	0.0142	1	04/17/2020 17:32	WG1462208
1,1,1,2-Tetrachloroethane	U		0.00108	0.00284	1	04/17/2020 17:32	WG1462208
1,1,2,2-Tetrachloroethane	U		0.000790	0.00284	1	04/17/2020 17:32	WG1462208
1,1,2-Trichlorotrifluoroethane	U		0.000857	0.00284	1	04/17/2020 17:32	WG1462208
Tetrachloroethene	U		0.00102	0.00284	1	04/17/2020 17:32	WG1462208
Toluene	U		0.00148	0.00569	1	04/17/2020 17:32	WG1462208
1,2,3-Trichlorobenzene	U		0.00834	0.0142	1	04/17/2020 17:32	WG1462208
1,2,4-Trichlorobenzene	U		0.00500	0.0142	1	04/17/2020 17:32	WG1462208
1,1,1-Trichloroethane	U		0.00105	0.00284	1	04/17/2020 17:32	WG1462208
1,1,2-Trichloroethane	U		0.000679	0.00284	1	04/17/2020 17:32	WG1462208
Trichloroethene	U		0.000664	0.00114	1	04/17/2020 17:32	WG1462208
Trichlorofluoromethane	U		0.000940	0.00284	1	04/17/2020 17:32	WG1462208
1,2,3-Trichloropropane	U		0.00184	0.0142	1	04/17/2020 17:32	WG1462208
1,2,4-Trimethylbenzene	U		0.00180	0.00569	1	04/17/2020 17:32	WG1462208
1,2,3-Trimethylbenzene	U		0.00180	0.00569	1	04/17/2020 17:32	WG1462208
1,3,5-Trimethylbenzene	U		0.00227	0.00569	1	04/17/2020 17:32	WG1462208
Vinyl acetate	U		0.00289	0.0142	1	04/17/2020 17:32	WG1462208
Vinyl chloride	U		0.00132	0.00284	1	04/17/2020 17:32	WG1462208
Xylenes, Total	U		0.00100	0.00739	1	04/17/2020 17:32	WG1462208
(S) Toluene-d8	*105*			*75.0-131*		*04/17/2020 17:32*	WG1462208
(S) 4-Bromofluorobenzene	*94.6*			*67.0-138*		*04/17/2020 17:32*	WG1462208
(S) 1,2-Dichloroethane-d4	*96.8*			*70.0-130*		*04/17/2020 17:32*	WG1462208

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MW-343-62

Collected date/time: 04/13/20 15:02

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	86.4		1	04/21/2020 13:18	WG1463617

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	U	~~J4~~	0.0422	0.0579	1	04/17/2020 17:51	WG1462208
Acrylonitrile	U		0.00418	0.0145	1	04/17/2020 17:51	WG1462208
Benzene	0.000572	J	0.000540	0.00116	1	04/17/2020 17:51	WG1462208
Bromobenzene	U		0.00104	0.0145	1	04/17/2020 17:51	WG1462208
Bromodichloromethane	U		0.000839	0.00289	1	04/17/2020 17:51	WG1462208
Bromochloromethane	U		0.000653	0.00579	1	04/17/2020 17:51	WG1462208
Bromoform	U		0.00135	0.0289	1	04/17/2020 17:51	WG1462208
Bromomethane	U		0.00228	0.0145	1	04/17/2020 17:51	WG1462208
n-Butylbenzene	U		0.00608	0.0145	1	04/17/2020 17:51	WG1462208
sec-Butylbenzene	U		0.00333	0.0145	1	04/17/2020 17:51	WG1462208
tert-Butylbenzene	U		0.00226	0.00579	1	04/17/2020 17:51	WG1462208
Carbon disulfide	U		0.000810	0.0145	1	04/17/2020 17:51	WG1462208
Carbon tetrachloride	U		0.00104	0.00579	1	04/17/2020 17:51	WG1462208
Chlorobenzene	U		0.000243	0.00289	1	04/17/2020 17:51	WG1462208
Chlorodibromomethane	U		0.000708	0.00289	1	04/17/2020 17:51	WG1462208
Chloroethane	U		0.00197	0.00579	1	04/17/2020 17:51	WG1462208
Chloroform	U		0.00119	0.00289	1	04/17/2020 17:51	WG1462208
Chloromethane	U		0.00503	0.0145	1	04/17/2020 17:51	WG1462208
2-Chlorotoluene	U		0.00100	0.00289	1	04/17/2020 17:51	WG1462208
4-Chlorotoluene	U		0.000521	0.00579	1	04/17/2020 17:51	WG1462208
1,2-Dibromo-3-Chloropropane	U		0.00451	0.0289	1	04/17/2020 17:51	WG1462208
1,2-Dibromoethane	U		0.000750	0.00289	1	04/17/2020 17:51	WG1462208
Dibromomethane	U		0.000868	0.00579	1	04/17/2020 17:51	WG1462208
1,2-Dichlorobenzene	U		0.000492	0.00579	1	04/17/2020 17:51	WG1462208
1,3-Dichlorobenzene	U		0.000694	0.00579	1	04/17/2020 17:51	WG1462208
1,4-Dichlorobenzene	U		0.000810	0.00579	1	04/17/2020 17:51	WG1462208
Dichlorodifluoromethane	U		0.00186	0.00289	1	04/17/2020 17:51	WG1462208
1,1-Dichloroethane	U		0.000568	0.00289	1	04/17/2020 17:51	WG1462208
1,2-Dichloroethane	U		0.000751	0.00289	1	04/17/2020 17:51	WG1462208
1,1-Dichloroethene	U		0.000701	0.00289	1	04/17/2020 17:51	WG1462208
cis-1,2-Dichloroethene	0.00389		0.000849	0.00289	1	04/17/2020 17:51	WG1462208
trans-1,2-Dichloroethene	U		0.00120	0.00579	1	04/17/2020 17:51	WG1462208
1,2-Dichloropropane	U	~~J4~~	0.00164	0.00579	1	04/17/2020 17:51	WG1462208
1,1-Dichloropropene	U		0.000936	0.00289	1	04/17/2020 17:51	WG1462208
1,3-Dichloropropane	U		0.000580	0.00579	1	04/17/2020 17:51	WG1462208
cis-1,3-Dichloropropene	U		0.000876	0.00289	1	04/17/2020 17:51	WG1462208
trans-1,3-Dichloropropene	U		0.00132	0.00579	1	04/17/2020 17:51	WG1462208
trans-1,4-Dichloro-2-butene	U		0.00215	0.00579	1	04/17/2020 17:51	WG1462208
2,2-Dichloropropane	U		0.00160	0.00289	1	04/17/2020 17:51	WG1462208
Di-isopropyl ether	U		0.000474	0.00116	1	04/17/2020 17:51	WG1462208
Ethylbenzene	U		0.000853	0.00289	1	04/17/2020 17:51	WG1462208
Hexachloro-1,3-butadiene	U		0.00694	0.0289	1	04/17/2020 17:51	WG1462208
2-Hexanone	U		0.00389	0.0289	1	04/17/2020 17:51	WG1462208
n-Hexane	U		0.00262	0.00579	1	04/17/2020 17:51	WG1462208
Iodomethane	U		0.00268	0.0145	1	04/17/2020 17:51	WG1462208
Isopropylbenzene	U		0.000492	0.00289	1	04/17/2020 17:51	WG1462208
p-Isopropyltoluene	U		0.00295	0.00579	1	04/17/2020 17:51	WG1462208
2-Butanone (MEK)	U		0.0735	0.116	1	04/17/2020 17:51	WG1462208
Methylene Chloride	U		0.00768	0.0289	1	04/17/2020 17:51	WG1462208
4-Methyl-2-pentanone (MIBK)	U		0.00264	0.0289	1	04/17/2020 17:51	WG1462208

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MW-343-62
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SAMPLE RESULTS - 13

L1209078

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.000405	0.00116	1	04/17/2020 17:51	WG1462208
Naphthalene	U		0.00565	0.0145	1	04/17/2020 17:51	WG1462208
n-Propylbenzene	U		0.00110	0.00579	1	04/17/2020 17:51	WG1462208
Styrene	U		0.000265	0.0145	1	04/17/2020 17:51	WG1462208
1,1,1,2-Tetrachloroethane	U		0.00110	0.00289	1	04/17/2020 17:51	WG1462208
1,1,2,2-Tetrachloroethane	U		0.000804	0.00289	1	04/17/2020 17:51	WG1462208
1,1,2-Trichlorotrifluoroethane	U		0.000873	0.00289	1	04/17/2020 17:51	WG1462208
Tetrachloroethene	U		0.00104	0.00289	1	04/17/2020 17:51	WG1462208
Toluene	U		0.00150	0.00579	1	04/17/2020 17:51	WG1462208
1,2,3-Trichlorobenzene	U		0.00848	0.0145	1	04/17/2020 17:51	WG1462208
1,2,4-Trichlorobenzene	U		0.00509	0.0145	1	04/17/2020 17:51	WG1462208
1,1,1-Trichloroethane	U		0.00107	0.00289	1	04/17/2020 17:51	WG1462208
1,1,2-Trichloroethane	U		0.000691	0.00289	1	04/17/2020 17:51	WG1462208
Trichloroethene	U		0.000676	0.00116	1	04/17/2020 17:51	WG1462208
Trichlorofluoromethane	U		0.000957	0.00289	1	04/17/2020 17:51	WG1462208
1,2,3-Trichloropropane	U		0.00187	0.0145	1	04/17/2020 17:51	WG1462208
1,2,4-Trimethylbenzene	U		0.00183	0.00579	1	04/17/2020 17:51	WG1462208
1,2,3-Trimethylbenzene	U		0.00183	0.00579	1	04/17/2020 17:51	WG1462208
1,3,5-Trimethylbenzene	U		0.00231	0.00579	1	04/17/2020 17:51	WG1462208
Vinyl acetate	U		0.00294	0.0145	1	04/17/2020 17:51	WG1462208
Vinyl chloride	U		0.00134	0.00289	1	04/17/2020 17:51	WG1462208
Xylenes, Total	U		0.00102	0.00752	1	04/17/2020 17:51	WG1462208
(S) Toluene-d8	*107*			*75.0-131*		*04/17/2020 17:51*	WG1462208
(S) 4-Bromofluorobenzene	*95.7*			*67.0-138*		*04/17/2020 17:51*	WG1462208
(S) 1,2-Dichloroethane-d4	*98.1*			*70.0-130*		*04/17/2020 17:51*	WG1462208

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Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	87.7		1	04/21/2020 13:18	WG1463617

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	U	~~J4~~	0.0416	0.0570	1	04/17/2020 18:10	WG1462208
Acrylonitrile	U		0.00412	0.0143	1	04/17/2020 18:10	WG1462208
Benzene	U		0.000532	0.00114	1	04/17/2020 18:10	WG1462208
Bromobenzene	U		0.00103	0.0143	1	04/17/2020 18:10	WG1462208
Bromodichloromethane	U		0.000827	0.00285	1	04/17/2020 18:10	WG1462208
Bromochloromethane	U		0.000643	0.00570	1	04/17/2020 18:10	WG1462208
Bromoform	U		0.00133	0.0285	1	04/17/2020 18:10	WG1462208
Bromomethane	U		0.00225	0.0143	1	04/17/2020 18:10	WG1462208
n-Butylbenzene	U		0.00599	0.0143	1	04/17/2020 18:10	WG1462208
sec-Butylbenzene	U		0.00328	0.0143	1	04/17/2020 18:10	WG1462208
tert-Butylbenzene	U		0.00222	0.00570	1	04/17/2020 18:10	WG1462208
Carbon disulfide	U		0.000798	0.0143	1	04/17/2020 18:10	WG1462208
Carbon tetrachloride	U		0.00102	0.00570	1	04/17/2020 18:10	WG1462208
Chlorobenzene	U		0.000239	0.00285	1	04/17/2020 18:10	WG1462208
Chlorodibromomethane	U		0.000698	0.00285	1	04/17/2020 18:10	WG1462208
Chloroethane	U		0.00194	0.00570	1	04/17/2020 18:10	WG1462208
Chloroform	U		0.00117	0.00285	1	04/17/2020 18:10	WG1462208
Chloromethane	U		0.00496	0.0143	1	04/17/2020 18:10	WG1462208
2-Chlorotoluene	U		0.000986	0.00285	1	04/17/2020 18:10	WG1462208
4-Chlorotoluene	U		0.000513	0.00570	1	04/17/2020 18:10	WG1462208
1,2-Dibromo-3-Chloropropane	U		0.00445	0.0285	1	04/17/2020 18:10	WG1462208
1,2-Dibromoethane	U		0.000739	0.00285	1	04/17/2020 18:10	WG1462208
Dibromomethane	U		0.000855	0.00570	1	04/17/2020 18:10	WG1462208
1,2-Dichlorobenzene	U		0.000485	0.00570	1	04/17/2020 18:10	WG1462208
1,3-Dichlorobenzene	U		0.000684	0.00570	1	04/17/2020 18:10	WG1462208
1,4-Dichlorobenzene	U		0.000798	0.00570	1	04/17/2020 18:10	WG1462208
Dichlorodifluoromethane	U		0.00184	0.00285	1	04/17/2020 18:10	WG1462208
1,1-Dichloroethane	U		0.000560	0.00285	1	04/17/2020 18:10	WG1462208
1,2-Dichloroethane	U		0.000740	0.00285	1	04/17/2020 18:10	WG1462208
1,1-Dichloroethene	U		0.000691	0.00285	1	04/17/2020 18:10	WG1462208
cis-1,2-Dichloroethene	0.00841		0.000837	0.00285	1	04/17/2020 18:10	WG1462208
trans-1,2-Dichloroethene	U		0.00119	0.00570	1	04/17/2020 18:10	WG1462208
1,2-Dichloropropane	U	~~J4~~	0.00162	0.00570	1	04/17/2020 18:10	WG1462208
1,1-Dichloropropene	U		0.000922	0.00285	1	04/17/2020 18:10	WG1462208
1,3-Dichloropropane	U		0.000571	0.00570	1	04/17/2020 18:10	WG1462208
cis-1,3-Dichloropropene	U		0.000863	0.00285	1	04/17/2020 18:10	WG1462208
trans-1,3-Dichloropropene	U		0.00130	0.00570	1	04/17/2020 18:10	WG1462208
trans-1,4-Dichloro-2-butene	U		0.00212	0.00570	1	04/17/2020 18:10	WG1462208
2,2-Dichloropropane	U		0.00157	0.00285	1	04/17/2020 18:10	WG1462208
Di-isopropyl ether	U		0.000467	0.00114	1	04/17/2020 18:10	WG1462208
Ethylbenzene	U		0.000840	0.00285	1	04/17/2020 18:10	WG1462208
Hexachloro-1,3-butadiene	U		0.00684	0.0285	1	04/17/2020 18:10	WG1462208
2-Hexanone	U		0.00383	0.0285	1	04/17/2020 18:10	WG1462208
n-Hexane	U		0.00258	0.00570	1	04/17/2020 18:10	WG1462208
Iodomethane	U		0.00264	0.0143	1	04/17/2020 18:10	WG1462208
Isopropylbenzene	U		0.000485	0.00285	1	04/17/2020 18:10	WG1462208
p-Isopropyltoluene	U		0.00291	0.00570	1	04/17/2020 18:10	WG1462208
2-Butanone (MEK)	U		0.0724	0.114	1	04/17/2020 18:10	WG1462208
Methylene Chloride	U		0.00757	0.0285	1	04/17/2020 18:10	WG1462208
4-Methyl-2-pentanone (MIBK)	U		0.00260	0.0285	1	04/17/2020 18:10	WG1462208

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SAMPLE RESULTS - 14

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Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.000399	0.00114	1	04/17/2020 18:10	WG1462208
Naphthalene	U		0.00556	0.0143	1	04/17/2020 18:10	WG1462208
n-Propylbenzene	U		0.00108	0.00570	1	04/17/2020 18:10	WG1462208
Styrene	U		0.000261	0.0143	1	04/17/2020 18:10	WG1462208
1,1,1,2-Tetrachloroethane	U		0.00108	0.00285	1	04/17/2020 18:10	WG1462208
1,1,2,2-Tetrachloroethane	U		0.000792	0.00285	1	04/17/2020 18:10	WG1462208
1,1,2-Trichlorotrifluoroethane	U		0.000860	0.00285	1	04/17/2020 18:10	WG1462208
Tetrachloroethene	U		0.00102	0.00285	1	04/17/2020 18:10	WG1462208
Toluene	U		0.00148	0.00570	1	04/17/2020 18:10	WG1462208
1,2,3-Trichlorobenzene	U		0.00836	0.0143	1	04/17/2020 18:10	WG1462208
1,2,4-Trichlorobenzene	U		0.00502	0.0143	1	04/17/2020 18:10	WG1462208
1,1,1-Trichloroethane	U		0.00105	0.00285	1	04/17/2020 18:10	WG1462208
1,1,2-Trichloroethane	U		0.000681	0.00285	1	04/17/2020 18:10	WG1462208
Trichloroethene	U		0.000666	0.00114	1	04/17/2020 18:10	WG1462208
Trichlorofluoromethane	U		0.000943	0.00285	1	04/17/2020 18:10	WG1462208
1,2,3-Trichloropropane	U		0.00185	0.0143	1	04/17/2020 18:10	WG1462208
1,2,4-Trimethylbenzene	U		0.00180	0.00570	1	04/17/2020 18:10	WG1462208
1,2,3-Trimethylbenzene	U		0.00180	0.00570	1	04/17/2020 18:10	WG1462208
1,3,5-Trimethylbenzene	U		0.00228	0.00570	1	04/17/2020 18:10	WG1462208
Vinyl acetate	U		0.00290	0.0143	1	04/17/2020 18:10	WG1462208
Vinyl chloride	U		0.00132	0.00285	1	04/17/2020 18:10	WG1462208
Xylenes, Total	U		0.00100	0.00741	1	04/17/2020 18:10	WG1462208
(S) Toluene-d8	*107*			*75.0-131*		*04/17/2020 18:10*	WG1462208
(S) 4-Bromofluorobenzene	*95.1*			*67.0-138*		*04/17/2020 18:10*	WG1462208
(S) 1,2-Dichloroethane-d4	*95.2*			*70.0-130*		*04/17/2020 18:10*	WG1462208

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MW-343-73
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SAMPLE RESULTS - 15

L1209078

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	86.8		1	04/21/2020 13:18	WG1463617

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	U	~~J4~~	0.0420	0.0576	1	04/17/2020 18:29	WG1462208
Acrylonitrile	U		0.00416	0.0144	1	04/17/2020 18:29	WG1462208
Benzene	0.000727	J	0.000538	0.00115	1	04/17/2020 18:29	WG1462208
Bromobenzene	U		0.00104	0.0144	1	04/17/2020 18:29	WG1462208
Bromodichloromethane	U		0.000835	0.00288	1	04/17/2020 18:29	WG1462208
Bromochloromethane	U		0.000650	0.00576	1	04/17/2020 18:29	WG1462208
Bromoform	U		0.00135	0.0288	1	04/17/2020 18:29	WG1462208
Bromomethane	U		0.00227	0.0144	1	04/17/2020 18:29	WG1462208
n-Butylbenzene	U		0.00605	0.0144	1	04/17/2020 18:29	WG1462208
sec-Butylbenzene	U		0.00332	0.0144	1	04/17/2020 18:29	WG1462208
tert-Butylbenzene	U		0.00225	0.00576	1	04/17/2020 18:29	WG1462208
Carbon disulfide	U		0.000806	0.0144	1	04/17/2020 18:29	WG1462208
Carbon tetrachloride	U		0.00103	0.00576	1	04/17/2020 18:29	WG1462208
Chlorobenzene	U		0.000242	0.00288	1	04/17/2020 18:29	WG1462208
Chlorodibromomethane	U		0.000705	0.00288	1	04/17/2020 18:29	WG1462208
Chloroethane	U		0.00196	0.00576	1	04/17/2020 18:29	WG1462208
Chloroform	U		0.00119	0.00288	1	04/17/2020 18:29	WG1462208
Chloromethane	U		0.00501	0.0144	1	04/17/2020 18:29	WG1462208
2-Chlorotoluene	U		0.000996	0.00288	1	04/17/2020 18:29	WG1462208
4-Chlorotoluene	U		0.000518	0.00576	1	04/17/2020 18:29	WG1462208
1,2-Dibromo-3-Chloropropane	U		0.00449	0.0288	1	04/17/2020 18:29	WG1462208
1,2-Dibromoethane	U		0.000746	0.00288	1	04/17/2020 18:29	WG1462208
Dibromomethane	U		0.000864	0.00576	1	04/17/2020 18:29	WG1462208
1,2-Dichlorobenzene	U		0.000490	0.00576	1	04/17/2020 18:29	WG1462208
1,3-Dichlorobenzene	U		0.000691	0.00576	1	04/17/2020 18:29	WG1462208
1,4-Dichlorobenzene	U		0.000806	0.00576	1	04/17/2020 18:29	WG1462208
Dichlorodifluoromethane	U		0.00185	0.00288	1	04/17/2020 18:29	WG1462208
1,1-Dichloroethane	U		0.000566	0.00288	1	04/17/2020 18:29	WG1462208
1,2-Dichloroethane	U		0.000748	0.00288	1	04/17/2020 18:29	WG1462208
1,1-Dichloroethene	U		0.000698	0.00288	1	04/17/2020 18:29	WG1462208
cis-1,2-Dichloroethene	0.0158		0.000845	0.00288	1	04/17/2020 18:29	WG1462208
trans-1,2-Dichloroethene	U		0.00120	0.00576	1	04/17/2020 18:29	WG1462208
1,2-Dichloropropane	U	~~J4~~	0.00164	0.00576	1	04/17/2020 18:29	WG1462208
1,1-Dichloropropene	U		0.000932	0.00288	1	04/17/2020 18:29	WG1462208
1,3-Dichloropropane	U		0.000577	0.00576	1	04/17/2020 18:29	WG1462208
cis-1,3-Dichloropropene	U		0.000872	0.00288	1	04/17/2020 18:29	WG1462208
trans-1,3-Dichloropropene	U		0.00131	0.00576	1	04/17/2020 18:29	WG1462208
trans-1,4-Dichloro-2-butene	U		0.00214	0.00576	1	04/17/2020 18:29	WG1462208
2,2-Dichloropropane	U		0.00159	0.00288	1	04/17/2020 18:29	WG1462208
Di-isopropyl ether	U		0.000472	0.00115	1	04/17/2020 18:29	WG1462208
Ethylbenzene	U		0.000849	0.00288	1	04/17/2020 18:29	WG1462208
Hexachloro-1,3-butadiene	U		0.00691	0.0288	1	04/17/2020 18:29	WG1462208
2-Hexanone	U		0.00387	0.0288	1	04/17/2020 18:29	WG1462208
n-Hexane	U		0.00260	0.00576	1	04/17/2020 18:29	WG1462208
Iodomethane	U		0.00267	0.0144	1	04/17/2020 18:29	WG1462208
Isopropylbenzene	U		0.000490	0.00288	1	04/17/2020 18:29	WG1462208
p-Isopropyltoluene	U		0.00294	0.00576	1	04/17/2020 18:29	WG1462208
2-Butanone (MEK)	U		0.0731	0.115	1	04/17/2020 18:29	WG1462208
Methylene Chloride	U		0.00765	0.0288	1	04/17/2020 18:29	WG1462208
4-Methyl-2-pentanone (MIBK)	U		0.00263	0.0288	1	04/17/2020 18:29	WG1462208

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MW-343-73
Collected date/time: 04/13/20 15:15

SAMPLE RESULTS - 15
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Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.000403	0.00115	1	04/17/2020 18:29	WG1462208
Naphthalene	U		0.00562	0.0144	1	04/17/2020 18:29	WG1462208
n-Propylbenzene	U		0.00109	0.00576	1	04/17/2020 18:29	WG1462208
Styrene	U		0.000264	0.0144	1	04/17/2020 18:29	WG1462208
1,1,1,2-Tetrachloroethane	U		0.00109	0.00288	1	04/17/2020 18:29	WG1462208
1,1,2,2-Tetrachloroethane	U		0.000801	0.00288	1	04/17/2020 18:29	WG1462208
1,1,2-Trichlorotrifluoroethane	U		0.000869	0.00288	1	04/17/2020 18:29	WG1462208
Tetrachloroethene	U		0.00103	0.00288	1	04/17/2020 18:29	WG1462208
Toluene	U		0.00150	0.00576	1	04/17/2020 18:29	WG1462208
1,2,3-Trichlorobenzene	U		0.00844	0.0144	1	04/17/2020 18:29	WG1462208
1,2,4-Trichlorobenzene	U		0.00507	0.0144	1	04/17/2020 18:29	WG1462208
1,1,1-Trichloroethane	U		0.00106	0.00288	1	04/17/2020 18:29	WG1462208
1,1,2-Trichloroethane	U		0.000688	0.00288	1	04/17/2020 18:29	WG1462208
Trichloroethene	U		0.000673	0.00115	1	04/17/2020 18:29	WG1462208
Trichlorofluoromethane	U		0.000953	0.00288	1	04/17/2020 18:29	WG1462208
1,2,3-Trichloropropane	U		0.00187	0.0144	1	04/17/2020 18:29	WG1462208
1,2,4-Trimethylbenzene	U		0.00182	0.00576	1	04/17/2020 18:29	WG1462208
1,2,3-Trimethylbenzene	U		0.00182	0.00576	1	04/17/2020 18:29	WG1462208
1,3,5-Trimethylbenzene	U		0.00230	0.00576	1	04/17/2020 18:29	WG1462208
Vinyl acetate	U		0.00293	0.0144	1	04/17/2020 18:29	WG1462208
Vinyl chloride	U		0.00134	0.00288	1	04/17/2020 18:29	WG1462208
Xylenes, Total	U		0.00101	0.00749	1	04/17/2020 18:29	WG1462208
(S) Toluene-d8	*106*			*75.0-131*		*04/17/2020 18:29*	WG1462208
(S) 4-Bromofluorobenzene	*94.9*			*67.0-138*		*04/17/2020 18:29*	WG1462208
(S) 1,2-Dichloroethane-d4	*98.3*			*70.0-130*		*04/17/2020 18:29*	WG1462208

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

JC 5/28/2020

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	92.3		1	04/21/2020 13:09	WG1463618

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	U	~~J4~~	0.0395	0.0541	1	04/17/2020 18:48	WG1462208
Acrylonitrile	U		0.00391	0.0135	1	04/17/2020 18:48	WG1462208
Benzene	0.000856	J	0.000506	0.00108	1	04/17/2020 18:48	WG1462208
Bromobenzene	U		0.000975	0.0135	1	04/17/2020 18:48	WG1462208
Bromodichloromethane	U		0.000785	0.00271	1	04/17/2020 18:48	WG1462208
Bromochloromethane	U		0.000611	0.00541	1	04/17/2020 18:48	WG1462208
Bromoform	U		0.00127	0.0271	1	04/17/2020 18:48	WG1462208
Bromomethane	U		0.00213	0.0135	1	04/17/2020 18:48	WG1462208
n-Butylbenzene	U		0.00569	0.0135	1	04/17/2020 18:48	WG1462208
sec-Butylbenzene	U		0.00312	0.0135	1	04/17/2020 18:48	WG1462208
tert-Butylbenzene	U		0.00211	0.00541	1	04/17/2020 18:48	WG1462208
Carbon disulfide	U		0.000758	0.0135	1	04/17/2020 18:48	WG1462208
Carbon tetrachloride	U		0.000972	0.00541	1	04/17/2020 18:48	WG1462208
Chlorobenzene	U		0.000227	0.00271	1	04/17/2020 18:48	WG1462208
Chlorodibromomethane	U		0.000663	0.00271	1	04/17/2020 18:48	WG1462208
Chloroethane	U		0.00184	0.00541	1	04/17/2020 18:48	WG1462208
Chloroform	U		0.00112	0.00271	1	04/17/2020 18:48	WG1462208
Chloromethane	U		0.00471	0.0135	1	04/17/2020 18:48	WG1462208
2-Chlorotoluene	U		0.000937	0.00271	1	04/17/2020 18:48	WG1462208
4-Chlorotoluene	U		0.000487	0.00541	1	04/17/2020 18:48	WG1462208
1,2-Dibromo-3-Chloropropane	U		0.00422	0.0271	1	04/17/2020 18:48	WG1462208
1,2-Dibromoethane	U		0.000702	0.00271	1	04/17/2020 18:48	WG1462208
Dibromomethane	U		0.000812	0.00541	1	04/17/2020 18:48	WG1462208
1,2-Dichlorobenzene	U		0.000460	0.00541	1	04/17/2020 18:48	WG1462208
1,3-Dichlorobenzene	U		0.000650	0.00541	1	04/17/2020 18:48	WG1462208
1,4-Dichlorobenzene	U		0.000758	0.00541	1	04/17/2020 18:48	WG1462208
Dichlorodifluoromethane	U		0.00174	0.00271	1	04/17/2020 18:48	WG1462208
1,1-Dichloroethane	U		0.000532	0.00271	1	04/17/2020 18:48	WG1462208
1,2-Dichloroethane	U		0.000703	0.00271	1	04/17/2020 18:48	WG1462208
1,1-Dichloroethene	U		0.000656	0.00271	1	04/17/2020 18:48	WG1462208
cis-1,2-Dichloroethene	0.0144		0.000795	0.00271	1	04/17/2020 18:48	WG1462208
trans-1,2-Dichloroethene	U		0.00113	0.00541	1	04/17/2020 18:48	WG1462208
1,2-Dichloropropane	U	~~J4~~	0.00154	0.00541	1	04/17/2020 18:48	WG1462208
1,1-Dichloropropene	U		0.000876	0.00271	1	04/17/2020 18:48	WG1462208
1,3-Dichloropropane	U		0.000543	0.00541	1	04/17/2020 18:48	WG1462208
cis-1,3-Dichloropropene	U		0.000820	0.00271	1	04/17/2020 18:48	WG1462208
trans-1,3-Dichloropropene	U		0.00123	0.00541	1	04/17/2020 18:48	WG1462208
trans-1,4-Dichloro-2-butene	U		0.00201	0.00541	1	04/17/2020 18:48	WG1462208
2,2-Dichloropropane	U		0.00149	0.00271	1	04/17/2020 18:48	WG1462208
Di-isopropyl ether	U		0.000444	0.00108	1	04/17/2020 18:48	WG1462208
Ethylbenzene	U		0.000798	0.00271	1	04/17/2020 18:48	WG1462208
Hexachloro-1,3-butadiene	U		0.00650	0.0271	1	04/17/2020 18:48	WG1462208
2-Hexanone	U		0.00364	0.0271	1	04/17/2020 18:48	WG1462208
n-Hexane	U		0.00245	0.00541	1	04/17/2020 18:48	WG1462208
Iodomethane	U		0.00251	0.0135	1	04/17/2020 18:48	WG1462208
Isopropylbenzene	U		0.000460	0.00271	1	04/17/2020 18:48	WG1462208
p-Isopropyltoluene	U		0.00276	0.00541	1	04/17/2020 18:48	WG1462208
2-Butanone (MEK)	U		0.0688	0.108	1	04/17/2020 18:48	WG1462208
Methylene Chloride	U		0.00719	0.0271	1	04/17/2020 18:48	WG1462208
4-Methyl-2-pentanone (MIBK)	U		0.00247	0.0271	1	04/17/2020 18:48	WG1462208

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Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.000379	0.00108	1	04/17/2020 18:48	WG1462208
Naphthalene	U		0.00528	0.0135	1	04/17/2020 18:48	WG1462208
n-Propylbenzene	U		0.00103	0.00541	1	04/17/2020 18:48	WG1462208
Styrene	U		0.000248	0.0135	1	04/17/2020 18:48	WG1462208
1,1,1,2-Tetrachloroethane	U		0.00103	0.00271	1	04/17/2020 18:48	WG1462208
1,1,2,2-Tetrachloroethane	U		0.000753	0.00271	1	04/17/2020 18:48	WG1462208
1,1,2-Trichlorotrifluoroethane	U		0.000817	0.00271	1	04/17/2020 18:48	WG1462208
Tetrachloroethene	U		0.000970	0.00271	1	04/17/2020 18:48	WG1462208
Toluene	U		0.00141	0.00541	1	04/17/2020 18:48	WG1462208
1,2,3-Trichlorobenzene	U		0.00794	0.0135	1	04/17/2020 18:48	WG1462208
1,2,4-Trichlorobenzene	U		0.00476	0.0135	1	04/17/2020 18:48	WG1462208
1,1,1-Trichloroethane	U		0.00100	0.00271	1	04/17/2020 18:48	WG1462208
1,1,2-Trichloroethane	U		0.000647	0.00271	1	04/17/2020 18:48	WG1462208
Trichloroethene	U		0.000632	0.00108	1	04/17/2020 18:48	WG1462208
Trichlorofluoromethane	U		0.000896	0.00271	1	04/17/2020 18:48	WG1462208
1,2,3-Trichloropropane	U		0.00175	0.0135	1	04/17/2020 18:48	WG1462208
1,2,4-Trimethylbenzene	U		0.00171	0.00541	1	04/17/2020 18:48	WG1462208
1,2,3-Trimethylbenzene	U		0.00171	0.00541	1	04/17/2020 18:48	WG1462208
1,3,5-Trimethylbenzene	U		0.00217	0.00541	1	04/17/2020 18:48	WG1462208
Vinyl acetate	U		0.00275	0.0135	1	04/17/2020 18:48	WG1462208
Vinyl chloride	U		0.00126	0.00271	1	04/17/2020 18:48	WG1462208
Xylenes, Total	U		0.000953	0.00704	1	04/17/2020 18:48	WG1462208
(S) Toluene-d8	*107*			*75.0-131*		*04/17/2020 18:48*	WG1462208
(S) 4-Bromofluorobenzene	*99.0*			*67.0-138*		*04/17/2020 18:48*	WG1462208
(S) 1,2-Dichloroethane-d4	*97.1*			*70.0-130*		*04/17/2020 18:48*	WG1462208

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Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	92.1		1	04/21/2020 13:09	WG1463618

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	U	~~J4~~	0.0396	0.0543	1	04/17/2020 19:08	WG1462208
Acrylonitrile	U		0.00392	0.0136	1	04/17/2020 19:08	WG1462208
Benzene	0.000828	J	0.000507	0.00109	1	04/17/2020 19:08	WG1462208
Bromobenzene	U		0.000977	0.0136	1	04/17/2020 19:08	WG1462208
Bromodichloromethane	U		0.000787	0.00271	1	04/17/2020 19:08	WG1462208
Bromochloromethane	U		0.000612	0.00543	1	04/17/2020 19:08	WG1462208
Bromoform	U		0.00127	0.0271	1	04/17/2020 19:08	WG1462208
Bromomethane	U		0.00214	0.0136	1	04/17/2020 19:08	WG1462208
n-Butylbenzene	U		0.00570	0.0136	1	04/17/2020 19:08	WG1462208
sec-Butylbenzene	U		0.00313	0.0136	1	04/17/2020 19:08	WG1462208
tert-Butylbenzene	U		0.00212	0.00543	1	04/17/2020 19:08	WG1462208
Carbon disulfide	U		0.000760	0.0136	1	04/17/2020 19:08	WG1462208
Carbon tetrachloride	U		0.000975	0.00543	1	04/17/2020 19:08	WG1462208
Chlorobenzene	U		0.000228	0.00271	1	04/17/2020 19:08	WG1462208
Chlorodibromomethane	U		0.000665	0.00271	1	04/17/2020 19:08	WG1462208
Chloroethane	U		0.00185	0.00543	1	04/17/2020 19:08	WG1462208
Chloroform	U		0.00112	0.00271	1	04/17/2020 19:08	WG1462208
Chloromethane	U		0.00472	0.0136	1	04/17/2020 19:08	WG1462208
2-Chlorotoluene	U		0.000939	0.00271	1	04/17/2020 19:08	WG1462208
4-Chlorotoluene	U		0.000489	0.00543	1	04/17/2020 19:08	WG1462208
1,2-Dibromo-3-Chloropropane	U		0.00423	0.0271	1	04/17/2020 19:08	WG1462208
1,2-Dibromoethane	U		0.000704	0.00271	1	04/17/2020 19:08	WG1462208
Dibromomethane	U		0.000814	0.00543	1	04/17/2020 19:08	WG1462208
1,2-Dichlorobenzene	U		0.000461	0.00543	1	04/17/2020 19:08	WG1462208
1,3-Dichlorobenzene	U		0.000652	0.00543	1	04/17/2020 19:08	WG1462208
1,4-Dichlorobenzene	U		0.000760	0.00543	1	04/17/2020 19:08	WG1462208
Dichlorodifluoromethane	U		0.00175	0.00271	1	04/17/2020 19:08	WG1462208
1,1-Dichloroethane	U		0.000533	0.00271	1	04/17/2020 19:08	WG1462208
1,2-Dichloroethane	U		0.000705	0.00271	1	04/17/2020 19:08	WG1462208
1,1-Dichloroethene	U		0.000658	0.00271	1	04/17/2020 19:08	WG1462208
cis-1,2-Dichloroethene	0.00844		0.000797	0.00271	1	04/17/2020 19:08	WG1462208
trans-1,2-Dichloroethene	U		0.00113	0.00543	1	04/17/2020 19:08	WG1462208
1,2-Dichloropropane	U	~~J4~~	0.00154	0.00543	1	04/17/2020 19:08	WG1462208
1,1-Dichloropropene	U		0.000878	0.00271	1	04/17/2020 19:08	WG1462208
1,3-Dichloropropane	U		0.000544	0.00543	1	04/17/2020 19:08	WG1462208
cis-1,3-Dichloropropene	U		0.000822	0.00271	1	04/17/2020 19:08	WG1462208
trans-1,3-Dichloropropene	U		0.00124	0.00543	1	04/17/2020 19:08	WG1462208
trans-1,4-Dichloro-2-butene	U		0.00202	0.00543	1	04/17/2020 19:08	WG1462208
2,2-Dichloropropane	U		0.00150	0.00271	1	04/17/2020 19:08	WG1462208
Di-isopropyl ether	U		0.000445	0.00109	1	04/17/2020 19:08	WG1462208
Ethylbenzene	U		0.000800	0.00271	1	04/17/2020 19:08	WG1462208
Hexachloro-1,3-butadiene	U		0.00652	0.0271	1	04/17/2020 19:08	WG1462208
2-Hexanone	U		0.00365	0.0271	1	04/17/2020 19:08	WG1462208
n-Hexane	U		0.00245	0.00543	1	04/17/2020 19:08	WG1462208
Iodomethane	U		0.00252	0.0136	1	04/17/2020 19:08	WG1462208
Isopropylbenzene	U		0.000461	0.00271	1	04/17/2020 19:08	WG1462208
p-Isopropyltoluene	U		0.00277	0.00543	1	04/17/2020 19:08	WG1462208
2-Butanone (MEK)	U		0.0690	0.109	1	04/17/2020 19:08	WG1462208
Methylene Chloride	U		0.00721	0.0271	1	04/17/2020 19:08	WG1462208
4-Methyl-2-pentanone (MIBK)	U		0.00248	0.0271	1	04/17/2020 19:08	WG1462208

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Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.000380	0.00109	1	04/17/2020 19:08	WG1462208
Naphthalene	U		0.00530	0.0136	1	04/17/2020 19:08	WG1462208
n-Propylbenzene	U		0.00103	0.00543	1	04/17/2020 19:08	WG1462208
Styrene	U		0.000249	0.0136	1	04/17/2020 19:08	WG1462208
1,1,1,2-Tetrachloroethane	U		0.00103	0.00271	1	04/17/2020 19:08	WG1462208
1,1,2,2-Tetrachloroethane	U		0.000755	0.00271	1	04/17/2020 19:08	WG1462208
1,1,2-Trichlorotrifluoroethane	U		0.000819	0.00271	1	04/17/2020 19:08	WG1462208
Tetrachloroethene	U		0.000973	0.00271	1	04/17/2020 19:08	WG1462208
Toluene	U		0.00141	0.00543	1	04/17/2020 19:08	WG1462208
1,2,3-Trichlorobenzene	U		0.00796	0.0136	1	04/17/2020 19:08	WG1462208
1,2,4-Trichlorobenzene	U		0.00478	0.0136	1	04/17/2020 19:08	WG1462208
1,1,1-Trichloroethane	U		0.00100	0.00271	1	04/17/2020 19:08	WG1462208
1,1,2-Trichloroethane	U		0.000648	0.00271	1	04/17/2020 19:08	WG1462208
Trichloroethene	U		0.000634	0.00109	1	04/17/2020 19:08	WG1462208
Trichlorofluoromethane	U		0.000898	0.00271	1	04/17/2020 19:08	WG1462208
1,2,3-Trichloropropane	U		0.00176	0.0136	1	04/17/2020 19:08	WG1462208
1,2,4-Trimethylbenzene	U		0.00172	0.00543	1	04/17/2020 19:08	WG1462208
1,2,3-Trimethylbenzene	U		0.00172	0.00543	1	04/17/2020 19:08	WG1462208
1,3,5-Trimethylbenzene	U		0.00217	0.00543	1	04/17/2020 19:08	WG1462208
Vinyl acetate	U		0.00276	0.0136	1	04/17/2020 19:08	WG1462208
Vinyl chloride	U		0.00126	0.00271	1	04/17/2020 19:08	WG1462208
Xylenes, Total	U		0.000956	0.00706	1	04/17/2020 19:08	WG1462208
(S) Toluene-d8	*105*			*75.0-131*		*04/17/2020 19:08*	WG1462208
(S) 4-Bromofluorobenzene	*97.5*			*67.0-138*		*04/17/2020 19:08*	WG1462208
(S) 1,2-Dichloroethane-d4	*98.2*			*70.0-130*		*04/17/2020 19:08*	WG1462208

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

JC 5/28/2020

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	94.4		1	04/21/2020 13:09	WG1463618

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	U	~~J4~~	0.0387	0.0530	1	04/17/2020 19:27	WG1462208
Acrylonitrile	U		0.00382	0.0132	1	04/17/2020 19:27	WG1462208
Benzene	U		0.000495	0.00106	1	04/17/2020 19:27	WG1462208
Bromobenzene	U		0.000953	0.0132	1	04/17/2020 19:27	WG1462208
Bromodichloromethane	U		0.000768	0.00265	1	04/17/2020 19:27	WG1462208
Bromochloromethane	U		0.000597	0.00530	1	04/17/2020 19:27	WG1462208
Bromoform	U		0.00124	0.0265	1	04/17/2020 19:27	WG1462208
Bromomethane	U		0.00209	0.0132	1	04/17/2020 19:27	WG1462208
n-Butylbenzene	U		0.00556	0.0132	1	04/17/2020 19:27	WG1462208
sec-Butylbenzene	U		0.00305	0.0132	1	04/17/2020 19:27	WG1462208
tert-Butylbenzene	U		0.00207	0.00530	1	04/17/2020 19:27	WG1462208
Carbon disulfide	U		0.000741	0.0132	1	04/17/2020 19:27	WG1462208
Carbon tetrachloride	U		0.000951	0.00530	1	04/17/2020 19:27	WG1462208
Chlorobenzene	U		0.000222	0.00265	1	04/17/2020 19:27	WG1462208
Chlorodibromomethane	U		0.000648	0.00265	1	04/17/2020 19:27	WG1462208
Chloroethane	U		0.00180	0.00530	1	04/17/2020 19:27	WG1462208
Chloroform	U		0.00109	0.00265	1	04/17/2020 19:27	WG1462208
Chloromethane	U		0.00461	0.0132	1	04/17/2020 19:27	WG1462208
2-Chlorotoluene	U		0.000916	0.00265	1	04/17/2020 19:27	WG1462208
4-Chlorotoluene	U		0.000477	0.00530	1	04/17/2020 19:27	WG1462208
1,2-Dibromo-3-Chloropropane	U		0.00413	0.0265	1	04/17/2020 19:27	WG1462208
1,2-Dibromoethane	U		0.000686	0.00265	1	04/17/2020 19:27	WG1462208
Dibromomethane	U		0.000794	0.00530	1	04/17/2020 19:27	WG1462208
1,2-Dichlorobenzene	U		0.000450	0.00530	1	04/17/2020 19:27	WG1462208
1,3-Dichlorobenzene	U		0.000636	0.00530	1	04/17/2020 19:27	WG1462208
1,4-Dichlorobenzene	U		0.000741	0.00530	1	04/17/2020 19:27	WG1462208
Dichlorodifluoromethane	U		0.00171	0.00265	1	04/17/2020 19:27	WG1462208
1,1-Dichloroethane	U		0.000520	0.00265	1	04/17/2020 19:27	WG1462208
1,2-Dichloroethane	U		0.000687	0.00265	1	04/17/2020 19:27	WG1462208
1,1-Dichloroethene	U		0.000642	0.00265	1	04/17/2020 19:27	WG1462208
cis-1,2-Dichloroethene	0.00200	J	0.000777	0.00265	1	04/17/2020 19:27	WG1462208
trans-1,2-Dichloroethene	U		0.00110	0.00530	1	04/17/2020 19:27	WG1462208
1,2-Dichloropropane	U	~~J4~~	0.00150	0.00530	1	04/17/2020 19:27	WG1462208
1,1-Dichloropropene	U		0.000857	0.00265	1	04/17/2020 19:27	WG1462208
1,3-Dichloropropane	U		0.000531	0.00530	1	04/17/2020 19:27	WG1462208
cis-1,3-Dichloropropene	U		0.000802	0.00265	1	04/17/2020 19:27	WG1462208
trans-1,3-Dichloropropene	U		0.00121	0.00530	1	04/17/2020 19:27	WG1462208
trans-1,4-Dichloro-2-butene	U		0.00197	0.00530	1	04/17/2020 19:27	WG1462208
2,2-Dichloropropane	U		0.00146	0.00265	1	04/17/2020 19:27	WG1462208
Di-isopropyl ether	U		0.000434	0.00106	1	04/17/2020 19:27	WG1462208
Ethylbenzene	U		0.000781	0.00265	1	04/17/2020 19:27	WG1462208
Hexachloro-1,3-butadiene	U		0.00636	0.0265	1	04/17/2020 19:27	WG1462208
2-Hexanone	U		0.00356	0.0265	1	04/17/2020 19:27	WG1462208
n-Hexane	U		0.00239	0.00530	1	04/17/2020 19:27	WG1462208
Iodomethane	U		0.00246	0.0132	1	04/17/2020 19:27	WG1462208
Isopropylbenzene	U		0.000450	0.00265	1	04/17/2020 19:27	WG1462208
p-Isopropyltoluene	U		0.00270	0.00530	1	04/17/2020 19:27	WG1462208
2-Butanone (MEK)	U		0.0673	0.106	1	04/17/2020 19:27	WG1462208
Methylene Chloride	U		0.00703	0.0265	1	04/17/2020 19:27	WG1462208
4-Methyl-2-pentanone (MIBK)	U		0.00241	0.0265	1	04/17/2020 19:27	WG1462208

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Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.000371	0.00106	1	04/17/2020 19:27	WG1462208
Naphthalene	U		0.00517	0.0132	1	04/17/2020 19:27	WG1462208
n-Propylbenzene	U		0.00101	0.00530	1	04/17/2020 19:27	WG1462208
Styrene	U		0.000243	0.0132	1	04/17/2020 19:27	WG1462208
1,1,1,2-Tetrachloroethane	U		0.00100	0.00265	1	04/17/2020 19:27	WG1462208
1,1,2,2-Tetrachloroethane	U		0.000736	0.00265	1	04/17/2020 19:27	WG1462208
1,1,2-Trichlorotrifluoroethane	U		0.000799	0.00265	1	04/17/2020 19:27	WG1462208
Tetrachloroethene	U		0.000949	0.00265	1	04/17/2020 19:27	WG1462208
Toluene	U		0.00138	0.00530	1	04/17/2020 19:27	WG1462208
1,2,3-Trichlorobenzene	U		0.00776	0.0132	1	04/17/2020 19:27	WG1462208
1,2,4-Trichlorobenzene	U		0.00466	0.0132	1	04/17/2020 19:27	WG1462208
1,1,1-Trichloroethane	U		0.000978	0.00265	1	04/17/2020 19:27	WG1462208
1,1,2-Trichloroethane	U		0.000632	0.00265	1	04/17/2020 19:27	WG1462208
Trichloroethene	U		0.000619	0.00106	1	04/17/2020 19:27	WG1462208
Trichlorofluoromethane	U		0.000876	0.00265	1	04/17/2020 19:27	WG1462208
1,2,3-Trichloropropane	U		0.00172	0.0132	1	04/17/2020 19:27	WG1462208
1,2,4-Trimethylbenzene	U		0.00167	0.00530	1	04/17/2020 19:27	WG1462208
1,2,3-Trimethylbenzene	U		0.00167	0.00530	1	04/17/2020 19:27	WG1462208
1,3,5-Trimethylbenzene	U		0.00212	0.00530	1	04/17/2020 19:27	WG1462208
Vinyl acetate	U		0.00269	0.0132	1	04/17/2020 19:27	WG1462208
Vinyl chloride	U		0.00123	0.00265	1	04/17/2020 19:27	WG1462208
Xylenes, Total	U		0.000932	0.00688	1	04/17/2020 19:27	WG1462208
(S) Toluene-d8	*105*			*75.0-131*		*04/17/2020 19:27*	WG1462208
(S) 4-Bromofluorobenzene	*95.2*			*67.0-138*		*04/17/2020 19:27*	WG1462208
(S) 1,2-Dichloroethane-d4	*98.3*			*70.0-130*		*04/17/2020 19:27*	WG1462208

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1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	89.3		1	04/21/2020 13:09	WG1463618

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	U	~~J4~~	0.0409	0.0560	1	04/17/2020 19:46	WG1462208
Acrylonitrile	U		0.00404	0.0140	1	04/17/2020 19:46	WG1462208
Benzene	U		0.000523	0.00112	1	04/17/2020 19:46	WG1462208
Bromobenzene	U		0.00101	0.0140	1	04/17/2020 19:46	WG1462208
Bromodichloromethane	U		0.000812	0.00280	1	04/17/2020 19:46	WG1462208
Bromochloromethane	U		0.000632	0.00560	1	04/17/2020 19:46	WG1462208
Bromoform	U		0.00131	0.0280	1	04/17/2020 19:46	WG1462208
Bromomethane	U		0.00221	0.0140	1	04/17/2020 19:46	WG1462208
n-Butylbenzene	U		0.00588	0.0140	1	04/17/2020 19:46	WG1462208
sec-Butylbenzene	U		0.00323	0.0140	1	04/17/2020 19:46	WG1462208
tert-Butylbenzene	U		0.00218	0.00560	1	04/17/2020 19:46	WG1462208
Carbon disulfide	U		0.000784	0.0140	1	04/17/2020 19:46	WG1462208
Carbon tetrachloride	U		0.00101	0.00560	1	04/17/2020 19:46	WG1462208
Chlorobenzene	U		0.000235	0.00280	1	04/17/2020 19:46	WG1462208
Chlorodibromomethane	U		0.000686	0.00280	1	04/17/2020 19:46	WG1462208
Chloroethane	U		0.00190	0.00560	1	04/17/2020 19:46	WG1462208
Chloroform	U		0.00115	0.00280	1	04/17/2020 19:46	WG1462208
Chloromethane	U		0.00487	0.0140	1	04/17/2020 19:46	WG1462208
2-Chlorotoluene	U		0.000969	0.00280	1	04/17/2020 19:46	WG1462208
4-Chlorotoluene	U		0.000504	0.00560	1	04/17/2020 19:46	WG1462208
1,2-Dibromo-3-Chloropropane	U		0.00437	0.0280	1	04/17/2020 19:46	WG1462208
1,2-Dibromoethane	U		0.000726	0.00280	1	04/17/2020 19:46	WG1462208
Dibromomethane	U		0.000840	0.00560	1	04/17/2020 19:46	WG1462208
1,2-Dichlorobenzene	U		0.000476	0.00560	1	04/17/2020 19:46	WG1462208
1,3-Dichlorobenzene	U		0.000672	0.00560	1	04/17/2020 19:46	WG1462208
1,4-Dichlorobenzene	U		0.000784	0.00560	1	04/17/2020 19:46	WG1462208
Dichlorodifluoromethane	U		0.00180	0.00280	1	04/17/2020 19:46	WG1462208
1,1-Dichloroethane	U		0.000550	0.00280	1	04/17/2020 19:46	WG1462208
1,2-Dichloroethane	U		0.000727	0.00280	1	04/17/2020 19:46	WG1462208
1,1-Dichloroethene	U		0.000679	0.00280	1	04/17/2020 19:46	WG1462208
cis-1,2-Dichloroethene	U		0.000822	0.00280	1	04/17/2020 19:46	WG1462208
trans-1,2-Dichloroethene	U		0.00116	0.00560	1	04/17/2020 19:46	WG1462208
1,2-Dichloropropane	U	~~J4~~	0.00159	0.00560	1	04/17/2020 19:46	WG1462208
1,1-Dichloropropene	U		0.000906	0.00280	1	04/17/2020 19:46	WG1462208
1,3-Dichloropropane	U		0.000561	0.00560	1	04/17/2020 19:46	WG1462208
cis-1,3-Dichloropropene	U		0.000848	0.00280	1	04/17/2020 19:46	WG1462208
trans-1,3-Dichloropropene	U		0.00128	0.00560	1	04/17/2020 19:46	WG1462208
trans-1,4-Dichloro-2-butene	U		0.00208	0.00560	1	04/17/2020 19:46	WG1462208
2,2-Dichloropropane	U		0.00155	0.00280	1	04/17/2020 19:46	WG1462208
Di-isopropyl ether	U		0.000459	0.00112	1	04/17/2020 19:46	WG1462208
Ethylbenzene	U		0.000826	0.00280	1	04/17/2020 19:46	WG1462208
Hexachloro-1,3-butadiene	U		0.00672	0.0280	1	04/17/2020 19:46	WG1462208
2-Hexanone	U		0.00376	0.0280	1	04/17/2020 19:46	WG1462208
n-Hexane	U		0.00253	0.00560	1	04/17/2020 19:46	WG1462208
Iodomethane	U		0.00260	0.0140	1	04/17/2020 19:46	WG1462208
Isopropylbenzene	U		0.000476	0.00280	1	04/17/2020 19:46	WG1462208
p-Isopropyltoluene	U		0.00286	0.00560	1	04/17/2020 19:46	WG1462208
2-Butanone (MEK)	U		0.0711	0.112	1	04/17/2020 19:46	WG1462208
Methylene Chloride	U		0.00744	0.0280	1	04/17/2020 19:46	WG1462208
4-Methyl-2-pentanone (MIBK)	U		0.00255	0.0280	1	04/17/2020 19:46	WG1462208

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Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.000392	0.00112	1	04/17/2020 19:46	WG1462208
Naphthalene	U		0.00547	0.0140	1	04/17/2020 19:46	WG1462208
n-Propylbenzene	U		0.00106	0.00560	1	04/17/2020 19:46	WG1462208
Styrene	U		0.000257	0.0140	1	04/17/2020 19:46	WG1462208
1,1,1,2-Tetrachloroethane	U		0.00106	0.00280	1	04/17/2020 19:46	WG1462208
1,1,2,2-Tetrachloroethane	U		0.000778	0.00280	1	04/17/2020 19:46	WG1462208
1,1,2-Trichlorotrifluoroethane	U		0.000845	0.00280	1	04/17/2020 19:46	WG1462208
Tetrachloroethene	U		0.00100	0.00280	1	04/17/2020 19:46	WG1462208
Toluene	0.00336	J	0.00146	0.00560	1	04/17/2020 19:46	WG1462208
1,2,3-Trichlorobenzene	U		0.00821	0.0140	1	04/17/2020 19:46	WG1462208
1,2,4-Trichlorobenzene	U		0.00493	0.0140	1	04/17/2020 19:46	WG1462208
1,1,1-Trichloroethane	U		0.00103	0.00280	1	04/17/2020 19:46	WG1462208
1,1,2-Trichloroethane	U		0.000669	0.00280	1	04/17/2020 19:46	WG1462208
Trichloroethene	U		0.000654	0.00112	1	04/17/2020 19:46	WG1462208
Trichlorofluoromethane	U		0.000926	0.00280	1	04/17/2020 19:46	WG1462208
1,2,3-Trichloropropane	U		0.00181	0.0140	1	04/17/2020 19:46	WG1462208
1,2,4-Trimethylbenzene	U		0.00177	0.00560	1	04/17/2020 19:46	WG1462208
1,2,3-Trimethylbenzene	U		0.00177	0.00560	1	04/17/2020 19:46	WG1462208
1,3,5-Trimethylbenzene	U		0.00224	0.00560	1	04/17/2020 19:46	WG1462208
Vinyl acetate	U		0.00285	0.0140	1	04/17/2020 19:46	WG1462208
Vinyl chloride	U		0.00130	0.00280	1	04/17/2020 19:46	WG1462208
Xylenes, Total	U		0.000986	0.00728	1	04/17/2020 19:46	WG1462208
(S) Toluene-d8	*106*			*75.0-131*		*04/17/2020 19:46*	WG1462208
(S) 4-Bromofluorobenzene	*96.0*			*67.0-138*		*04/17/2020 19:46*	WG1462208
(S) 1,2-Dichloroethane-d4	*93.3*			*70.0-130*		*04/17/2020 19:46*	WG1462208

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

JC 5/28/2020

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	93.2		1	04/21/2020 13:09	WG1463618

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	U	~~J4~~	0.0392	0.0537	1	04/17/2020 20:04	WG1462208
Acrylonitrile	U		0.00388	0.0134	1	04/17/2020 20:04	WG1462208
Benzene	U		0.000501	0.00107	1	04/17/2020 20:04	WG1462208
Bromobenzene	U		0.000966	0.0134	1	04/17/2020 20:04	WG1462208
Bromodichloromethane	U		0.000778	0.00268	1	04/17/2020 20:04	WG1462208
Bromochloromethane	U		0.000605	0.00537	1	04/17/2020 20:04	WG1462208
Bromoform	U		0.00126	0.0268	1	04/17/2020 20:04	WG1462208
Bromomethane	U		0.00211	0.0134	1	04/17/2020 20:04	WG1462208
n-Butylbenzene	U		0.00564	0.0134	1	04/17/2020 20:04	WG1462208
sec-Butylbenzene	U		0.00309	0.0134	1	04/17/2020 20:04	WG1462208
tert-Butylbenzene	U		0.00209	0.00537	1	04/17/2020 20:04	WG1462208
Carbon disulfide	U		0.000751	0.0134	1	04/17/2020 20:04	WG1462208
Carbon tetrachloride	U		0.000964	0.00537	1	04/17/2020 20:04	WG1462208
Chlorobenzene	U		0.000225	0.00268	1	04/17/2020 20:04	WG1462208
Chlorodibromomethane	U		0.000657	0.00268	1	04/17/2020 20:04	WG1462208
Chloroethane	U		0.00183	0.00537	1	04/17/2020 20:04	WG1462208
Chloroform	U		0.00111	0.00268	1	04/17/2020 20:04	WG1462208
Chloromethane	U		0.00467	0.0134	1	04/17/2020 20:04	WG1462208
2-Chlorotoluene	U		0.000929	0.00268	1	04/17/2020 20:04	WG1462208
4-Chlorotoluene	U		0.000483	0.00537	1	04/17/2020 20:04	WG1462208
1,2-Dibromo-3-Chloropropane	U		0.00419	0.0268	1	04/17/2020 20:04	WG1462208
1,2-Dibromoethane	U		0.000696	0.00268	1	04/17/2020 20:04	WG1462208
Dibromomethane	U		0.000805	0.00537	1	04/17/2020 20:04	WG1462208
1,2-Dichlorobenzene	U		0.000456	0.00537	1	04/17/2020 20:04	WG1462208
1,3-Dichlorobenzene	U		0.000644	0.00537	1	04/17/2020 20:04	WG1462208
1,4-Dichlorobenzene	U		0.000751	0.00537	1	04/17/2020 20:04	WG1462208
Dichlorodifluoromethane	U		0.00173	0.00268	1	04/17/2020 20:04	WG1462208
1,1-Dichloroethane	U		0.000527	0.00268	1	04/17/2020 20:04	WG1462208
1,2-Dichloroethane	U		0.000697	0.00268	1	04/17/2020 20:04	WG1462208
1,1-Dichloroethene	U		0.000651	0.00268	1	04/17/2020 20:04	WG1462208
cis-1,2-Dichloroethene	U		0.000788	0.00268	1	04/17/2020 20:04	WG1462208
trans-1,2-Dichloroethene	U		0.00112	0.00537	1	04/17/2020 20:04	WG1462208
1,2-Dichloropropane	U	~~J4~~	0.00152	0.00537	1	04/17/2020 20:04	WG1462208
1,1-Dichloropropene	U		0.000868	0.00268	1	04/17/2020 20:04	WG1462208
1,3-Dichloropropane	U		0.000538	0.00537	1	04/17/2020 20:04	WG1462208
cis-1,3-Dichloropropene	U		0.000813	0.00268	1	04/17/2020 20:04	WG1462208
trans-1,3-Dichloropropene	U		0.00122	0.00537	1	04/17/2020 20:04	WG1462208
trans-1,4-Dichloro-2-butene	U		0.00200	0.00537	1	04/17/2020 20:04	WG1462208
2,2-Dichloropropane	U		0.00148	0.00268	1	04/17/2020 20:04	WG1462208
Di-isopropyl ether	U		0.000440	0.00107	1	04/17/2020 20:04	WG1462208
Ethylbenzene	U		0.000791	0.00268	1	04/17/2020 20:04	WG1462208
Hexachloro-1,3-butadiene	U		0.00644	0.0268	1	04/17/2020 20:04	WG1462208
2-Hexanone	U		0.00361	0.0268	1	04/17/2020 20:04	WG1462208
n-Hexane	U		0.00243	0.00537	1	04/17/2020 20:04	WG1462208
Iodomethane	U		0.00249	0.0134	1	04/17/2020 20:04	WG1462208
Isopropylbenzene	U		0.000456	0.00268	1	04/17/2020 20:04	WG1462208
p-Isopropyltoluene	U		0.00274	0.00537	1	04/17/2020 20:04	WG1462208
2-Butanone (MEK)	U		0.0682	0.107	1	04/17/2020 20:04	WG1462208
Methylene Chloride	U		0.00713	0.0268	1	04/17/2020 20:04	WG1462208
4-Methyl-2-pentanone (MIBK)	U		0.00245	0.0268	1	04/17/2020 20:04	WG1462208

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Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.000376	0.00107	1	04/17/2020 20:04	WG1462208
Naphthalene	U		0.00524	0.0134	1	04/17/2020 20:04	WG1462208
n-Propylbenzene	U		0.00102	0.00537	1	04/17/2020 20:04	WG1462208
Styrene	U		0.000246	0.0134	1	04/17/2020 20:04	WG1462208
1,1,1,2-Tetrachloroethane	U		0.00102	0.00268	1	04/17/2020 20:04	WG1462208
1,1,2,2-Tetrachloroethane	U		0.000746	0.00268	1	04/17/2020 20:04	WG1462208
1,1,2-Trichlorotrifluoroethane	U		0.000809	0.00268	1	04/17/2020 20:04	WG1462208
Tetrachloroethene	U		0.000962	0.00268	1	04/17/2020 20:04	WG1462208
Toluene	U		0.00140	0.00537	1	04/17/2020 20:04	WG1462208
1,2,3-Trichlorobenzene	U		0.00787	0.0134	1	04/17/2020 20:04	WG1462208
1,2,4-Trichlorobenzene	U		0.00472	0.0134	1	04/17/2020 20:04	WG1462208
1,1,1-Trichloroethane	U		0.000991	0.00268	1	04/17/2020 20:04	WG1462208
1,1,2-Trichloroethane	U		0.000641	0.00268	1	04/17/2020 20:04	WG1462208
Trichloroethene	U		0.000627	0.00107	1	04/17/2020 20:04	WG1462208
Trichlorofluoromethane	U		0.000888	0.00268	1	04/17/2020 20:04	WG1462208
1,2,3-Trichloropropane	U		0.00174	0.0134	1	04/17/2020 20:04	WG1462208
1,2,4-Trimethylbenzene	U		0.00170	0.00537	1	04/17/2020 20:04	WG1462208
1,2,3-Trimethylbenzene	U		0.00170	0.00537	1	04/17/2020 20:04	WG1462208
1,3,5-Trimethylbenzene	U		0.00215	0.00537	1	04/17/2020 20:04	WG1462208
Vinyl acetate	U		0.00273	0.0134	1	04/17/2020 20:04	WG1462208
Vinyl chloride	U		0.00125	0.00268	1	04/17/2020 20:04	WG1462208
Xylenes, Total	U		0.000945	0.00698	1	04/17/2020 20:04	WG1462208
(S) Toluene-d8	*107*			*75.0-131*		*04/17/2020 20:04*	WG1462208
(S) 4-Bromofluorobenzene	*92.6*			*67.0-138*		*04/17/2020 20:04*	WG1462208
(S) 1,2-Dichloroethane-d4	*97.2*			*70.0-130*		*04/17/2020 20:04*	WG1462208

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Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	90.6		1	04/21/2020 13:09	WG1463618

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg		Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	U			0.0403	0.0552	1	04/17/2020 15:41	WG1462349
Acrylonitrile	U	UJ	J0	0.00398	0.0138	1	04/17/2020 15:41	WG1462349
Benzene	0.00125			0.000515	0.00110	1	04/17/2020 15:41	WG1462349
Bromobenzene	U			0.000993	0.0138	1	04/17/2020 15:41	WG1462349
Bromodichloromethane	U			0.000800	0.00276	1	04/17/2020 15:41	WG1462349
Bromochloromethane	U			0.000622	0.00552	1	04/17/2020 15:41	WG1462349
Bromoform	U			0.00129	0.0276	1	04/17/2020 15:41	WG1462349
Bromomethane	U			0.00217	0.0138	1	04/17/2020 15:41	WG1462349
n-Butylbenzene	U			0.00579	0.0138	1	04/17/2020 15:41	WG1462349
sec-Butylbenzene	U			0.00318	0.0138	1	04/17/2020 15:41	WG1462349
tert-Butylbenzene	U			0.00215	0.00552	1	04/17/2020 15:41	WG1462349
Carbon disulfide	0.00110		J	0.000772	0.0138	1	04/17/2020 15:41	WG1462349
Carbon tetrachloride	U			0.000991	0.00552	1	04/17/2020 15:41	WG1462349
Chlorobenzene	U			0.000232	0.00276	1	04/17/2020 15:41	WG1462349
Chlorodibromomethane	U			0.000675	0.00276	1	04/17/2020 15:41	WG1462349
Chloroethane	U			0.00188	0.00552	1	04/17/2020 15:41	WG1462349
Chloroform	U			0.00114	0.00276	1	04/17/2020 15:41	WG1462349
Chloromethane	U			0.00480	0.0138	1	04/17/2020 15:41	WG1462349
2-Chlorotoluene	U		~~J4~~	0.000954	0.00276	1	04/17/2020 15:41	WG1462349
4-Chlorotoluene	U			0.000496	0.00552	1	04/17/2020 15:41	WG1462349
1,2-Dibromo-3-Chloropropane	U	UJ	J0	0.00430	0.0276	1	04/17/2020 15:41	WG1462349
1,2-Dibromoethane	U			0.000715	0.00276	1	04/17/2020 15:41	WG1462349
Dibromomethane	U			0.000827	0.00552	1	04/17/2020 15:41	WG1462349
1,2-Dichlorobenzene	U			0.000469	0.00552	1	04/17/2020 15:41	WG1462349
1,3-Dichlorobenzene	U			0.000662	0.00552	1	04/17/2020 15:41	WG1462349
1,4-Dichlorobenzene	U	UJ	J4	0.000772	0.00552	1	04/17/2020 15:41	WG1462349
Dichlorodifluoromethane	U			0.00178	0.00276	1	04/17/2020 15:41	WG1462349
1,1-Dichloroethane	U			0.000542	0.00276	1	04/17/2020 15:41	WG1462349
1,2-Dichloroethane	U			0.000716	0.00276	1	04/17/2020 15:41	WG1462349
1,1-Dichloroethene	U			0.000669	0.00276	1	04/17/2020 15:41	WG1462349
cis-1,2-Dichloroethene	U			0.000810	0.00276	1	04/17/2020 15:41	WG1462349
trans-1,2-Dichloroethene	U			0.00115	0.00552	1	04/17/2020 15:41	WG1462349
1,2-Dichloropropane	U			0.00157	0.00552	1	04/17/2020 15:41	WG1462349
1,1-Dichloropropene	U			0.000892	0.00276	1	04/17/2020 15:41	WG1462349
1,3-Dichloropropane	U			0.000553	0.00552	1	04/17/2020 15:41	WG1462349
cis-1,3-Dichloropropene	U			0.000835	0.00276	1	04/17/2020 15:41	WG1462349
trans-1,3-Dichloropropene	U			0.00126	0.00552	1	04/17/2020 15:41	WG1462349
trans-1,4-Dichloro-2-butene	U			0.00205	0.00552	1	04/17/2020 15:41	WG1462349
2,2-Dichloropropane	U			0.00152	0.00276	1	04/17/2020 15:41	WG1462349
Di-isopropyl ether	U			0.000452	0.00110	1	04/17/2020 15:41	WG1462349
Ethylbenzene	0.00103		J	0.000813	0.00276	1	04/17/2020 15:41	WG1462349
Hexachloro-1,3-butadiene	U			0.00662	0.0276	1	04/17/2020 15:41	WG1462349
2-Hexanone	U			0.00371	0.0276	1	04/17/2020 15:41	WG1462349
n-Hexane	U			0.00249	0.00552	1	04/17/2020 15:41	WG1462349
Iodomethane	U			0.00256	0.0138	1	04/17/2020 15:41	WG1462349
Isopropylbenzene	U			0.000469	0.00276	1	04/17/2020 15:41	WG1462349
p-Isopropyltoluene	U			0.00281	0.00552	1	04/17/2020 15:41	WG1462349
2-Butanone (MEK)	U	UJ	J0	0.0701	0.110	1	04/17/2020 15:41	WG1462349
Methylene Chloride	U			0.00732	0.0276	1	04/17/2020 15:41	WG1462349
4-Methyl-2-pentanone (MIBK)	U			0.00252	0.0276	1	04/17/2020 15:41	WG1462349

JC
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MW-343-102

Collected date/time: 04/14/20 11:04

SAMPLE RESULTS - 21

L1209078

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.000386	0.00110	1	04/17/2020 15:41	WG1462349
Naphthalene	U	UJ J0	0.00538	0.0138	1	04/17/2020 15:41	WG1462349
n-Propylbenzene	U		0.00105	0.00552	1	04/17/2020 15:41	WG1462349
Styrene	U		0.000253	0.0138	1	04/17/2020 15:41	WG1462349
1,1,1,2-Tetrachloroethane	U		0.00105	0.00276	1	04/17/2020 15:41	WG1462349
1,1,2,2-Tetrachloroethane	U		0.000767	0.00276	1	04/17/2020 15:41	WG1462349
1,1,2-Trichlorotrifluoroethane	U		0.000832	0.00276	1	04/17/2020 15:41	WG1462349
Tetrachloroethene	U		0.000988	0.00276	1	04/17/2020 15:41	WG1462349
Toluene	0.00314	J	0.00143	0.00552	1	04/17/2020 15:41	WG1462349
1,2,3-Trichlorobenzene	U	UJ J0	0.00809	0.0138	1	04/17/2020 15:41	WG1462349
1,2,4-Trichlorobenzene	U	UJ J0	0.00485	0.0138	1	04/17/2020 15:41	WG1462349
1,1,1-Trichloroethane	U		0.00102	0.00276	1	04/17/2020 15:41	WG1462349
1,1,2-Trichloroethane	U		0.000659	0.00276	1	04/17/2020 15:41	WG1462349
Trichloroethene	U		0.000644	0.00110	1	04/17/2020 15:41	WG1462349
Trichlorofluoromethane	U		0.000912	0.00276	1	04/17/2020 15:41	WG1462349
1,2,3-Trichloropropane	U		0.00179	0.0138	1	04/17/2020 15:41	WG1462349
1,2,4-Trimethylbenzene	U		0.00174	0.00552	1	04/17/2020 15:41	WG1462349
1,2,3-Trimethylbenzene	U		0.00174	0.00552	1	04/17/2020 15:41	WG1462349
1,3,5-Trimethylbenzene	U		0.00221	0.00552	1	04/17/2020 15:41	WG1462349
Vinyl acetate	U		0.00280	0.0138	1	04/17/2020 15:41	WG1462349
Vinyl chloride	U		0.00128	0.00276	1	04/17/2020 15:41	WG1462349
Xylenes, Total	0.00169	J	0.000971	0.00717	1	04/17/2020 15:41	WG1462349
(S) Toluene-d8	*101*			*75.0-131*		*04/17/2020 15:41*	WG1462349
(S) 4-Bromofluorobenzene	*102*			*67.0-138*		*04/17/2020 15:41*	WG1462349
(S) 1,2-Dichloroethane-d4	*84.7*			*70.0-130*		*04/17/2020 15:41*	WG1462349

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Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	93.3		1	04/21/2020 13:09	WG1463618

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	U		0.0391	0.0536	1	04/17/2020 16:00	WG1462349
Acrylonitrile	U UJ	J0	0.00387	0.0134	1	04/17/2020 16:00	WG1462349
Benzene	0.00459		0.000501	0.00107	1	04/17/2020 16:00	WG1462349
Bromobenzene	U		0.000965	0.0134	1	04/17/2020 16:00	WG1462349
Bromodichloromethane	U		0.000777	0.00268	1	04/17/2020 16:00	WG1462349
Bromochloromethane	U		0.000605	0.00536	1	04/17/2020 16:00	WG1462349
Bromoform	U		0.00125	0.0268	1	04/17/2020 16:00	WG1462349
Bromomethane	U		0.00211	0.0134	1	04/17/2020 16:00	WG1462349
n-Butylbenzene	U		0.00563	0.0134	1	04/17/2020 16:00	WG1462349
sec-Butylbenzene	U		0.00309	0.0134	1	04/17/2020 16:00	WG1462349
tert-Butylbenzene	U		0.00209	0.00536	1	04/17/2020 16:00	WG1462349
Carbon disulfide	U		0.000750	0.0134	1	04/17/2020 16:00	WG1462349
Carbon tetrachloride	U		0.000963	0.00536	1	04/17/2020 16:00	WG1462349
Chlorobenzene	U		0.000225	0.00268	1	04/17/2020 16:00	WG1462349
Chlorodibromomethane	U		0.000656	0.00268	1	04/17/2020 16:00	WG1462349
Chloroethane	U		0.00182	0.00536	1	04/17/2020 16:00	WG1462349
Chloroform	U		0.00110	0.00268	1	04/17/2020 16:00	WG1462349
Chloromethane	U		0.00466	0.0134	1	04/17/2020 16:00	WG1462349
2-Chlorotoluene	U	~~J4~~	0.000927	0.00268	1	04/17/2020 16:00	WG1462349
4-Chlorotoluene	U		0.000482	0.00536	1	04/17/2020 16:00	WG1462349
1,2-Dibromo-3-Chloropropane	U UJ	J0	0.00418	0.0268	1	04/17/2020 16:00	WG1462349
1,2-Dibromoethane	U		0.000695	0.00268	1	04/17/2020 16:00	WG1462349
Dibromomethane	U		0.000804	0.00536	1	04/17/2020 16:00	WG1462349
1,2-Dichlorobenzene	U		0.000456	0.00536	1	04/17/2020 16:00	WG1462349
1,3-Dichlorobenzene	U		0.000643	0.00536	1	04/17/2020 16:00	WG1462349
1,4-Dichlorobenzene	U UJ	J4	0.000750	0.00536	1	04/17/2020 16:00	WG1462349
Dichlorodifluoromethane	U		0.00173	0.00268	1	04/17/2020 16:00	WG1462349
1,1-Dichloroethane	U		0.000526	0.00268	1	04/17/2020 16:00	WG1462349
1,2-Dichloroethane	U		0.000696	0.00268	1	04/17/2020 16:00	WG1462349
1,1-Dichloroethene	U		0.000650	0.00268	1	04/17/2020 16:00	WG1462349
cis-1,2-Dichloroethene	U		0.000787	0.00268	1	04/17/2020 16:00	WG1462349
trans-1,2-Dichloroethene	U		0.00112	0.00536	1	04/17/2020 16:00	WG1462349
1,2-Dichloropropane	U		0.00152	0.00536	1	04/17/2020 16:00	WG1462349
1,1-Dichloropropene	U		0.000867	0.00268	1	04/17/2020 16:00	WG1462349
1,3-Dichloropropane	U		0.000537	0.00536	1	04/17/2020 16:00	WG1462349
cis-1,3-Dichloropropene	U		0.000812	0.00268	1	04/17/2020 16:00	WG1462349
trans-1,3-Dichloropropene	U		0.00122	0.00536	1	04/17/2020 16:00	WG1462349
trans-1,4-Dichloro-2-butene	U		0.00199	0.00536	1	04/17/2020 16:00	WG1462349
2,2-Dichloropropane	U		0.00148	0.00268	1	04/17/2020 16:00	WG1462349
Di-isopropyl ether	U		0.000440	0.00107	1	04/17/2020 16:00	WG1462349
Ethylbenzene	0.00253	J	0.000790	0.00268	1	04/17/2020 16:00	WG1462349
Hexachloro-1,3-butadiene	U		0.00643	0.0268	1	04/17/2020 16:00	WG1462349
2-Hexanone	U		0.00360	0.0268	1	04/17/2020 16:00	WG1462349
n-Hexane	0.0163		0.00242	0.00536	1	04/17/2020 16:00	WG1462349
Iodomethane	U		0.00249	0.0134	1	04/17/2020 16:00	WG1462349
Isopropylbenzene	U		0.000456	0.00268	1	04/17/2020 16:00	WG1462349
p-Isopropyltoluene	U		0.00273	0.00536	1	04/17/2020 16:00	WG1462349
2-Butanone (MEK)	U UJ	J0	0.0681	0.107	1	04/17/2020 16:00	WG1462349
Methylene Chloride	U		0.00712	0.0268	1	04/17/2020 16:00	WG1462349
4-Methyl-2-pentanone (MIBK)	U		0.00244	0.0268	1	04/17/2020 16:00	WG1462349

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Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.000375	0.00107	1	04/17/2020 16:00	WG1462349
Naphthalene	U	UJ J0	0.00523	0.0134	1	04/17/2020 16:00	WG1462349
n-Propylbenzene	0.00106	J	0.00102	0.00536	1	04/17/2020 16:00	WG1462349
Styrene	0.000289	J	0.000246	0.0134	1	04/17/2020 16:00	WG1462349
1,1,1,2-Tetrachloroethane	U		0.00102	0.00268	1	04/17/2020 16:00	WG1462349
1,1,2,2-Tetrachloroethane	U		0.000745	0.00268	1	04/17/2020 16:00	WG1462349
1,1,2-Trichlorotrifluoroethane	U		0.000808	0.00268	1	04/17/2020 16:00	WG1462349
Tetrachloroethene	U		0.000961	0.00268	1	04/17/2020 16:00	WG1462349
Toluene	0.00864		0.00139	0.00536	1	04/17/2020 16:00	WG1462349
1,2,3-Trichlorobenzene	U	UJ J0	0.00786	0.0134	1	04/17/2020 16:00	WG1462349
1,2,4-Trichlorobenzene	U	UJ J0	0.00472	0.0134	1	04/17/2020 16:00	WG1462349
1,1,1-Trichloroethane	U		0.000990	0.00268	1	04/17/2020 16:00	WG1462349
1,1,2-Trichloroethane	U		0.000640	0.00268	1	04/17/2020 16:00	WG1462349
Trichloroethene	U		0.000626	0.00107	1	04/17/2020 16:00	WG1462349
Trichlorofluoromethane	U		0.000887	0.00268	1	04/17/2020 16:00	WG1462349
1,2,3-Trichloropropane	U		0.00174	0.0134	1	04/17/2020 16:00	WG1462349
1,2,4-Trimethylbenzene	0.00309	J	0.00169	0.00536	1	04/17/2020 16:00	WG1462349
1,2,3-Trimethylbenzene	U		0.00169	0.00536	1	04/17/2020 16:00	WG1462349
1,3,5-Trimethylbenzene	U		0.00214	0.00536	1	04/17/2020 16:00	WG1462349
Vinyl acetate	U		0.00272	0.0134	1	04/17/2020 16:00	WG1462349
Vinyl chloride	U		0.00124	0.00268	1	04/17/2020 16:00	WG1462349
Xylenes, Total	0.00681	J	0.000943	0.00697	1	04/17/2020 16:00	WG1462349
(S) Toluene-d8	*99.8*			*75.0-131*		*04/17/2020 16:00*	WG1462349
(S) 4-Bromofluorobenzene	*104*			*67.0-138*		*04/17/2020 16:00*	WG1462349
(S) 1,2-Dichloroethane-d4	*86.3*			*70.0-130*		*04/17/2020 16:00*	WG1462349

JC 5/28/2020

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	90.2		1	04/21/2020 13:09	WG1463618

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	U		0.0405	0.0554	1	04/17/2020 16:19	WG1462349
Acrylonitrile	U	UJ J0	0.00400	0.0139	1	04/17/2020 16:19	WG1462349
Benzene	0.00360		0.000518	0.00111	1	04/17/2020 16:19	WG1462349
Bromobenzene	U		0.000998	0.0139	1	04/17/2020 16:19	WG1462349
Bromodichloromethane	U		0.000804	0.00277	1	04/17/2020 16:19	WG1462349
Bromochloromethane	U		0.000625	0.00554	1	04/17/2020 16:19	WG1462349
Bromoform	U		0.00130	0.0277	1	04/17/2020 16:19	WG1462349
Bromomethane	U		0.00218	0.0139	1	04/17/2020 16:19	WG1462349
n-Butylbenzene	U		0.00582	0.0139	1	04/17/2020 16:19	WG1462349
sec-Butylbenzene	U		0.00319	0.0139	1	04/17/2020 16:19	WG1462349
tert-Butylbenzene	U		0.00216	0.00554	1	04/17/2020 16:19	WG1462349
Carbon disulfide	U		0.000776	0.0139	1	04/17/2020 16:19	WG1462349
Carbon tetrachloride	U		0.000995	0.00554	1	04/17/2020 16:19	WG1462349
Chlorobenzene	U		0.000233	0.00277	1	04/17/2020 16:19	WG1462349
Chlorodibromomethane	U		0.000678	0.00277	1	04/17/2020 16:19	WG1462349
Chloroethane	U		0.00188	0.00554	1	04/17/2020 16:19	WG1462349
Chloroform	U		0.00114	0.00277	1	04/17/2020 16:19	WG1462349
Chloromethane	U		0.00482	0.0139	1	04/17/2020 16:19	WG1462349
2-Chlorotoluene	U	~~J4~~	0.000959	0.00277	1	04/17/2020 16:19	WG1462349
4-Chlorotoluene	U		0.000499	0.00554	1	04/17/2020 16:19	WG1462349
1,2-Dibromo-3-Chloropropane	U	UJ J0	0.00432	0.0277	1	04/17/2020 16:19	WG1462349
1,2-Dibromoethane	U		0.000718	0.00277	1	04/17/2020 16:19	WG1462349
Dibromomethane	U		0.000831	0.00554	1	04/17/2020 16:19	WG1462349
1,2-Dichlorobenzene	U		0.000471	0.00554	1	04/17/2020 16:19	WG1462349
1,3-Dichlorobenzene	U		0.000665	0.00554	1	04/17/2020 16:19	WG1462349
1,4-Dichlorobenzene	U	UJ J4	0.000776	0.00554	1	04/17/2020 16:19	WG1462349
Dichlorodifluoromethane	U		0.00178	0.00277	1	04/17/2020 16:19	WG1462349
1,1-Dichloroethane	U		0.000544	0.00277	1	04/17/2020 16:19	WG1462349
1,2-Dichloroethane	U		0.000719	0.00277	1	04/17/2020 16:19	WG1462349
1,1-Dichloroethene	U		0.000672	0.00277	1	04/17/2020 16:19	WG1462349
cis-1,2-Dichloroethene	U		0.000814	0.00277	1	04/17/2020 16:19	WG1462349
trans-1,2-Dichloroethene	U		0.00115	0.00554	1	04/17/2020 16:19	WG1462349
1,2-Dichloropropane	U		0.00157	0.00554	1	04/17/2020 16:19	WG1462349
1,1-Dichloropropene	U		0.000897	0.00277	1	04/17/2020 16:19	WG1462349
1,3-Dichloropropane	U		0.000555	0.00554	1	04/17/2020 16:19	WG1462349
cis-1,3-Dichloropropene	U		0.000839	0.00277	1	04/17/2020 16:19	WG1462349
trans-1,3-Dichloropropene	U		0.00126	0.00554	1	04/17/2020 16:19	WG1462349
trans-1,4-Dichloro-2-butene	U		0.00206	0.00554	1	04/17/2020 16:19	WG1462349
2,2-Dichloropropane	U		0.00153	0.00277	1	04/17/2020 16:19	WG1462349
Di-isopropyl ether	U		0.000454	0.00111	1	04/17/2020 16:19	WG1462349
Ethylbenzene	0.00173	J	0.000817	0.00277	1	04/17/2020 16:19	WG1462349
Hexachloro-1,3-butadiene	U		0.00665	0.0277	1	04/17/2020 16:19	WG1462349
2-Hexanone	U		0.00372	0.0277	1	04/17/2020 16:19	WG1462349
n-Hexane	0.00787		0.00251	0.00554	1	04/17/2020 16:19	WG1462349
Iodomethane	U		0.00257	0.0139	1	04/17/2020 16:19	WG1462349
Isopropylbenzene	U		0.000471	0.00277	1	04/17/2020 16:19	WG1462349
p-Isopropyltoluene	U		0.00283	0.00554	1	04/17/2020 16:19	WG1462349
2-Butanone (MEK)	U	UJ J0	0.0704	0.111	1	04/17/2020 16:19	WG1462349
Methylene Chloride	U		0.00736	0.0277	1	04/17/2020 16:19	WG1462349
4-Methyl-2-pentanone (MIBK)	U		0.00253	0.0277	1	04/17/2020 16:19	WG1462349

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Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg		Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U			0.000388	0.00111	1	04/17/2020 16:19	WG1462349
Naphthalene	U	UJ	J0	0.00541	0.0139	1	04/17/2020 16:19	WG1462349
n-Propylbenzene	U			0.00105	0.00554	1	04/17/2020 16:19	WG1462349
Styrene	U			0.000254	0.0139	1	04/17/2020 16:19	WG1462349
1,1,1,2-Tetrachloroethane	U			0.00105	0.00277	1	04/17/2020 16:19	WG1462349
1,1,2,2-Tetrachloroethane	U			0.000770	0.00277	1	04/17/2020 16:19	WG1462349
1,1,2-Trichlorotrifluoroethane	U			0.000836	0.00277	1	04/17/2020 16:19	WG1462349
Tetrachloroethene	U			0.000993	0.00277	1	04/17/2020 16:19	WG1462349
Toluene	0.00672			0.00144	0.00554	1	04/17/2020 16:19	WG1462349
1,2,3-Trichlorobenzene	U	UJ	J0	0.00813	0.0139	1	04/17/2020 16:19	WG1462349
1,2,4-Trichlorobenzene	U	UJ	J0	0.00488	0.0139	1	04/17/2020 16:19	WG1462349
1,1,1-Trichloroethane	U			0.00102	0.00277	1	04/17/2020 16:19	WG1462349
1,1,2-Trichloroethane	U			0.000662	0.00277	1	04/17/2020 16:19	WG1462349
Trichloroethene	U			0.000647	0.00111	1	04/17/2020 16:19	WG1462349
Trichlorofluoromethane	U			0.000917	0.00277	1	04/17/2020 16:19	WG1462349
1,2,3-Trichloropropane	U			0.00180	0.0139	1	04/17/2020 16:19	WG1462349
1,2,4-Trimethylbenzene	0.00182		J	0.00175	0.00554	1	04/17/2020 16:19	WG1462349
1,2,3-Trimethylbenzene	U			0.00175	0.00554	1	04/17/2020 16:19	WG1462349
1,3,5-Trimethylbenzene	U			0.00222	0.00554	1	04/17/2020 16:19	WG1462349
Vinyl acetate	U			0.00282	0.0139	1	04/17/2020 16:19	WG1462349
Vinyl chloride	U			0.00129	0.00277	1	04/17/2020 16:19	WG1462349
Xylenes, Total	0.00550		J	0.000975	0.00721	1	04/17/2020 16:19	WG1462349
(S) Toluene-d8	*101*				*75.0-131*		*04/17/2020 16:19*	WG1462349
(S) 4-Bromofluorobenzene	*103*				*67.0-138*		*04/17/2020 16:19*	WG1462349
(S) 1,2-Dichloroethane-d4	*88.1*				*70.0-130*		*04/17/2020 16:19*	WG1462349

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Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	91.6		1	04/21/2020 13:09	WG1463618

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	U		0.0399	0.0546	1	04/17/2020 16:38	WG1462349
Acrylonitrile	U	UJ J0	0.00394	0.0136	1	04/17/2020 16:38	WG1462349
Benzene	0.00202		0.000510	0.00109	1	04/17/2020 16:38	WG1462349
Bromobenzene	U		0.000983	0.0136	1	04/17/2020 16:38	WG1462349
Bromodichloromethane	U		0.000792	0.00273	1	04/17/2020 16:38	WG1462349
Bromochloromethane	U		0.000616	0.00546	1	04/17/2020 16:38	WG1462349
Bromoform	U		0.00128	0.0273	1	04/17/2020 16:38	WG1462349
Bromomethane	U		0.00215	0.0136	1	04/17/2020 16:38	WG1462349
n-Butylbenzene	U		0.00573	0.0136	1	04/17/2020 16:38	WG1462349
sec-Butylbenzene	U		0.00314	0.0136	1	04/17/2020 16:38	WG1462349
tert-Butylbenzene	U		0.00213	0.00546	1	04/17/2020 16:38	WG1462349
Carbon disulfide	U		0.000764	0.0136	1	04/17/2020 16:38	WG1462349
Carbon tetrachloride	U		0.000981	0.00546	1	04/17/2020 16:38	WG1462349
Chlorobenzene	U		0.000229	0.00273	1	04/17/2020 16:38	WG1462349
Chlorodibromomethane	U		0.000668	0.00273	1	04/17/2020 16:38	WG1462349
Chloroethane	U		0.00186	0.00546	1	04/17/2020 16:38	WG1462349
Chloroform	U		0.00112	0.00273	1	04/17/2020 16:38	WG1462349
Chloromethane	U		0.00475	0.0136	1	04/17/2020 16:38	WG1462349
2-Chlorotoluene	U	~~J4~~	0.000945	0.00273	1	04/17/2020 16:38	WG1462349
4-Chlorotoluene	U		0.000491	0.00546	1	04/17/2020 16:38	WG1462349
1,2-Dibromo-3-Chloropropane	U	UJ J0	0.00426	0.0273	1	04/17/2020 16:38	WG1462349
1,2-Dibromoethane	U		0.000708	0.00273	1	04/17/2020 16:38	WG1462349
Dibromomethane	U		0.000819	0.00546	1	04/17/2020 16:38	WG1462349
1,2-Dichlorobenzene	U		0.000464	0.00546	1	04/17/2020 16:38	WG1462349
1,3-Dichlorobenzene	U		0.000655	0.00546	1	04/17/2020 16:38	WG1462349
1,4-Dichlorobenzene	U	UJ J4	0.000764	0.00546	1	04/17/2020 16:38	WG1462349
Dichlorodifluoromethane	U		0.00176	0.00273	1	04/17/2020 16:38	WG1462349
1,1-Dichloroethane	U		0.000536	0.00273	1	04/17/2020 16:38	WG1462349
1,2-Dichloroethane	U		0.000709	0.00273	1	04/17/2020 16:38	WG1462349
1,1-Dichloroethene	U		0.000662	0.00273	1	04/17/2020 16:38	WG1462349
cis-1,2-Dichloroethene	U		0.000802	0.00273	1	04/17/2020 16:38	WG1462349
trans-1,2-Dichloroethene	U		0.00114	0.00546	1	04/17/2020 16:38	WG1462349
1,2-Dichloropropane	U		0.00155	0.00546	1	04/17/2020 16:38	WG1462349
1,1-Dichloropropene	U		0.000883	0.00273	1	04/17/2020 16:38	WG1462349
1,3-Dichloropropane	U		0.000547	0.00546	1	04/17/2020 16:38	WG1462349
cis-1,3-Dichloropropene	U		0.000827	0.00273	1	04/17/2020 16:38	WG1462349
trans-1,3-Dichloropropene	U		0.00124	0.00546	1	04/17/2020 16:38	WG1462349
trans-1,4-Dichloro-2-butene	U		0.00203	0.00546	1	04/17/2020 16:38	WG1462349
2,2-Dichloropropane	U		0.00151	0.00273	1	04/17/2020 16:38	WG1462349
Di-isopropyl ether	U		0.000448	0.00109	1	04/17/2020 16:38	WG1462349
Ethylbenzene	U		0.000805	0.00273	1	04/17/2020 16:38	WG1462349
Hexachloro-1,3-butadiene	U		0.00655	0.0273	1	04/17/2020 16:38	WG1462349
2-Hexanone	U		0.00367	0.0273	1	04/17/2020 16:38	WG1462349
n-Hexane	0.00452	J	0.00247	0.00546	1	04/17/2020 16:38	WG1462349
Iodomethane	U		0.00253	0.0136	1	04/17/2020 16:38	WG1462349
Isopropylbenzene	U		0.000464	0.00273	1	04/17/2020 16:38	WG1462349
p-Isopropyltoluene	U		0.00278	0.00546	1	04/17/2020 16:38	WG1462349
2-Butanone (MEK)	U	UJ J0	0.0693	0.109	1	04/17/2020 16:38	WG1462349
Methylene Chloride	U		0.00725	0.0273	1	04/17/2020 16:38	WG1462349
4-Methyl-2-pentanone (MIBK)	U		0.00249	0.0273	1	04/17/2020 16:38	WG1462349

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Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.000382	0.00109	1	04/17/2020 16:38	WG1462349
Naphthalene	U UJ	J0	0.00533	0.0136	1	04/17/2020 16:38	WG1462349
n-Propylbenzene	U		0.00104	0.00546	1	04/17/2020 16:38	WG1462349
Styrene	U		0.000250	0.0136	1	04/17/2020 16:38	WG1462349
1,1,1,2-Tetrachloroethane	U		0.00104	0.00273	1	04/17/2020 16:38	WG1462349
1,1,2,2-Tetrachloroethane	U		0.000759	0.00273	1	04/17/2020 16:38	WG1462349
1,1,2-Trichlorotrifluoroethane	U		0.000823	0.00273	1	04/17/2020 16:38	WG1462349
Tetrachloroethene	U		0.000978	0.00273	1	04/17/2020 16:38	WG1462349
Toluene	0.00442	J	0.00142	0.00546	1	04/17/2020 16:38	WG1462349
1,2,3-Trichlorobenzene	U UJ	J0	0.00800	0.0136	1	04/17/2020 16:38	WG1462349
1,2,4-Trichlorobenzene	U UJ	J0	0.00480	0.0136	1	04/17/2020 16:38	WG1462349
1,1,1-Trichloroethane	U		0.00101	0.00273	1	04/17/2020 16:38	WG1462349
1,1,2-Trichloroethane	U		0.000652	0.00273	1	04/17/2020 16:38	WG1462349
Trichloroethene	U		0.000638	0.00109	1	04/17/2020 16:38	WG1462349
Trichlorofluoromethane	U		0.000903	0.00273	1	04/17/2020 16:38	WG1462349
1,2,3-Trichloropropane	U		0.00177	0.0136	1	04/17/2020 16:38	WG1462349
1,2,4-Trimethylbenzene	U		0.00173	0.00546	1	04/17/2020 16:38	WG1462349
1,2,3-Trimethylbenzene	U		0.00173	0.00546	1	04/17/2020 16:38	WG1462349
1,3,5-Trimethylbenzene	U		0.00218	0.00546	1	04/17/2020 16:38	WG1462349
Vinyl acetate	U		0.00277	0.0136	1	04/17/2020 16:38	WG1462349
Vinyl chloride	U		0.00127	0.00273	1	04/17/2020 16:38	WG1462349
Xylenes, Total	0.00297	J	0.000961	0.00710	1	04/17/2020 16:38	WG1462349
(S) Toluene-d8	*101*			*75.0-131*		*04/17/2020 16:38*	WG1462349
(S) 4-Bromofluorobenzene	*101*			*67.0-138*		*04/17/2020 16:38*	WG1462349
(S) 1,2-Dichloroethane-d4	*87.6*			*70.0-130*		*04/17/2020 16:38*	WG1462349

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1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	82.3		1	04/27/2020 12:11	WG1465755

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch	
Acetone	U		0.0443	0.0607	1	04/22/2020 18:23	WG1464831	
Acrylonitrile	U		0.00439	0.0152	1	04/22/2020 18:23	WG1464831	
Benzene	0.00108	J	0.000567	0.00121	1	04/22/2020 18:23	WG1464831	
Bromobenzene	U		0.00109	0.0152	1	04/22/2020 18:23	WG1464831	
Bromodichloromethane	U		0.000881	0.00304	1	04/22/2020 18:23	WG1464831	
Bromochloromethane	U		0.000685	0.00607	1	04/22/2020 18:23	WG1464831	
Bromoform	U		0.00142	0.0304	1	04/22/2020 18:23	WG1464831	
Bromomethane	U		0.00239	0.0152	1	04/22/2020 18:23	WG1464831	
n-Butylbenzene	U		0.00638	0.0152	1	04/22/2020 18:23	WG1464831	
sec-Butylbenzene	U		0.00350	0.0152	1	04/22/2020 18:23	WG1464831	
tert-Butylbenzene	U		0.00237	0.00607	1	04/22/2020 18:23	WG1464831	
Carbon disulfide	0.00300	J	0.000850	0.0152	1	04/22/2020 18:23	WG1464831	
Carbon tetrachloride	U		0.00109	0.00607	1	04/22/2020 18:23	WG1464831	
Chlorobenzene	U		0.000255	0.00304	1	04/22/2020 18:23	WG1464831	
Chlorodibromomethane	U	~~J4~~	0.000743	0.00304	1	04/22/2020 18:23	WG1464831	
Chloroethane	U		0.00207	0.00607	1	04/22/2020 18:23	WG1464831	
Chloroform	U		0.00125	0.00304	1	04/22/2020 18:23	WG1464831	
Chloromethane	U		0.00528	0.0152	1	04/22/2020 18:23	WG1464831	
2-Chlorotoluene	U		0.00105	0.00304	1	04/22/2020 18:23	WG1464831	
4-Chlorotoluene	U		0.000547	0.00607	1	04/22/2020 18:23	WG1464831	
1,2-Dibromo-3-Chloropropane	U		0.00474	0.0304	1	04/22/2020 18:23	WG1464831	
1,2-Dibromoethane	U		0.000787	0.00304	1	04/22/2020 18:23	WG1464831	
Dibromomethane	U		0.000911	0.00607	1	04/22/2020 18:23	WG1464831	
1,2-Dichlorobenzene	0.00746		0.000516	0.00607	1	04/22/2020 18:23	WG1464831	
1,3-Dichlorobenzene	0.00129	J	0.000729	0.00607	1	04/22/2020 18:23	WG1464831	
1,4-Dichlorobenzene	0.00813		0.000850	0.00607	1	04/22/2020 18:23	WG1464831	
Dichlorodifluoromethane	U		0.00196	0.00304	1	04/22/2020 18:23	WG1464831	
1,1-Dichloroethane	U		0.000596	0.00304	1	04/22/2020 18:23	WG1464831	
1,2-Dichloroethane	U		0.000788	0.00304	1	04/22/2020 18:23	WG1464831	
1,1-Dichloroethene	U		0.000736	0.00304	1	04/22/2020 18:23	WG1464831	
cis-1,2-Dichloroethene	U		0.000892	0.00304	1	04/22/2020 18:23	WG1464831	
trans-1,2-Dichloroethene	U		0.00126	0.00607	1	04/22/2020 18:23	WG1464831	
1,2-Dichloropropane	U		0.00173	0.00607	1	04/22/2020 18:23	WG1464831	
1,1-Dichloropropene	U		0.000983	0.00304	1	04/22/2020 18:23	WG1464831	
1,3-Dichloropropane	U		0.000609	0.00607	1	04/22/2020 18:23	WG1464831	
cis-1,3-Dichloropropene	U		0.000920	0.00304	1	04/22/2020 18:23	WG1464831	
trans-1,3-Dichloropropene	U		0.00138	0.00607	1	04/22/2020 18:23	WG1464831	
trans-1,4-Dichloro-2-butene	0.0124		0.00226	0.00607	1	04/22/2020 18:23	WG1464831	
2,2-Dichloropropane	U	~~J4~~	0.00168	0.00304	1	04/22/2020 18:23	WG1464831	
Di-isopropyl ether	U		0.000498	0.00121	1	04/22/2020 18:23	WG1464831	
Ethylbenzene	U		0.000895	0.00304	1	04/22/2020 18:23	WG1464831	
Hexachloro-1,3-butadiene	U		0.00729	0.0304	1	04/22/2020 18:23	WG1464831	
2-Hexanone	U		0.00408	0.0304	1	04/22/2020 18:23	WG1464831	
n-Hexane	U		0.00275	0.00607	1	04/22/2020 18:23	WG1464831	
Iodomethane	U		0.00282	0.0152	1	04/22/2020 18:23	WG1464831	
Isopropylbenzene	U		0.000516	0.00304	1	04/22/2020 18:23	WG1464831	
p-Isopropyltoluene	U		0.00310	0.00607	1	04/22/2020 18:23	WG1464831	
2-Butanone (MEK)	U		0.0771	0.121	1	04/22/2020 18:23	WG1464831	
Methylene Chloride	U		0.00807	0.0304	1	04/22/2020 18:23	WG1464831	JC 5/28/2020
4-Methyl-2-pentanone (MIBK)	U		0.00277	0.0304	1	04/22/2020 18:23	WG1464831	

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.000425	0.00121	1	04/22/2020 18:23	WG1464831
Naphthalene	0.00952	J	0.00593	0.0152	1	04/22/2020 18:23	WG1464831
n-Propylbenzene	0.00121	J	0.00115	0.00607	1	04/22/2020 18:23	WG1464831
Styrene	U		0.000278	0.0152	1	04/22/2020 18:23	WG1464831
1,1,1,2-Tetrachloroethane	U		0.00115	0.00304	1	04/22/2020 18:23	WG1464831
1,1,2,2-Tetrachloroethane	U		0.000844	0.00304	1	04/22/2020 18:23	WG1464831
1,1,2-Trichlorotrifluoroethane	U		0.000916	0.00304	1	04/22/2020 18:23	WG1464831
Tetrachloroethene	0.00163	J	0.00109	0.00304	1	04/22/2020 18:23	WG1464831
Toluene	0.00335	J	0.00158	0.00607	1	04/22/2020 18:23	WG1464831
1,2,3-Trichlorobenzene	U		0.00890	0.0152	1	04/27/2020 23:33	WG1466991
1,2,4-Trichlorobenzene	U		0.00535	0.0152	1	04/22/2020 18:23	WG1464831
1,1,1-Trichloroethane	U		0.00112	0.00304	1	04/22/2020 18:23	WG1464831
1,1,2-Trichloroethane	U		0.000725	0.00304	1	04/22/2020 18:23	WG1464831
Trichloroethene	U		0.000709	0.00121	1	04/22/2020 18:23	WG1464831
Trichlorofluoromethane	U		0.00100	0.00304	1	04/22/2020 18:23	WG1464831
1,2,3-Trichloropropane	U		0.00197	0.0152	1	04/22/2020 18:23	WG1464831
1,2,4-Trimethylbenzene	0.00757		0.00192	0.00607	1	04/22/2020 18:23	WG1464831
1,2,3-Trimethylbenzene	0.00695		0.00192	0.00607	1	04/22/2020 18:23	WG1464831
1,3,5-Trimethylbenzene	0.00268	J	0.00243	0.00607	1	04/22/2020 18:23	WG1464831
Vinyl acetate	U		0.00309	0.0152	1	04/22/2020 18:23	WG1464831
Vinyl chloride	U	~~J4~~	0.00141	0.00304	1	04/22/2020 18:23	WG1464831
Xylenes, Total	0.00773	J	0.00107	0.00790	1	04/22/2020 18:23	WG1464831
(S) Toluene-d8	*103*			*75.0-131*		*04/22/2020 18:23*	WG1464831
(S) Toluene-d8	*106*			*75.0-131*		*04/27/2020 23:33*	WG1466991
(S) 4-Bromofluorobenzene	*102*			*67.0-138*		*04/22/2020 18:23*	WG1464831
(S) 4-Bromofluorobenzene	*102*			*67.0-138*		*04/27/2020 23:33*	WG1466991
(S) 1,2-Dichloroethane-d4	*97.0*			*70.0-130*		*04/22/2020 18:23*	WG1464831
(S) 1,2-Dichloroethane-d4	*108*			*70.0-130*		*04/27/2020 23:33*	WG1466991

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Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	82.2		1	04/27/2020 12:11	WG1465755

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	8.53	~~B~~	1.03	3.04	25	04/23/2020 18:12	WG1465276
(S) a,a,a-Trifluorotoluene(FID)	*106*			*77.0-120*		*04/23/2020 18:12*	WG1465276

Sample Narrative:

L1210278-03 WG1465276: No discernable petroleum pattern present.

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	0.0495	J	0.0444	0.0608	1	04/22/2020 18:43	WG1464831
Acrylonitrile	U		0.00439	0.0152	1	04/22/2020 18:43	WG1464831
Benzene	U		0.000568	0.00122	1	04/22/2020 18:43	WG1464831
Bromobenzene	U		0.00109	0.0152	1	04/22/2020 18:43	WG1464831
Bromodichloromethane	U		0.000882	0.00304	1	04/22/2020 18:43	WG1464831
Bromochloromethane	U		0.000686	0.00608	1	04/22/2020 18:43	WG1464831
Bromoform	U		0.00142	0.0304	1	04/22/2020 18:43	WG1464831
Bromomethane	U		0.00240	0.0152	1	04/22/2020 18:43	WG1464831
n-Butylbenzene	U		0.00638	0.0152	1	04/22/2020 18:43	WG1464831
sec-Butylbenzene	0.00666	J	0.00350	0.0152	1	04/22/2020 18:43	WG1464831
tert-Butylbenzene	U		0.00237	0.00608	1	04/22/2020 18:43	WG1464831
Carbon disulfide	0.0153		0.000851	0.0152	1	04/22/2020 18:43	WG1464831
Carbon tetrachloride	U		0.00109	0.00608	1	04/22/2020 18:43	WG1464831
Chlorobenzene	0.00224	J	0.000255	0.00304	1	04/22/2020 18:43	WG1464831
Chlorodibromomethane	U	~~J4~~	0.000744	0.00304	1	04/22/2020 18:43	WG1464831
Chloroethane	U		0.00207	0.00608	1	04/22/2020 18:43	WG1464831
Chloroform	U		0.00125	0.00304	1	04/22/2020 18:43	WG1464831
Chloromethane	U		0.00529	0.0152	1	04/22/2020 18:43	WG1464831
2-Chlorotoluene	U		0.00105	0.00304	1	04/22/2020 18:43	WG1464831
4-Chlorotoluene	U		0.000547	0.00608	1	04/22/2020 18:43	WG1464831
1,2-Dibromo-3-Chloropropane	U		0.00474	0.0304	1	04/22/2020 18:43	WG1464831
1,2-Dibromoethane	U		0.000788	0.00304	1	04/22/2020 18:43	WG1464831
Dibromomethane	U		0.000912	0.00608	1	04/22/2020 18:43	WG1464831
1,2-Dichlorobenzene	0.0345		0.000517	0.00608	1	04/22/2020 18:43	WG1464831
1,3-Dichlorobenzene	U		0.000730	0.00608	1	04/22/2020 18:43	WG1464831
1,4-Dichlorobenzene	0.00255	J	0.000851	0.00608	1	04/22/2020 18:43	WG1464831
Dichlorodifluoromethane	U		0.00196	0.00304	1	04/22/2020 18:43	WG1464831
1,1-Dichloroethane	U		0.000597	0.00304	1	04/22/2020 18:43	WG1464831
1,2-Dichloroethane	U		0.000789	0.00304	1	04/22/2020 18:43	WG1464831
1,1-Dichloroethene	U		0.000737	0.00304	1	04/22/2020 18:43	WG1464831
cis-1,2-Dichloroethene	U		0.000893	0.00304	1	04/22/2020 18:43	WG1464831
trans-1,2-Dichloroethene	U		0.00126	0.00608	1	04/22/2020 18:43	WG1464831
1,2-Dichloropropane	U		0.00173	0.00608	1	04/22/2020 18:43	WG1464831
1,1-Dichloropropene	U		0.000984	0.00304	1	04/22/2020 18:43	WG1464831
1,3-Dichloropropane	U		0.000609	0.00608	1	04/22/2020 18:43	WG1464831
cis-1,3-Dichloropropene	U		0.000921	0.00304	1	04/22/2020 18:43	WG1464831
trans-1,3-Dichloropropene	U		0.00139	0.00608	1	04/22/2020 18:43	WG1464831
trans-1,4-Dichloro-2-butene	U		0.00226	0.00608	1	04/22/2020 18:43	WG1464831
2,2-Dichloropropane	U	~~J4~~	0.00168	0.00304	1	04/22/2020 18:43	WG1464831
Di-isopropyl ether	U		0.000499	0.00122	1	04/22/2020 18:43	WG1464831
Ethylbenzene	0.00150	J	0.000896	0.00304	1	04/22/2020 18:43	WG1464831

JC 5/28/2020

MW-334-10
Collected date/time: 04/16/20 08:42

SAMPLE RESULTS - 03

L1210278

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Hexachloro-1,3-butadiene	U		0.00730	0.0304	1	04/22/2020 18:43	WG1464831
2-Hexanone	U		0.00409	0.0304	1	04/22/2020 18:43	WG1464831
n-Hexane	U		0.00275	0.00608	1	04/22/2020 18:43	WG1464831
Iodomethane	U		0.00282	0.0152	1	04/22/2020 18:43	WG1464831
Isopropylbenzene	0.00730		0.000517	0.00304	1	04/22/2020 18:43	WG1464831
p-Isopropyltoluene	0.961		0.00310	0.00608	1	04/22/2020 18:43	WG1464831
2-Butanone (MEK)	U		0.0772	0.122	1	04/22/2020 18:43	WG1464831
Methylene Chloride	U		0.00808	0.0304	1	04/22/2020 18:43	WG1464831
4-Methyl-2-pentanone (MIBK)	U		0.00277	0.0304	1	04/22/2020 18:43	WG1464831
Methyl tert-butyl ether	U		0.000426	0.00122	1	04/22/2020 18:43	WG1464831
Naphthalene	U		0.00593	0.0152	1	04/22/2020 18:43	WG1464831
n-Propylbenzene	0.0135		0.00116	0.00608	1	04/22/2020 18:43	WG1464831
Styrene	U		0.000279	0.0152	1	04/22/2020 18:43	WG1464831
1,1,1,2-Tetrachloroethane	U		0.00115	0.00304	1	04/22/2020 18:43	WG1464831
1,1,2,2-Tetrachloroethane	U		0.000845	0.00304	1	04/22/2020 18:43	WG1464831
1,1,2-Trichlorotrifluoroethane	U		0.000917	0.00304	1	04/22/2020 18:43	WG1464831
Tetrachloroethene	U		0.00109	0.00304	1	04/22/2020 18:43	WG1464831
Toluene	0.00452	J	0.00158	0.00608	1	04/22/2020 18:43	WG1464831
1,2,3-Trichlorobenzene	U		0.00891	0.0152	1	04/27/2020 23:52	WG1466991
1,2,4-Trichlorobenzene	U		0.00535	0.0152	1	04/22/2020 18:43	WG1464831
1,1,1-Trichloroethane	U		0.00112	0.00304	1	04/22/2020 18:43	WG1464831
1,1,2-Trichloroethane	U		0.000726	0.00304	1	04/22/2020 18:43	WG1464831
Trichloroethene	U		0.000710	0.00122	1	04/22/2020 18:43	WG1464831
Trichlorofluoromethane	U		0.00101	0.00304	1	04/22/2020 18:43	WG1464831
1,2,3-Trichloropropane	U		0.00197	0.0152	1	04/22/2020 18:43	WG1464831
1,2,4-Trimethylbenzene	0.0184		0.00192	0.00608	1	04/22/2020 18:43	WG1464831
1,2,3-Trimethylbenzene	0.00490	J	0.00192	0.00608	1	04/22/2020 18:43	WG1464831
1,3,5-Trimethylbenzene	U		0.00243	0.00608	1	04/22/2020 18:43	WG1464831
Vinyl acetate	U		0.00309	0.0152	1	04/22/2020 18:43	WG1464831
Vinyl chloride	U	~~J4~~	0.00141	0.00304	1	04/22/2020 18:43	WG1464831
Xylenes, Total	0.00677	J	0.00107	0.00791	1	04/22/2020 18:43	WG1464831
(S) Toluene-d8	*106*			*75.0-131*		*04/22/2020 18:43*	WG1464831
(S) Toluene-d8	*106*			*75.0-131*		*04/27/2020 23:52*	WG1466991
(S) 4-Bromofluorobenzene	*136*			*67.0-138*		*04/22/2020 18:43*	WG1464831
(S) 4-Bromofluorobenzene	*101*			*67.0-138*		*04/27/2020 23:52*	WG1466991
(S) 1,2-Dichloroethane-d4	*106*			*70.0-130*		*04/22/2020 18:43*	WG1464831
(S) 1,2-Dichloroethane-d4	*105*			*70.0-130*		*04/27/2020 23:52*	WG1466991

JC 5/28/2020

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	88.8		1	04/27/2020 12:02	WG1465756

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	644		3.82	11.3	100	04/23/2020 18:34	WG1465276
(S) a,a,a-Trifluorotoluene(FID)	*106*			*77.0-120*		*04/23/2020 18:34*	WG1465276

Sample Narrative:

L1210278-04 WG1465276: No discernable petroleum pattern present.

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	U		0.329	0.450	8	04/23/2020 00:43	WG1464831
Acrylonitrile	U		0.0325	0.113	8	04/23/2020 00:43	WG1464831
Benzene	U		0.00421	0.00900	8	04/23/2020 00:43	WG1464831
Bromobenzene	U		0.00810	0.113	8	04/23/2020 00:43	WG1464831
Bromodichloromethane	U		0.00653	0.0225	8	04/23/2020 00:43	WG1464831
Bromochloromethane	U		0.00508	0.0450	8	04/23/2020 00:43	WG1464831
Bromoform	U		0.0105	0.225	8	04/23/2020 00:43	WG1464831
Bromomethane	U		0.0178	0.113	8	04/23/2020 00:43	WG1464831
n-Butylbenzene	1.02		0.0473	0.113	8	04/23/2020 00:43	WG1464831
sec-Butylbenzene	0.665		0.0259	0.113	8	04/23/2020 00:43	WG1464831
tert-Butylbenzene	0.0421	J	0.0176	0.0450	8	04/23/2020 00:43	WG1464831
Carbon disulfide	U		0.00630	0.113	8	04/23/2020 00:43	WG1464831
Carbon tetrachloride	U		0.00808	0.0450	8	04/23/2020 00:43	WG1464831
Chlorobenzene	0.0633		0.00189	0.0225	8	04/23/2020 00:43	WG1464831
Chlorodibromomethane	U	~~J4~~	0.00552	0.0225	8	04/23/2020 00:43	WG1464831
Chloroethane	U		0.0153	0.0450	8	04/23/2020 00:43	WG1464831
Chloroform	U		0.00927	0.0225	8	04/23/2020 00:43	WG1464831
Chloromethane	U		0.0392	0.113	8	04/23/2020 00:43	WG1464831
2-Chlorotoluene	U		0.00779	0.0225	8	04/23/2020 00:43	WG1464831
4-Chlorotoluene	U		0.00405	0.0450	8	04/23/2020 00:43	WG1464831
1,2-Dibromo-3-Chloropropane	U		0.0351	0.225	8	04/23/2020 00:43	WG1464831
1,2-Dibromoethane	U		0.00583	0.0225	8	04/23/2020 00:43	WG1464831
Dibromomethane	U		0.00675	0.0450	8	04/23/2020 00:43	WG1464831
1,2-Dichlorobenzene	0.196		0.00383	0.0450	8	04/23/2020 00:43	WG1464831
1,3-Dichlorobenzene	0.0133	J	0.00540	0.0450	8	04/23/2020 00:43	WG1464831
1,4-Dichlorobenzene	0.0559		0.00630	0.0450	8	04/23/2020 00:43	WG1464831
Dichlorodifluoromethane	U		0.0145	0.0225	8	04/23/2020 00:43	WG1464831
1,1-Dichloroethane	U		0.00442	0.0225	8	04/23/2020 00:43	WG1464831
1,2-Dichloroethane	U		0.00584	0.0225	8	04/23/2020 00:43	WG1464831
1,1-Dichloroethene	U		0.00546	0.0225	8	04/23/2020 00:43	WG1464831
cis-1,2-Dichloroethene	U		0.00661	0.0225	8	04/23/2020 00:43	WG1464831
trans-1,2-Dichloroethene	U		0.00936	0.0450	8	04/23/2020 00:43	WG1464831
1,2-Dichloropropane	U		0.0128	0.0450	8	04/23/2020 00:43	WG1464831
1,1-Dichloropropene	U		0.00728	0.0225	8	04/23/2020 00:43	WG1464831
1,3-Dichloropropane	U		0.00451	0.0450	8	04/23/2020 00:43	WG1464831
cis-1,3-Dichloropropene	U		0.00682	0.0225	8	04/23/2020 00:43	WG1464831
trans-1,3-Dichloropropene	U		0.0103	0.0450	8	04/23/2020 00:43	WG1464831
trans-1,4-Dichloro-2-butene	0.332		0.0168	0.0450	8	04/23/2020 00:43	WG1464831
2,2-Dichloropropane	U	~~J4~~	0.0124	0.0225	8	04/23/2020 00:43	WG1464831
Di-isopropyl ether	U		0.00369	0.00900	8	04/23/2020 00:43	WG1464831
Ethylbenzene	U		0.00664	0.0225	8	04/23/2020 00:43	WG1464831

JC 5/28/2020

MW-334-13
Collected date/time: 04/16/20 09:05

SAMPLE RESULTS - 04

L1210278

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Hexachloro-1,3-butadiene	U		0.0540	0.225	8	04/23/2020 00:43	WG1464831
2-Hexanone	U		0.0303	0.225	8	04/23/2020 00:43	WG1464831
n-Hexane	0.0312 J	J J0	0.0204	0.0450	8	04/23/2020 00:43	WG1464831
Iodomethane	U		0.0209	0.113	8	04/23/2020 00:43	WG1464831
Isopropylbenzene	0.294		0.00383	0.0225	8	04/23/2020 00:43	WG1464831
p-Isopropyltoluene	U		0.0230	0.0450	8	04/23/2020 00:43	WG1464831
2-Butanone (MEK)	U		0.572	0.900	8	04/23/2020 00:43	WG1464831
Methylene Chloride	U		0.0598	0.225	8	04/23/2020 00:43	WG1464831
4-Methyl-2-pentanone (MIBK)	U		0.0205	0.225	8	04/23/2020 00:43	WG1464831
Methyl tert-butyl ether	U		0.00315	0.00900	8	04/23/2020 00:43	WG1464831
Naphthalene	U		0.0439	0.113	8	04/23/2020 00:43	WG1464831
n-Propylbenzene	0.934		0.00855	0.0450	8	04/23/2020 00:43	WG1464831
Styrene	U		0.00206	0.113	8	04/23/2020 00:43	WG1464831
1,1,1,2-Tetrachloroethane	U		0.00853	0.0225	8	04/23/2020 00:43	WG1464831
1,1,2,2-Tetrachloroethane	U		0.00626	0.0225	8	04/23/2020 00:43	WG1464831
1,1,2-Trichlorotrifluoroethane	U		0.00679	0.0225	8	04/23/2020 00:43	WG1464831
Tetrachloroethene	U		0.00807	0.0225	8	04/23/2020 00:43	WG1464831
Toluene	U		0.0117	0.0450	8	04/23/2020 00:43	WG1464831
1,2,3-Trichlorobenzene	U		0.0660	0.113	8	04/28/2020 00:11	WG1466991
1,2,4-Trichlorobenzene	U		0.0396	0.113	8	04/23/2020 00:43	WG1464831
1,1,1-Trichloroethane	U		0.00831	0.0225	8	04/23/2020 00:43	WG1464831
1,1,2-Trichloroethane	U		0.00538	0.0225	8	04/23/2020 00:43	WG1464831
Trichloroethene	U		0.00526	0.00900	8	04/23/2020 00:43	WG1464831
Trichlorofluoromethane	U		0.00745	0.0225	8	04/23/2020 00:43	WG1464831
1,2,3-Trichloropropane	U		0.0146	0.113	8	04/23/2020 00:43	WG1464831
1,2,4-Trimethylbenzene	0.0369	J	0.0142	0.0450	8	04/23/2020 00:43	WG1464831
1,2,3-Trimethylbenzene	0.160		0.0142	0.0450	8	04/23/2020 00:43	WG1464831
1,3,5-Trimethylbenzene	U		0.0180	0.0450	8	04/23/2020 00:43	WG1464831
Vinyl acetate	U		0.0228	0.113	8	04/23/2020 00:43	WG1464831
Vinyl chloride	U	~~J4~~	0.0104	0.0225	8	04/23/2020 00:43	WG1464831
Xylenes, Total	0.0684		0.00792	0.0585	8	04/23/2020 00:43	WG1464831
(S) Toluene-d8	*101*			*75.0-131*		*04/23/2020 00:43*	WG1464831
(S) Toluene-d8	*104*			*75.0-131*		*04/28/2020 00:11*	WG1466991
(S) 4-Bromofluorobenzene	*134*			*67.0-138*		*04/23/2020 00:43*	WG1464831
(S) 4-Bromofluorobenzene	*103*			*67.0-138*		*04/28/2020 00:11*	WG1466991
(S) 1,2-Dichloroethane-d4	*107*			*70.0-130*		*04/23/2020 00:43*	WG1464831
(S) 1,2-Dichloroethane-d4	*109*			*70.0-130*		*04/28/2020 00:11*	WG1466991

Sample Narrative:

L1210278-04 WG1464831: NT too high to run lower

JC 5/28/2020

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	96.8		1	04/27/2020 12:02	WG1465756

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	16.5	~~B~~	0.876	2.58	25	04/23/2020 18:57	WG1465276
(S) a,a,a-Trifluorotoluene(FID)	*107*			*77.0-120*		*04/23/2020 18:57*	WG1465276

Sample Narrative:

L1210278-05 WG1465276: No discernable petroleum pattern present.

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	U		0.0377	0.0517	1	04/22/2020 19:03	WG1464831
Acrylonitrile	U		0.00373	0.0129	1	04/22/2020 19:03	WG1464831
Benzene	U		0.000483	0.00103	1	04/22/2020 19:03	WG1464831
Bromobenzene	U		0.000930	0.0129	1	04/22/2020 19:03	WG1464831
Bromodichloromethane	U		0.000749	0.00258	1	04/22/2020 19:03	WG1464831
Bromochloromethane	U		0.000583	0.00517	1	04/22/2020 19:03	WG1464831
Bromoform	U		0.00121	0.0258	1	04/22/2020 19:03	WG1464831
Bromomethane	U		0.00204	0.0129	1	04/22/2020 19:03	WG1464831
n-Butylbenzene	0.00543	J	0.00543	0.0129	1	04/22/2020 19:03	WG1464831
sec-Butylbenzene	0.00442	J	0.00298	0.0129	1	04/22/2020 19:03	WG1464831
tert-Butylbenzene	U		0.00202	0.00517	1	04/22/2020 19:03	WG1464831
Carbon disulfide	U		0.000723	0.0129	1	04/22/2020 19:03	WG1464831
Carbon tetrachloride	U		0.000928	0.00517	1	04/22/2020 19:03	WG1464831
Chlorobenzene	0.000622	J	0.000217	0.00258	1	04/22/2020 19:03	WG1464831
Chlorodibromomethane	U	~~J4~~	0.000632	0.00258	1	04/22/2020 19:03	WG1464831
Chloroethane	U		0.00176	0.00517	1	04/22/2020 19:03	WG1464831
Chloroform	0.00131	B J	0.00106	0.00258	1	04/22/2020 19:03	WG1464831
Chloromethane	U		0.00450	0.0129	1	04/22/2020 19:03	WG1464831
2-Chlorotoluene	U		0.000894	0.00258	1	04/22/2020 19:03	WG1464831
4-Chlorotoluene	U		0.000465	0.00517	1	04/22/2020 19:03	WG1464831
1,2-Dibromo-3-Chloropropane	U		0.00403	0.0258	1	04/22/2020 19:03	WG1464831
1,2-Dibromoethane	U		0.000670	0.00258	1	04/22/2020 19:03	WG1464831
Dibromomethane	U		0.000775	0.00517	1	04/22/2020 19:03	WG1464831
1,2-Dichlorobenzene	0.00804		0.000439	0.00517	1	04/22/2020 19:03	WG1464831
1,3-Dichlorobenzene	U		0.000620	0.00517	1	04/22/2020 19:03	WG1464831
1,4-Dichlorobenzene	0.00271	J	0.000723	0.00517	1	04/22/2020 19:03	WG1464831
Dichlorodifluoromethane	U		0.00166	0.00258	1	04/22/2020 19:03	WG1464831
1,1-Dichloroethane	U		0.000507	0.00258	1	04/22/2020 19:03	WG1464831
1,2-Dichloroethane	U		0.000671	0.00258	1	04/22/2020 19:03	WG1464831
1,1-Dichloroethene	U		0.000626	0.00258	1	04/22/2020 19:03	WG1464831
cis-1,2-Dichloroethene	U		0.000759	0.00258	1	04/22/2020 19:03	WG1464831
trans-1,2-Dichloroethene	U		0.00107	0.00517	1	04/22/2020 19:03	WG1464831
1,2-Dichloropropane	U		0.00147	0.00517	1	04/22/2020 19:03	WG1464831
1,1-Dichloropropene	U		0.000836	0.00258	1	04/22/2020 19:03	WG1464831
1,3-Dichloropropane	U		0.000518	0.00517	1	04/22/2020 19:03	WG1464831
cis-1,3-Dichloropropene	U		0.000782	0.00258	1	04/22/2020 19:03	WG1464831
trans-1,3-Dichloropropene	U		0.00118	0.00517	1	04/22/2020 19:03	WG1464831
trans-1,4-Dichloro-2-butene	0.00324	J	0.00192	0.00517	1	04/22/2020 19:03	WG1464831
2,2-Dichloropropane	U	~~J4~~	0.00143	0.00258	1	04/22/2020 19:03	WG1464831
Di-isopropyl ether	U		0.000424	0.00103	1	04/22/2020 19:03	WG1464831
Ethylbenzene	0.00116	J	0.000762	0.00258	1	04/22/2020 19:03	WG1464831

JC 5/28/2020

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Hexachloro-1,3-butadiene	U		0.00620	0.0258	1	04/22/2020 19:03	WG1464831
2-Hexanone	U		0.00347	0.0258	1	04/22/2020 19:03	WG1464831
n-Hexane	U		0.00234	0.00517	1	04/22/2020 19:03	WG1464831
Iodomethane	U		0.00240	0.0129	1	04/22/2020 19:03	WG1464831
Isopropylbenzene	0.00207	J	0.000439	0.00258	1	04/22/2020 19:03	WG1464831
p-Isopropyltoluene	0.0361		0.00264	0.00517	1	04/22/2020 19:03	WG1464831
2-Butanone (MEK)	U		0.0656	0.103	1	04/22/2020 19:03	WG1464831
Methylene Chloride	U		0.00686	0.0258	1	04/22/2020 19:03	WG1464831
4-Methyl-2-pentanone (MIBK)	U		0.00236	0.0258	1	04/22/2020 19:03	WG1464831
Methyl tert-butyl ether	U		0.000362	0.00103	1	04/22/2020 19:03	WG1464831
Naphthalene	0.0113	J	0.00504	0.0129	1	04/22/2020 19:03	WG1464831
n-Propylbenzene	0.00433	J	0.000982	0.00517	1	04/22/2020 19:03	WG1464831
Styrene	0.00349	J	0.000237	0.0129	1	04/22/2020 19:03	WG1464831
1,1,1,2-Tetrachloroethane	U		0.000980	0.00258	1	04/22/2020 19:03	WG1464831
1,1,2,2-Tetrachloroethane	U		0.000718	0.00258	1	04/22/2020 19:03	WG1464831
1,1,2-Trichlorotrifluoroethane	U		0.000779	0.00258	1	04/22/2020 19:03	WG1464831
Tetrachloroethene	U		0.000926	0.00258	1	04/22/2020 19:03	WG1464831
Toluene	0.0102		0.00134	0.00517	1	04/22/2020 19:03	WG1464831
1,2,3-Trichlorobenzene	U		0.00757	0.0129	1	04/28/2020 00:30	WG1466991
1,2,4-Trichlorobenzene	U		0.00455	0.0129	1	04/22/2020 19:03	WG1464831
1,1,1-Trichloroethane	U		0.000954	0.00258	1	04/22/2020 19:03	WG1464831
1,1,2-Trichloroethane	U		0.000617	0.00258	1	04/22/2020 19:03	WG1464831
Trichloroethene	U		0.000604	0.00103	1	04/22/2020 19:03	WG1464831
Trichlorofluoromethane	U		0.000855	0.00258	1	04/22/2020 19:03	WG1464831
1,2,3-Trichloropropane	U		0.00167	0.0129	1	04/22/2020 19:03	WG1464831
1,2,4-Trimethylbenzene	0.00333	J	0.00163	0.00517	1	04/22/2020 19:03	WG1464831
1,2,3-Trimethylbenzene	U		0.00163	0.00517	1	04/22/2020 19:03	WG1464831
1,3,5-Trimethylbenzene	U		0.00207	0.00517	1	04/22/2020 19:03	WG1464831
Vinyl acetate	U		0.00262	0.0129	1	04/22/2020 19:03	WG1464831
Vinyl chloride	U	~~J4~~	0.00120	0.00258	1	04/22/2020 19:03	WG1464831
Xylenes, Total	0.00349	J	0.000909	0.00672	1	04/22/2020 19:03	WG1464831
(S) Toluene-d8	*105*			*75.0-131*		*04/22/2020 19:03*	WG1464831
(S) Toluene-d8	*108*			*75.0-131*		*04/28/2020 00:30*	WG1466991
(S) 4-Bromofluorobenzene	*108*			*67.0-138*		*04/22/2020 19:03*	WG1464831
(S) 4-Bromofluorobenzene	*102*			*67.0-138*		*04/28/2020 00:30*	WG1466991
(S) 1,2-Dichloroethane-d4	*105*			*70.0-130*		*04/22/2020 19:03*	WG1464831
(S) 1,2-Dichloroethane-d4	*105*			*70.0-130*		*04/28/2020 00:30*	WG1466991

JC 5/28/2020

MW-334-23

Collected date/time: 04/16/20 09:38

SAMPLE RESULTS - 06

L1210278

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	84.0		1	04/27/2020 12:02	WG1465756

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	3.93	~~B~~	1.01	2.98	25	04/23/2020 19:19	WG1465276
(S) a,a,a-Trifluorotoluene(FID)	*106*			*77.0-120*		*04/23/2020 19:19*	WG1465276

Sample Narrative:

L1210278-06 WG1465276: No discernable petroleum pattern present.

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	U		0.0434	0.0595	1	04/22/2020 19:23	WG1464831
Acrylonitrile	U		0.00430	0.0149	1	04/22/2020 19:23	WG1464831
Benzene	0.00177		0.000556	0.00119	1	04/22/2020 19:23	WG1464831
Bromobenzene	U		0.00107	0.0149	1	04/22/2020 19:23	WG1464831
Bromodichloromethane	U		0.000863	0.00298	1	04/22/2020 19:23	WG1464831
Bromochloromethane	U		0.000671	0.00595	1	04/22/2020 19:23	WG1464831
Bromoform	U		0.00139	0.0298	1	04/22/2020 19:23	WG1464831
Bromomethane	U		0.00234	0.0149	1	04/22/2020 19:23	WG1464831
n-Butylbenzene	U		0.00625	0.0149	1	04/22/2020 19:23	WG1464831
sec-Butylbenzene	U		0.00343	0.0149	1	04/22/2020 19:23	WG1464831
tert-Butylbenzene	U		0.00232	0.00595	1	04/22/2020 19:23	WG1464831
Carbon disulfide	0.00530	J	0.000833	0.0149	1	04/22/2020 19:23	WG1464831
Carbon tetrachloride	U		0.00107	0.00595	1	04/22/2020 19:23	WG1464831
Chlorobenzene	U		0.000250	0.00298	1	04/22/2020 19:23	WG1464831
Chlorodibromomethane	U	~~J4~~	0.000728	0.00298	1	04/22/2020 19:23	WG1464831
Chloroethane	U		0.00202	0.00595	1	04/22/2020 19:23	WG1464831
Chloroform	U		0.00123	0.00298	1	04/22/2020 19:23	WG1464831
Chloromethane	U		0.00518	0.0149	1	04/22/2020 19:23	WG1464831
2-Chlorotoluene	U		0.00103	0.00298	1	04/22/2020 19:23	WG1464831
4-Chlorotoluene	U		0.000536	0.00595	1	04/22/2020 19:23	WG1464831
1,2-Dibromo-3-Chloropropane	U		0.00464	0.0298	1	04/22/2020 19:23	WG1464831
1,2-Dibromoethane	U		0.000771	0.00298	1	04/22/2020 19:23	WG1464831
Dibromomethane	U		0.000893	0.00595	1	04/22/2020 19:23	WG1464831
1,2-Dichlorobenzene	U		0.000506	0.00595	1	04/22/2020 19:23	WG1464831
1,3-Dichlorobenzene	U		0.000714	0.00595	1	04/22/2020 19:23	WG1464831
1,4-Dichlorobenzene	U		0.000833	0.00595	1	04/22/2020 19:23	WG1464831
Dichlorodifluoromethane	U		0.00192	0.00298	1	04/22/2020 19:23	WG1464831
1,1-Dichloroethane	U		0.000584	0.00298	1	04/22/2020 19:23	WG1464831
1,2-Dichloroethane	U		0.000773	0.00298	1	04/22/2020 19:23	WG1464831
1,1-Dichloroethene	U		0.000721	0.00298	1	04/22/2020 19:23	WG1464831
cis-1,2-Dichloroethene	U		0.000874	0.00298	1	04/22/2020 19:23	WG1464831
trans-1,2-Dichloroethene	U		0.00124	0.00595	1	04/22/2020 19:23	WG1464831
1,2-Dichloropropane	U		0.00169	0.00595	1	04/22/2020 19:23	WG1464831
1,1-Dichloropropene	U		0.000963	0.00298	1	04/22/2020 19:23	WG1464831
1,3-Dichloropropane	U		0.000596	0.00595	1	04/22/2020 19:23	WG1464831
cis-1,3-Dichloropropene	U		0.000901	0.00298	1	04/22/2020 19:23	WG1464831
trans-1,3-Dichloropropene	U		0.00136	0.00595	1	04/22/2020 19:23	WG1464831
trans-1,4-Dichloro-2-butene	U		0.00221	0.00595	1	04/22/2020 19:23	WG1464831
2,2-Dichloropropane	U	~~J4~~	0.00164	0.00298	1	04/22/2020 19:23	WG1464831
Di-isopropyl ether	U		0.000488	0.00119	1	04/22/2020 19:23	WG1464831
Ethylbenzene	U		0.000877	0.00298	1	04/22/2020 19:23	WG1464831

JC 5/28/2020

MW-334-23
Collected date/time: 04/16/20 09:38

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Hexachloro-1,3-butadiene	U		0.00714	0.0298	1	04/22/2020 19:23	WG1464831
2-Hexanone	U		0.00400	0.0298	1	04/22/2020 19:23	WG1464831
n-Hexane	U		0.00269	0.00595	1	04/22/2020 19:23	WG1464831
Iodomethane	U		0.00276	0.0149	1	04/22/2020 19:23	WG1464831
Isopropylbenzene	U		0.000506	0.00298	1	04/22/2020 19:23	WG1464831
p-Isopropyltoluene	0.0110		0.00304	0.00595	1	04/22/2020 19:23	WG1464831
2-Butanone (MEK)	U		0.0756	0.119	1	04/22/2020 19:23	WG1464831
Methylene Chloride	U		0.00790	0.0298	1	04/22/2020 19:23	WG1464831
4-Methyl-2-pentanone (MIBK)	U		0.00271	0.0298	1	04/22/2020 19:23	WG1464831
Methyl tert-butyl ether	U		0.000417	0.00119	1	04/22/2020 19:23	WG1464831
Naphthalene	0.00793	J	0.00581	0.0149	1	04/22/2020 19:23	WG1464831
n-Propylbenzene	U		0.00113	0.00595	1	04/22/2020 19:23	WG1464831
Styrene	U		0.000273	0.0149	1	04/22/2020 19:23	WG1464831
1,1,1,2-Tetrachloroethane	U		0.00113	0.00298	1	04/22/2020 19:23	WG1464831
1,1,2,2-Tetrachloroethane	U		0.000827	0.00298	1	04/22/2020 19:23	WG1464831
1,1,2-Trichlorotrifluoroethane	U		0.000897	0.00298	1	04/22/2020 19:23	WG1464831
Tetrachloroethene	U		0.00107	0.00298	1	04/22/2020 19:23	WG1464831
Toluene	U		0.00155	0.00595	1	04/22/2020 19:23	WG1464831
1,2,3-Trichlorobenzene	U		0.00872	0.0149	1	04/28/2020 00:49	WG1466991
1,2,4-Trichlorobenzene	U		0.00524	0.0149	1	04/22/2020 19:23	WG1464831
1,1,1-Trichloroethane	U		0.00110	0.00298	1	04/22/2020 19:23	WG1464831
1,1,2-Trichloroethane	U		0.000711	0.00298	1	04/22/2020 19:23	WG1464831
Trichloroethene	U		0.000695	0.00119	1	04/22/2020 19:23	WG1464831
Trichlorofluoromethane	U		0.000984	0.00298	1	04/22/2020 19:23	WG1464831
1,2,3-Trichloropropane	U		0.00193	0.0149	1	04/22/2020 19:23	WG1464831
1,2,4-Trimethylbenzene	U		0.00188	0.00595	1	04/22/2020 19:23	WG1464831
1,2,3-Trimethylbenzene	U		0.00188	0.00595	1	04/22/2020 19:23	WG1464831
1,3,5-Trimethylbenzene	U		0.00238	0.00595	1	04/22/2020 19:23	WG1464831
Vinyl acetate	U		0.00302	0.0149	1	04/22/2020 19:23	WG1464831
Vinyl chloride	U	~~J4~~	0.00138	0.00298	1	04/22/2020 19:23	WG1464831
Xylenes, Total	0.00275	J	0.00105	0.00774	1	04/22/2020 19:23	WG1464831
(S) Toluene-d8	*103*			*75.0-131*		*04/22/2020 19:23*	WG1464831
(S) Toluene-d8	*107*			*75.0-131*		*04/28/2020 00:49*	WG1466991
(S) 4-Bromofluorobenzene	*98.5*			*67.0-138*		*04/22/2020 19:23*	WG1464831
(S) 4-Bromofluorobenzene	*100*			*67.0-138*		*04/28/2020 00:49*	WG1466991
(S) 1,2-Dichloroethane-d4	*103*			*70.0-130*		*04/22/2020 19:23*	WG1464831
(S) 1,2-Dichloroethane-d4	*103*			*70.0-130*		*04/28/2020 00:49*	WG1466991

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

JC 5/28/2020

MW-334-28
Collected date/time: 04/16/20 09:40

SAMPLE RESULTS - 07
L1210278

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	84.9		1	04/27/2020 12:02	WG1465756

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	U		0.0430	0.0589	1	04/22/2020 19:43	WG1464831
Acrylonitrile	U		0.00425	0.0147	1	04/22/2020 19:43	WG1464831
Benzene	0.000841	J	0.000550	0.00118	1	04/22/2020 19:43	WG1464831
Bromobenzene	U		0.00106	0.0147	1	04/22/2020 19:43	WG1464831
Bromodichloromethane	U		0.000854	0.00294	1	04/22/2020 19:43	WG1464831
Bromochloromethane	U		0.000664	0.00589	1	04/22/2020 19:43	WG1464831
Bromoform	U		0.00138	0.0294	1	04/22/2020 19:43	WG1464831
Bromomethane	U		0.00232	0.0147	1	04/22/2020 19:43	WG1464831
n-Butylbenzene	U		0.00618	0.0147	1	04/22/2020 19:43	WG1464831
sec-Butylbenzene	U		0.00339	0.0147	1	04/22/2020 19:43	WG1464831
tert-Butylbenzene	U		0.00230	0.00589	1	04/22/2020 19:43	WG1464831
Carbon disulfide	0.00314	J	0.000824	0.0147	1	04/22/2020 19:43	WG1464831
Carbon tetrachloride	U		0.00106	0.00589	1	04/22/2020 19:43	WG1464831
Chlorobenzene	U		0.000247	0.00294	1	04/22/2020 19:43	WG1464831
Chlorodibromomethane	U	~~J4~~	0.000721	0.00294	1	04/22/2020 19:43	WG1464831
Chloroethane	U		0.00200	0.00589	1	04/22/2020 19:43	WG1464831
Chloroform	U		0.00121	0.00294	1	04/22/2020 19:43	WG1464831
Chloromethane	U		0.00512	0.0147	1	04/22/2020 19:43	WG1464831
2-Chlorotoluene	U		0.00102	0.00294	1	04/22/2020 19:43	WG1464831
4-Chlorotoluene	U		0.000530	0.00589	1	04/22/2020 19:43	WG1464831
1,2-Dibromo-3-Chloropropane	U		0.00459	0.0294	1	04/22/2020 19:43	WG1464831
1,2-Dibromoethane	U		0.000763	0.00294	1	04/22/2020 19:43	WG1464831
Dibromomethane	U		0.000883	0.00589	1	04/22/2020 19:43	WG1464831
1,2-Dichlorobenzene	U		0.000501	0.00589	1	04/22/2020 19:43	WG1464831
1,3-Dichlorobenzene	U		0.000707	0.00589	1	04/22/2020 19:43	WG1464831
1,4-Dichlorobenzene	U		0.000824	0.00589	1	04/22/2020 19:43	WG1464831
Dichlorodifluoromethane	U		0.00190	0.00294	1	04/22/2020 19:43	WG1464831
1,1-Dichloroethane	U		0.000578	0.00294	1	04/22/2020 19:43	WG1464831
1,2-Dichloroethane	U		0.000764	0.00294	1	04/22/2020 19:43	WG1464831
1,1-Dichloroethene	U		0.000714	0.00294	1	04/22/2020 19:43	WG1464831
cis-1,2-Dichloroethene	U		0.000865	0.00294	1	04/22/2020 19:43	WG1464831
trans-1,2-Dichloroethene	U		0.00122	0.00589	1	04/22/2020 19:43	WG1464831
1,2-Dichloropropane	U		0.00167	0.00589	1	04/22/2020 19:43	WG1464831
1,1-Dichloropropene	U		0.000953	0.00294	1	04/22/2020 19:43	WG1464831
1,3-Dichloropropane	U		0.000590	0.00589	1	04/22/2020 19:43	WG1464831
cis-1,3-Dichloropropene	U		0.000892	0.00294	1	04/22/2020 19:43	WG1464831
trans-1,3-Dichloropropene	U		0.00134	0.00589	1	04/22/2020 19:43	WG1464831
trans-1,4-Dichloro-2-butene	0.00254	J	0.00219	0.00589	1	04/22/2020 19:43	WG1464831
2,2-Dichloropropane	U	~~J4~~	0.00163	0.00294	1	04/22/2020 19:43	WG1464831
Di-isopropyl ether	U		0.000483	0.00118	1	04/22/2020 19:43	WG1464831
Ethylbenzene	U		0.000868	0.00294	1	04/22/2020 19:43	WG1464831
Hexachloro-1,3-butadiene	U		0.00707	0.0294	1	04/22/2020 19:43	WG1464831
2-Hexanone	U		0.00396	0.0294	1	04/22/2020 19:43	WG1464831
n-Hexane	U		0.00266	0.00589	1	04/22/2020 19:43	WG1464831
Iodomethane	U		0.00273	0.0147	1	04/22/2020 19:43	WG1464831
Isopropylbenzene	U		0.000501	0.00294	1	04/22/2020 19:43	WG1464831
p-Isopropyltoluene	0.00844		0.00300	0.00589	1	04/22/2020 19:43	WG1464831
2-Butanone (MEK)	U		0.0748	0.118	1	04/22/2020 19:43	WG1464831
Methylene Chloride	U		0.00782	0.0294	1	04/22/2020 19:43	WG1464831
4-Methyl-2-pentanone (MIBK)	U		0.00269	0.0294	1	04/22/2020 19:43	WG1464831

JC 5/28/2020

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.000412	0.00118	1	04/22/2020 19:43	WG1464831
Naphthalene	U		0.00575	0.0147	1	04/22/2020 19:43	WG1464831
n-Propylbenzene	U		0.00112	0.00589	1	04/22/2020 19:43	WG1464831
Styrene	U		0.000270	0.0147	1	04/22/2020 19:43	WG1464831
1,1,1,2-Tetrachloroethane	U		0.00112	0.00294	1	04/22/2020 19:43	WG1464831
1,1,2,2-Tetrachloroethane	U		0.000819	0.00294	1	04/22/2020 19:43	WG1464831
1,1,2-Trichlorotrifluoroethane	U		0.000888	0.00294	1	04/22/2020 19:43	WG1464831
Tetrachloroethene	U		0.00106	0.00294	1	04/22/2020 19:43	WG1464831
Toluene	0.00446	J	0.00153	0.00589	1	04/22/2020 19:43	WG1464831
1,2,3-Trichlorobenzene	U		0.00863	0.0147	1	04/28/2020 01:08	WG1466991
1,2,4-Trichlorobenzene	U		0.00518	0.0147	1	04/22/2020 19:43	WG1464831
1,1,1-Trichloroethane	U		0.00109	0.00294	1	04/22/2020 19:43	WG1464831
1,1,2-Trichloroethane	U		0.000703	0.00294	1	04/22/2020 19:43	WG1464831
Trichloroethene	U		0.000688	0.00118	1	04/22/2020 19:43	WG1464831
Trichlorofluoromethane	U		0.000974	0.00294	1	04/22/2020 19:43	WG1464831
1,2,3-Trichloropropane	U		0.00191	0.0147	1	04/22/2020 19:43	WG1464831
1,2,4-Trimethylbenzene	U		0.00186	0.00589	1	04/22/2020 19:43	WG1464831
1,2,3-Trimethylbenzene	U		0.00186	0.00589	1	04/22/2020 19:43	WG1464831
1,3,5-Trimethylbenzene	U		0.00236	0.00589	1	04/22/2020 19:43	WG1464831
Vinyl acetate	U		0.00299	0.0147	1	04/22/2020 19:43	WG1464831
Vinyl chloride	U	~~J4~~	0.00137	0.00294	1	04/22/2020 19:43	WG1464831
Xylenes, Total	0.00171	J	0.00104	0.00766	1	04/22/2020 19:43	WG1464831
(S) Toluene-d8	*107*			*75.0-131*		*04/22/2020 19:43*	WG1464831
(S) Toluene-d8	*105*			*75.0-131*		*04/28/2020 01:08*	WG1466991
(S) 4-Bromofluorobenzene	*99.7*			*67.0-138*		*04/22/2020 19:43*	WG1464831
(S) 4-Bromofluorobenzene	*96.1*			*67.0-138*		*04/28/2020 01:08*	WG1466991
(S) 1,2-Dichloroethane-d4	*98.6*			*70.0-130*		*04/22/2020 19:43*	WG1464831
(S) 1,2-Dichloroethane-d4	*101*			*70.0-130*		*04/28/2020 01:08*	WG1466991

JC 5/28/2020

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	79.1		1	04/27/2020 12:02	WG1465756

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	U		0.0461	0.0632	1	04/22/2020 20:03	WG1464831
Acrylonitrile	U		0.00456	0.0158	1	04/22/2020 20:03	WG1464831
Benzene	U		0.000590	0.00126	1	04/22/2020 20:03	WG1464831
Bromobenzene	U		0.00114	0.0158	1	04/22/2020 20:03	WG1464831
Bromodichloromethane	U		0.000916	0.00316	1	04/22/2020 20:03	WG1464831
Bromochloromethane	U		0.000713	0.00632	1	04/22/2020 20:03	WG1464831
Bromoform	U		0.00148	0.0316	1	04/22/2020 20:03	WG1464831
Bromomethane	U		0.00249	0.0158	1	04/22/2020 20:03	WG1464831
n-Butylbenzene	U		0.00664	0.0158	1	04/22/2020 20:03	WG1464831
sec-Butylbenzene	U		0.00364	0.0158	1	04/22/2020 20:03	WG1464831
tert-Butylbenzene	U		0.00246	0.00632	1	04/22/2020 20:03	WG1464831
Carbon disulfide	U		0.000885	0.0158	1	04/22/2020 20:03	WG1464831
Carbon tetrachloride	U		0.00114	0.00632	1	04/22/2020 20:03	WG1464831
Chlorobenzene	U		0.000265	0.00316	1	04/22/2020 20:03	WG1464831
Chlorodibromomethane	U	~~J4~~	0.000774	0.00316	1	04/22/2020 20:03	WG1464831
Chloroethane	U		0.00215	0.00632	1	04/22/2020 20:03	WG1464831
Chloroform	U		0.00130	0.00316	1	04/22/2020 20:03	WG1464831
Chloromethane	U		0.00550	0.0158	1	04/22/2020 20:03	WG1464831
2-Chlorotoluene	U		0.00109	0.00316	1	04/22/2020 20:03	WG1464831
4-Chlorotoluene	U		0.000569	0.00632	1	04/22/2020 20:03	WG1464831
1,2-Dibromo-3-Chloropropane	U		0.00493	0.0316	1	04/22/2020 20:03	WG1464831
1,2-Dibromoethane	U		0.000819	0.00316	1	04/22/2020 20:03	WG1464831
Dibromomethane	U		0.000948	0.00632	1	04/22/2020 20:03	WG1464831
1,2-Dichlorobenzene	U		0.000537	0.00632	1	04/22/2020 20:03	WG1464831
1,3-Dichlorobenzene	U		0.000758	0.00632	1	04/22/2020 20:03	WG1464831
1,4-Dichlorobenzene	U		0.000885	0.00632	1	04/22/2020 20:03	WG1464831
Dichlorodifluoromethane	U		0.00204	0.00316	1	04/22/2020 20:03	WG1464831
1,1-Dichloroethane	U		0.000621	0.00316	1	04/22/2020 20:03	WG1464831
1,2-Dichloroethane	U		0.000820	0.00316	1	04/22/2020 20:03	WG1464831
1,1-Dichloroethene	U		0.000766	0.00316	1	04/22/2020 20:03	WG1464831
cis-1,2-Dichloroethene	U		0.000928	0.00316	1	04/22/2020 20:03	WG1464831
trans-1,2-Dichloroethene	U		0.00131	0.00632	1	04/22/2020 20:03	WG1464831
1,2-Dichloropropane	U		0.00179	0.00632	1	04/22/2020 20:03	WG1464831
1,1-Dichloropropene	U		0.00102	0.00316	1	04/22/2020 20:03	WG1464831
1,3-Dichloropropane	U		0.000633	0.00632	1	04/22/2020 20:03	WG1464831
cis-1,3-Dichloropropene	U		0.000957	0.00316	1	04/22/2020 20:03	WG1464831
trans-1,3-Dichloropropene	U		0.00144	0.00632	1	04/22/2020 20:03	WG1464831
trans-1,4-Dichloro-2-butene	U		0.00235	0.00632	1	04/22/2020 20:03	WG1464831
2,2-Dichloropropane	U	~~J4~~	0.00174	0.00316	1	04/22/2020 20:03	WG1464831
Di-isopropyl ether	U		0.000518	0.00126	1	04/22/2020 20:03	WG1464831
Ethylbenzene	U		0.000932	0.00316	1	04/22/2020 20:03	WG1464831
Hexachloro-1,3-butadiene	U		0.00758	0.0316	1	04/22/2020 20:03	WG1464831
2-Hexanone	U		0.00425	0.0316	1	04/22/2020 20:03	WG1464831
n-Hexane	U		0.00286	0.00632	1	04/22/2020 20:03	WG1464831
Iodomethane	U		0.00293	0.0158	1	04/22/2020 20:03	WG1464831
Isopropylbenzene	U		0.000537	0.00316	1	04/22/2020 20:03	WG1464831
p-Isopropyltoluene	U		0.00322	0.00632	1	04/22/2020 20:03	WG1464831
2-Butanone (MEK)	U		0.0803	0.126	1	04/22/2020 20:03	WG1464831
Methylene Chloride	U		0.00839	0.0316	1	04/22/2020 20:03	WG1464831
4-Methyl-2-pentanone (MIBK)	U		0.00288	0.0316	1	04/22/2020 20:03	WG1464831

JC 5/28/2020

MW-334-35

Collected date/time: 04/16/20 10:10

SAMPLE RESULTS - 08

L1210278

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.000442	0.00126	1	04/22/2020 20:03	WG1464831
Naphthalene	U		0.00617	0.0158	1	04/22/2020 20:03	WG1464831
n-Propylbenzene	U		0.00120	0.00632	1	04/22/2020 20:03	WG1464831
Styrene	U		0.000289	0.0158	1	04/22/2020 20:03	WG1464831
1,1,1,2-Tetrachloroethane	U		0.00120	0.00316	1	04/22/2020 20:03	WG1464831
1,1,2,2-Tetrachloroethane	U		0.000878	0.00316	1	04/22/2020 20:03	WG1464831
1,1,2-Trichlorotrifluoroethane	U		0.000953	0.00316	1	04/22/2020 20:03	WG1464831
Tetrachloroethene	U		0.00113	0.00316	1	04/22/2020 20:03	WG1464831
Toluene	U		0.00164	0.00632	1	04/22/2020 20:03	WG1464831
1,2,3-Trichlorobenzene	U		0.00926	0.0158	1	04/28/2020 01:28	WG1466991
1,2,4-Trichlorobenzene	U		0.00556	0.0158	1	04/22/2020 20:03	WG1464831
1,1,1-Trichloroethane	U		0.00117	0.00316	1	04/22/2020 20:03	WG1464831
1,1,2-Trichloroethane	U		0.000755	0.00316	1	04/22/2020 20:03	WG1464831
Trichloroethene	U		0.000738	0.00126	1	04/22/2020 20:03	WG1464831
Trichlorofluoromethane	U		0.00105	0.00316	1	04/22/2020 20:03	WG1464831
1,2,3-Trichloropropane	U		0.00205	0.0158	1	04/22/2020 20:03	WG1464831
1,2,4-Trimethylbenzene	U		0.00200	0.00632	1	04/22/2020 20:03	WG1464831
1,2,3-Trimethylbenzene	U		0.00200	0.00632	1	04/22/2020 20:03	WG1464831
1,3,5-Trimethylbenzene	U		0.00253	0.00632	1	04/22/2020 20:03	WG1464831
Vinyl acetate	U		0.00321	0.0158	1	04/22/2020 20:03	WG1464831
Vinyl chloride	U	~~J4~~	0.00147	0.00316	1	04/22/2020 20:03	WG1464831
Xylenes, Total	U		0.00111	0.00822	1	04/22/2020 20:03	WG1464831
(S) Toluene-d8	*105*			*75.0-131*		*04/22/2020 20:03*	WG1464831
(S) Toluene-d8	*104*			*75.0-131*		*04/28/2020 01:28*	WG1466991
(S) 4-Bromofluorobenzene	*101*			*67.0-138*		*04/22/2020 20:03*	WG1464831
(S) 4-Bromofluorobenzene	*98.3*			*67.0-138*		*04/28/2020 01:28*	WG1466991
(S) 1,2-Dichloroethane-d4	*107*			*70.0-130*		*04/22/2020 20:03*	WG1464831
(S) 1,2-Dichloroethane-d4	*101*			*70.0-130*		*04/28/2020 01:28*	WG1466991

JC 5/28/2020

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	77.4		1	04/27/2020 12:02	WG1465756

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	U		0.0471	0.0646	1	04/22/2020 20:22	WG1464831
Acrylonitrile	U		0.00466	0.0161	1	04/22/2020 20:22	WG1464831
Benzene	U		0.000603	0.00129	1	04/22/2020 20:22	WG1464831
Bromobenzene	U		0.00116	0.0161	1	04/22/2020 20:22	WG1464831
Bromodichloromethane	U		0.000936	0.00323	1	04/22/2020 20:22	WG1464831
Bromochloromethane	U		0.000728	0.00646	1	04/22/2020 20:22	WG1464831
Bromoform	U		0.00151	0.0323	1	04/22/2020 20:22	WG1464831
Bromomethane	U		0.00254	0.0161	1	04/22/2020 20:22	WG1464831
n-Butylbenzene	U		0.00678	0.0161	1	04/22/2020 20:22	WG1464831
sec-Butylbenzene	U		0.00372	0.0161	1	04/22/2020 20:22	WG1464831
tert-Butylbenzene	U		0.00252	0.00646	1	04/22/2020 20:22	WG1464831
Carbon disulfide	0.00128	J	0.000904	0.0161	1	04/22/2020 20:22	WG1464831
Carbon tetrachloride	U		0.00116	0.00646	1	04/22/2020 20:22	WG1464831
Chlorobenzene	U		0.000271	0.00323	1	04/22/2020 20:22	WG1464831
Chlorodibromomethane	U	~~J4~~	0.000790	0.00323	1	04/22/2020 20:22	WG1464831
Chloroethane	U		0.00220	0.00646	1	04/22/2020 20:22	WG1464831
Chloroform	U		0.00133	0.00323	1	04/22/2020 20:22	WG1464831
Chloromethane	U		0.00562	0.0161	1	04/22/2020 20:22	WG1464831
2-Chlorotoluene	U		0.00112	0.00323	1	04/22/2020 20:22	WG1464831
4-Chlorotoluene	U		0.000581	0.00646	1	04/22/2020 20:22	WG1464831
1,2-Dibromo-3-Chloropropane	U		0.00504	0.0323	1	04/22/2020 20:22	WG1464831
1,2-Dibromoethane	U		0.000837	0.00323	1	04/22/2020 20:22	WG1464831
Dibromomethane	U		0.000969	0.00646	1	04/22/2020 20:22	WG1464831
1,2-Dichlorobenzene	U		0.000549	0.00646	1	04/22/2020 20:22	WG1464831
1,3-Dichlorobenzene	U		0.000775	0.00646	1	04/22/2020 20:22	WG1464831
1,4-Dichlorobenzene	U		0.000904	0.00646	1	04/22/2020 20:22	WG1464831
Dichlorodifluoromethane	U		0.00208	0.00323	1	04/22/2020 20:22	WG1464831
1,1-Dichloroethane	U		0.000634	0.00323	1	04/22/2020 20:22	WG1464831
1,2-Dichloroethane	U		0.000838	0.00323	1	04/22/2020 20:22	WG1464831
1,1-Dichloroethene	U		0.000783	0.00323	1	04/22/2020 20:22	WG1464831
cis-1,2-Dichloroethene	U		0.000948	0.00323	1	04/22/2020 20:22	WG1464831
trans-1,2-Dichloroethene	U		0.00134	0.00646	1	04/22/2020 20:22	WG1464831
1,2-Dichloropropane	U		0.00183	0.00646	1	04/22/2020 20:22	WG1464831
1,1-Dichloropropene	U		0.00104	0.00323	1	04/22/2020 20:22	WG1464831
1,3-Dichloropropane	U		0.000647	0.00646	1	04/22/2020 20:22	WG1464831
cis-1,3-Dichloropropene	U		0.000978	0.00323	1	04/22/2020 20:22	WG1464831
trans-1,3-Dichloropropene	U		0.00147	0.00646	1	04/22/2020 20:22	WG1464831
trans-1,4-Dichloro-2-butene	U		0.00240	0.00646	1	04/22/2020 20:22	WG1464831
2,2-Dichloropropane	U	~~J4~~	0.00178	0.00323	1	04/22/2020 20:22	WG1464831
Di-isopropyl ether	U		0.000530	0.00129	1	04/22/2020 20:22	WG1464831
Ethylbenzene	U		0.000952	0.00323	1	04/22/2020 20:22	WG1464831
Hexachloro-1,3-butadiene	U		0.00775	0.0323	1	04/22/2020 20:22	WG1464831
2-Hexanone	U		0.00434	0.0323	1	04/22/2020 20:22	WG1464831
n-Hexane	U		0.00292	0.00646	1	04/22/2020 20:22	WG1464831
Iodomethane	U		0.00300	0.0161	1	04/22/2020 20:22	WG1464831
Isopropylbenzene	U		0.000549	0.00323	1	04/22/2020 20:22	WG1464831
p-Isopropyltoluene	U		0.00329	0.00646	1	04/22/2020 20:22	WG1464831
2-Butanone (MEK)	U		0.0820	0.129	1	04/22/2020 20:22	WG1464831
Methylene Chloride	U		0.00858	0.0323	1	04/22/2020 20:22	WG1464831
4-Methyl-2-pentanone (MIBK)	U		0.00294	0.0323	1	04/22/2020 20:22	WG1464831

JC 5/28/2020

MW-334-40

Collected date/time: 04/16/20 10:12

SAMPLE RESULTS - 09

L1210278

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.000452	0.00129	1	04/22/2020 20:22	WG1464831
Naphthalene	U		0.00630	0.0161	1	04/22/2020 20:22	WG1464831
n-Propylbenzene	U		0.00123	0.00646	1	04/22/2020 20:22	WG1464831
Styrene	U		0.000296	0.0161	1	04/22/2020 20:22	WG1464831
1,1,1,2-Tetrachloroethane	U		0.00122	0.00323	1	04/22/2020 20:22	WG1464831
1,1,2,2-Tetrachloroethane	U		0.000898	0.00323	1	04/22/2020 20:22	WG1464831
1,1,2-Trichlorotrifluoroethane	U		0.000974	0.00323	1	04/22/2020 20:22	WG1464831
Tetrachloroethene	U		0.00116	0.00323	1	04/22/2020 20:22	WG1464831
Toluene	U		0.00168	0.00646	1	04/22/2020 20:22	WG1464831
1,2,3-Trichlorobenzene	U		0.00947	0.0161	1	04/28/2020 01:47	WG1466991
1,2,4-Trichlorobenzene	U		0.00568	0.0161	1	04/22/2020 20:22	WG1464831
1,1,1-Trichloroethane	U		0.00119	0.00323	1	04/22/2020 20:22	WG1464831
1,1,2-Trichloroethane	U		0.000771	0.00323	1	04/22/2020 20:22	WG1464831
Trichloroethene	U		0.000754	0.00129	1	04/22/2020 20:22	WG1464831
Trichlorofluoromethane	U		0.00107	0.00323	1	04/22/2020 20:22	WG1464831
1,2,3-Trichloropropane	U		0.00209	0.0161	1	04/22/2020 20:22	WG1464831
1,2,4-Trimethylbenzene	U		0.00204	0.00646	1	04/22/2020 20:22	WG1464831
1,2,3-Trimethylbenzene	U		0.00204	0.00646	1	04/22/2020 20:22	WG1464831
1,3,5-Trimethylbenzene	U		0.00258	0.00646	1	04/22/2020 20:22	WG1464831
Vinyl acetate	U		0.00328	0.0161	1	04/22/2020 20:22	WG1464831
Vinyl chloride	U	~~J4~~	0.00150	0.00323	1	04/22/2020 20:22	WG1464831
Xylenes, Total	U		0.00114	0.00840	1	04/22/2020 20:22	WG1464831
(S) Toluene-d8	*105*			*75.0-131*		*04/22/2020 20:22*	WG1464831
(S) Toluene-d8	*107*			*75.0-131*		*04/28/2020 01:47*	WG1466991
(S) 4-Bromofluorobenzene	*98.4*			*67.0-138*		*04/22/2020 20:22*	WG1464831
(S) 4-Bromofluorobenzene	*98.8*			*67.0-138*		*04/28/2020 01:47*	WG1466991
(S) 1,2-Dichloroethane-d4	*104*			*70.0-130*		*04/22/2020 20:22*	WG1464831
(S) 1,2-Dichloroethane-d4	*101*			*70.0-130*		*04/28/2020 01:47*	WG1466991

JC 5/28/2020

SAMPLE RESULTS - 10

L1210278

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	82.2		1	04/27/2020 12:02	WG1465756

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	U		0.0444	0.0608	1	04/22/2020 20:42	WG1464831
Acrylonitrile	U		0.00439	0.0152	1	04/22/2020 20:42	WG1464831
Benzene	U		0.000568	0.00122	1	04/22/2020 20:42	WG1464831
Bromobenzene	U		0.00109	0.0152	1	04/22/2020 20:42	WG1464831
Bromodichloromethane	U		0.000882	0.00304	1	04/22/2020 20:42	WG1464831
Bromochloromethane	U		0.000686	0.00608	1	04/22/2020 20:42	WG1464831
Bromoform	U		0.00142	0.0304	1	04/22/2020 20:42	WG1464831
Bromomethane	U		0.00240	0.0152	1	04/22/2020 20:42	WG1464831
n-Butylbenzene	U		0.00639	0.0152	1	04/22/2020 20:42	WG1464831
sec-Butylbenzene	U		0.00350	0.0152	1	04/22/2020 20:42	WG1464831
tert-Butylbenzene	U		0.00237	0.00608	1	04/22/2020 20:42	WG1464831
Carbon disulfide	U		0.000852	0.0152	1	04/22/2020 20:42	WG1464831
Carbon tetrachloride	U		0.00109	0.00608	1	04/22/2020 20:42	WG1464831
Chlorobenzene	U		0.000255	0.00304	1	04/22/2020 20:42	WG1464831
Chlorodibromomethane	U	~~J4~~	0.000745	0.00304	1	04/22/2020 20:42	WG1464831
Chloroethane	U		0.00207	0.00608	1	04/22/2020 20:42	WG1464831
Chloroform	U		0.00125	0.00304	1	04/22/2020 20:42	WG1464831
Chloromethane	U		0.00529	0.0152	1	04/22/2020 20:42	WG1464831
2-Chlorotoluene	U		0.00105	0.00304	1	04/22/2020 20:42	WG1464831
4-Chlorotoluene	U		0.000547	0.00608	1	04/22/2020 20:42	WG1464831
1,2-Dibromo-3-Chloropropane	U		0.00474	0.0304	1	04/22/2020 20:42	WG1464831
1,2-Dibromoethane	U		0.000788	0.00304	1	04/22/2020 20:42	WG1464831
Dibromomethane	U		0.000912	0.00608	1	04/22/2020 20:42	WG1464831
1,2-Dichlorobenzene	U		0.000517	0.00608	1	04/22/2020 20:42	WG1464831
1,3-Dichlorobenzene	U		0.000730	0.00608	1	04/22/2020 20:42	WG1464831
1,4-Dichlorobenzene	U		0.000852	0.00608	1	04/22/2020 20:42	WG1464831
Dichlorodifluoromethane	U		0.00196	0.00304	1	04/22/2020 20:42	WG1464831
1,1-Dichloroethane	U		0.000597	0.00304	1	04/22/2020 20:42	WG1464831
1,2-Dichloroethane	U		0.000790	0.00304	1	04/22/2020 20:42	WG1464831
1,1-Dichloroethene	U		0.000737	0.00304	1	04/22/2020 20:42	WG1464831
cis-1,2-Dichloroethene	U		0.000893	0.00304	1	04/22/2020 20:42	WG1464831
trans-1,2-Dichloroethene	U		0.00127	0.00608	1	04/22/2020 20:42	WG1464831
1,2-Dichloropropane	U		0.00173	0.00608	1	04/22/2020 20:42	WG1464831
1,1-Dichloropropene	U		0.000984	0.00304	1	04/22/2020 20:42	WG1464831
1,3-Dichloropropane	U		0.000609	0.00608	1	04/22/2020 20:42	WG1464831
cis-1,3-Dichloropropene	U		0.000921	0.00304	1	04/22/2020 20:42	WG1464831
trans-1,3-Dichloropropene	U		0.00139	0.00608	1	04/22/2020 20:42	WG1464831
trans-1,4-Dichloro-2-butene	U		0.00226	0.00608	1	04/22/2020 20:42	WG1464831
2,2-Dichloropropane	U	~~J4~~	0.00168	0.00304	1	04/22/2020 20:42	WG1464831
Di-isopropyl ether	U		0.000499	0.00122	1	04/22/2020 20:42	WG1464831
Ethylbenzene	U		0.000897	0.00304	1	04/22/2020 20:42	WG1464831
Hexachloro-1,3-butadiene	U		0.00730	0.0304	1	04/22/2020 20:42	WG1464831
2-Hexanone	U		0.00409	0.0304	1	04/22/2020 20:42	WG1464831
n-Hexane	U		0.00275	0.00608	1	04/22/2020 20:42	WG1464831
Iodomethane	U		0.00282	0.0152	1	04/22/2020 20:42	WG1464831
Isopropylbenzene	U		0.000517	0.00304	1	04/22/2020 20:42	WG1464831
p-Isopropyltoluene	U		0.00310	0.00608	1	04/22/2020 20:42	WG1464831
2-Butanone (MEK)	U		0.0772	0.122	1	04/22/2020 20:42	WG1464831
Methylene Chloride	U		0.00808	0.0304	1	04/22/2020 20:42	WG1464831
4-Methyl-2-pentanone (MIBK)	U		0.00277	0.0304	1	04/22/2020 20:42	WG1464831

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Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.000426	0.00122	1	04/22/2020 20:42	WG1464831
Naphthalene	U		0.00594	0.0152	1	04/22/2020 20:42	WG1464831
n-Propylbenzene	U		0.00116	0.00608	1	04/22/2020 20:42	WG1464831
Styrene	U		0.000279	0.0152	1	04/22/2020 20:42	WG1464831
1,1,1,2-Tetrachloroethane	U		0.00115	0.00304	1	04/22/2020 20:42	WG1464831
1,1,2,2-Tetrachloroethane	U		0.000845	0.00304	1	04/22/2020 20:42	WG1464831
1,1,2-Trichlorotrifluoroethane	U		0.000917	0.00304	1	04/22/2020 20:42	WG1464831
Tetrachloroethene	U		0.00109	0.00304	1	04/22/2020 20:42	WG1464831
Toluene	U		0.00158	0.00608	1	04/22/2020 20:42	WG1464831
1,2,3-Trichlorobenzene	U		0.00892	0.0152	1	04/28/2020 02:06	WG1466991
1,2,4-Trichlorobenzene	U		0.00535	0.0152	1	04/22/2020 20:42	WG1464831
1,1,1-Trichloroethane	U		0.00112	0.00304	1	04/22/2020 20:42	WG1464831
1,1,2-Trichloroethane	U		0.000726	0.00304	1	04/22/2020 20:42	WG1464831
Trichloroethene	U		0.000710	0.00122	1	04/22/2020 20:42	WG1464831
Trichlorofluoromethane	U		0.00101	0.00304	1	04/22/2020 20:42	WG1464831
1,2,3-Trichloropropane	U		0.00197	0.0152	1	04/22/2020 20:42	WG1464831
1,2,4-Trimethylbenzene	U		0.00192	0.00608	1	04/22/2020 20:42	WG1464831
1,2,3-Trimethylbenzene	U		0.00192	0.00608	1	04/22/2020 20:42	WG1464831
1,3,5-Trimethylbenzene	U		0.00243	0.00608	1	04/22/2020 20:42	WG1464831
Vinyl acetate	U		0.00309	0.0152	1	04/22/2020 20:42	WG1464831
Vinyl chloride	U	~~J4~~	0.00141	0.00304	1	04/22/2020 20:42	WG1464831
Xylenes, Total	U		0.00107	0.00791	1	04/22/2020 20:42	WG1464831
(S) Toluene-d8	*105*			*75.0-131*		*04/22/2020 20:42*	WG1464831
(S) Toluene-d8	*106*			*75.0-131*		*04/28/2020 02:06*	WG1466991
(S) 4-Bromofluorobenzene	*96.3*			*67.0-138*		*04/22/2020 20:42*	WG1464831
(S) 4-Bromofluorobenzene	*95.9*			*67.0-138*		*04/28/2020 02:06*	WG1466991
(S) 1,2-Dichloroethane-d4	*99.4*			*70.0-130*		*04/22/2020 20:42*	WG1464831
(S) 1,2-Dichloroethane-d4	*104*			*70.0-130*		*04/28/2020 02:06*	WG1466991

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Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	90.4		1	04/27/2020 12:02	WG1465756

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	U		0.0404	0.0553	1	04/22/2020 21:02	WG1464831
Acrylonitrile	U		0.00399	0.0138	1	04/22/2020 21:02	WG1464831
Benzene	U		0.000517	0.00111	1	04/22/2020 21:02	WG1464831
Bromobenzene	U		0.000996	0.0138	1	04/22/2020 21:02	WG1464831
Bromodichloromethane	U		0.000802	0.00277	1	04/22/2020 21:02	WG1464831
Bromochloromethane	U		0.000624	0.00553	1	04/22/2020 21:02	WG1464831
Bromoform	U		0.00129	0.0277	1	04/22/2020 21:02	WG1464831
Bromomethane	U		0.00218	0.0138	1	04/22/2020 21:02	WG1464831
n-Butylbenzene	U		0.00581	0.0138	1	04/22/2020 21:02	WG1464831
sec-Butylbenzene	U		0.00319	0.0138	1	04/22/2020 21:02	WG1464831
tert-Butylbenzene	U		0.00216	0.00553	1	04/22/2020 21:02	WG1464831
Carbon disulfide	U		0.000775	0.0138	1	04/22/2020 21:02	WG1464831
Carbon tetrachloride	U		0.000994	0.00553	1	04/22/2020 21:02	WG1464831
Chlorobenzene	U		0.000232	0.00277	1	04/22/2020 21:02	WG1464831
Chlorodibromomethane	U	~~J4~~	0.000677	0.00277	1	04/22/2020 21:02	WG1464831
Chloroethane	U		0.00188	0.00553	1	04/22/2020 21:02	WG1464831
Chloroform	U		0.00114	0.00277	1	04/22/2020 21:02	WG1464831
Chloromethane	U		0.00481	0.0138	1	04/22/2020 21:02	WG1464831
2-Chlorotoluene	U		0.000957	0.00277	1	04/22/2020 21:02	WG1464831
4-Chlorotoluene	U		0.000498	0.00553	1	04/22/2020 21:02	WG1464831
1,2-Dibromo-3-Chloropropane	U		0.00432	0.0277	1	04/22/2020 21:02	WG1464831
1,2-Dibromoethane	U		0.000717	0.00277	1	04/22/2020 21:02	WG1464831
Dibromomethane	U		0.000830	0.00553	1	04/22/2020 21:02	WG1464831
1,2-Dichlorobenzene	U		0.000470	0.00553	1	04/22/2020 21:02	WG1464831
1,3-Dichlorobenzene	U		0.000664	0.00553	1	04/22/2020 21:02	WG1464831
1,4-Dichlorobenzene	U		0.000775	0.00553	1	04/22/2020 21:02	WG1464831
Dichlorodifluoromethane	U		0.00178	0.00277	1	04/22/2020 21:02	WG1464831
1,1-Dichloroethane	U		0.000543	0.00277	1	04/22/2020 21:02	WG1464831
1,2-Dichloroethane	U		0.000718	0.00277	1	04/22/2020 21:02	WG1464831
1,1-Dichloroethene	U		0.000671	0.00277	1	04/22/2020 21:02	WG1464831
cis-1,2-Dichloroethene	U		0.000812	0.00277	1	04/22/2020 21:02	WG1464831
trans-1,2-Dichloroethene	U		0.00115	0.00553	1	04/22/2020 21:02	WG1464831
1,2-Dichloropropane	U		0.00157	0.00553	1	04/22/2020 21:02	WG1464831
1,1-Dichloropropene	U		0.000895	0.00277	1	04/22/2020 21:02	WG1464831
1,3-Dichloropropane	U		0.000554	0.00553	1	04/22/2020 21:02	WG1464831
cis-1,3-Dichloropropene	U		0.000838	0.00277	1	04/22/2020 21:02	WG1464831
trans-1,3-Dichloropropene	U		0.00126	0.00553	1	04/22/2020 21:02	WG1464831
trans-1,4-Dichloro-2-butene	U		0.00206	0.00553	1	04/22/2020 21:02	WG1464831
2,2-Dichloropropane	U	~~J4~~	0.00153	0.00277	1	04/22/2020 21:02	WG1464831
Di-isopropyl ether	U		0.000454	0.00111	1	04/22/2020 21:02	WG1464831
Ethylbenzene	U		0.000816	0.00277	1	04/22/2020 21:02	WG1464831
Hexachloro-1,3-butadiene	U		0.00664	0.0277	1	04/22/2020 21:02	WG1464831
2-Hexanone	U		0.00372	0.0277	1	04/22/2020 21:02	WG1464831
n-Hexane	U		0.00250	0.00553	1	04/22/2020 21:02	WG1464831
Iodomethane	U		0.00257	0.0138	1	04/22/2020 21:02	WG1464831
Isopropylbenzene	U		0.000470	0.00277	1	04/22/2020 21:02	WG1464831
p-Isopropyltoluene	U		0.00282	0.00553	1	04/22/2020 21:02	WG1464831
2-Butanone (MEK)	U		0.0703	0.111	1	04/22/2020 21:02	WG1464831
Methylene Chloride	U		0.00735	0.0277	1	04/22/2020 21:02	WG1464831
4-Methyl-2-pentanone (MIBK)	U		0.00252	0.0277	1	04/22/2020 21:02	WG1464831

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Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.000387	0.00111	1	04/22/2020 21:02	WG1464831
Naphthalene	U		0.00540	0.0138	1	04/22/2020 21:02	WG1464831
n-Propylbenzene	U		0.00105	0.00553	1	04/22/2020 21:02	WG1464831
Styrene	U		0.000253	0.0138	1	04/22/2020 21:02	WG1464831
1,1,1,2-Tetrachloroethane	U		0.00105	0.00277	1	04/22/2020 21:02	WG1464831
1,1,2,2-Tetrachloroethane	U		0.000769	0.00277	1	04/22/2020 21:02	WG1464831
1,1,2-Trichlorotrifluoroethane	U		0.000834	0.00277	1	04/22/2020 21:02	WG1464831
Tetrachloroethene	U		0.000992	0.00277	1	04/22/2020 21:02	WG1464831
Toluene	U		0.00144	0.00553	1	04/22/2020 21:02	WG1464831
1,2,3-Trichlorobenzene	U		0.00811	0.0138	1	04/28/2020 02:25	WG1466991
1,2,4-Trichlorobenzene	U		0.00487	0.0138	1	04/22/2020 21:02	WG1464831
1,1,1-Trichloroethane	U		0.00102	0.00277	1	04/22/2020 21:02	WG1464831
1,1,2-Trichloroethane	U		0.000661	0.00277	1	04/22/2020 21:02	WG1464831
Trichloroethene	U		0.000646	0.00111	1	04/22/2020 21:02	WG1464831
Trichlorofluoromethane	U		0.000915	0.00277	1	04/22/2020 21:02	WG1464831
1,2,3-Trichloropropane	U		0.00179	0.0138	1	04/22/2020 21:02	WG1464831
1,2,4-Trimethylbenzene	U		0.00175	0.00553	1	04/22/2020 21:02	WG1464831
1,2,3-Trimethylbenzene	U		0.00175	0.00553	1	04/22/2020 21:02	WG1464831
1,3,5-Trimethylbenzene	U		0.00221	0.00553	1	04/22/2020 21:02	WG1464831
Vinyl acetate	U		0.00281	0.0138	1	04/22/2020 21:02	WG1464831
Vinyl chloride	U	~~J4~~	0.00128	0.00277	1	04/22/2020 21:02	WG1464831
Xylenes, Total	U		0.000974	0.00719	1	04/22/2020 21:02	WG1464831
(S) Toluene-d8	*104*			*75.0-131*		*04/22/2020 21:02*	WG1464831
(S) Toluene-d8	*104*			*75.0-131*		*04/28/2020 02:25*	WG1466991
(S) 4-Bromofluorobenzene	*98.5*			*67.0-138*		*04/22/2020 21:02*	WG1464831
(S) 4-Bromofluorobenzene	*95.0*			*67.0-138*		*04/28/2020 02:25*	WG1466991
(S) 1,2-Dichloroethane-d4	*100*			*70.0-130*		*04/22/2020 21:02*	WG1464831
(S) 1,2-Dichloroethane-d4	*99.9*			*70.0-130*		*04/28/2020 02:25*	WG1466991

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1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	80.8		1	04/27/2020 12:02	WG1465756

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	U		0.0452	0.0619	1	04/22/2020 21:23	WG1464831
Acrylonitrile	U		0.00447	0.0155	1	04/22/2020 21:23	WG1464831
Benzene	U		0.000578	0.00124	1	04/22/2020 21:23	WG1464831
Bromobenzene	U		0.00111	0.0155	1	04/22/2020 21:23	WG1464831
Bromodichloromethane	U		0.000897	0.00309	1	04/22/2020 21:23	WG1464831
Bromochloromethane	U		0.000698	0.00619	1	04/22/2020 21:23	WG1464831
Bromoform	U		0.00145	0.0309	1	04/22/2020 21:23	WG1464831
Bromomethane	U		0.00244	0.0155	1	04/22/2020 21:23	WG1464831
n-Butylbenzene	U		0.00650	0.0155	1	04/22/2020 21:23	WG1464831
sec-Butylbenzene	U		0.00356	0.0155	1	04/22/2020 21:23	WG1464831
tert-Butylbenzene	U		0.00241	0.00619	1	04/22/2020 21:23	WG1464831
Carbon disulfide	0.00131	J	0.000866	0.0155	1	04/22/2020 21:23	WG1464831
Carbon tetrachloride	U		0.00111	0.00619	1	04/22/2020 21:23	WG1464831
Chlorobenzene	U		0.000260	0.00309	1	04/22/2020 21:23	WG1464831
Chlorodibromomethane	U	~~J4~~	0.000757	0.00309	1	04/22/2020 21:23	WG1464831
Chloroethane	U		0.00210	0.00619	1	04/22/2020 21:23	WG1464831
Chloroform	U		0.00127	0.00309	1	04/22/2020 21:23	WG1464831
Chloromethane	U		0.00538	0.0155	1	04/22/2020 21:23	WG1464831
2-Chlorotoluene	U		0.00107	0.00309	1	04/22/2020 21:23	WG1464831
4-Chlorotoluene	U		0.000557	0.00619	1	04/22/2020 21:23	WG1464831
1,2-Dibromo-3-Chloropropane	U		0.00483	0.0309	1	04/22/2020 21:23	WG1464831
1,2-Dibromoethane	U		0.000802	0.00309	1	04/22/2020 21:23	WG1464831
Dibromomethane	U		0.000928	0.00619	1	04/22/2020 21:23	WG1464831
1,2-Dichlorobenzene	U		0.000526	0.00619	1	04/22/2020 21:23	WG1464831
1,3-Dichlorobenzene	U		0.000742	0.00619	1	04/22/2020 21:23	WG1464831
1,4-Dichlorobenzene	U		0.000866	0.00619	1	04/22/2020 21:23	WG1464831
Dichlorodifluoromethane	U		0.00199	0.00309	1	04/22/2020 21:23	WG1464831
1,1-Dichloroethane	U		0.000608	0.00309	1	04/22/2020 21:23	WG1464831
1,2-Dichloroethane	U		0.000803	0.00309	1	04/22/2020 21:23	WG1464831
1,1-Dichloroethene	U		0.000750	0.00309	1	04/22/2020 21:23	WG1464831
cis-1,2-Dichloroethene	U		0.000908	0.00309	1	04/22/2020 21:23	WG1464831
trans-1,2-Dichloroethene	U		0.00129	0.00619	1	04/22/2020 21:23	WG1464831
1,2-Dichloropropane	U		0.00176	0.00619	1	04/22/2020 21:23	WG1464831
1,1-Dichloropropene	U		0.00100	0.00309	1	04/22/2020 21:23	WG1464831
1,3-Dichloropropane	U		0.000620	0.00619	1	04/22/2020 21:23	WG1464831
cis-1,3-Dichloropropene	U		0.000937	0.00309	1	04/22/2020 21:23	WG1464831
trans-1,3-Dichloropropene	U		0.00141	0.00619	1	04/22/2020 21:23	WG1464831
trans-1,4-Dichloro-2-butene	U		0.00230	0.00619	1	04/22/2020 21:23	WG1464831
2,2-Dichloropropane	U	~~J4~~	0.00171	0.00309	1	04/22/2020 21:23	WG1464831
Di-isopropyl ether	U		0.000507	0.00124	1	04/22/2020 21:23	WG1464831
Ethylbenzene	U		0.000912	0.00309	1	04/22/2020 21:23	WG1464831
Hexachloro-1,3-butadiene	U		0.00742	0.0309	1	04/22/2020 21:23	WG1464831
2-Hexanone	U		0.00416	0.0309	1	04/22/2020 21:23	WG1464831
n-Hexane	U		0.00280	0.00619	1	04/22/2020 21:23	WG1464831
Iodomethane	U		0.00287	0.0155	1	04/22/2020 21:23	WG1464831
Isopropylbenzene	U		0.000526	0.00309	1	04/22/2020 21:23	WG1464831
p-Isopropyltoluene	U		0.00316	0.00619	1	04/22/2020 21:23	WG1464831
2-Butanone (MEK)	U		0.0786	0.124	1	04/22/2020 21:23	WG1464831
Methylene Chloride	U		0.00822	0.0309	1	04/22/2020 21:23	WG1464831
4-Methyl-2-pentanone (MIBK)	U		0.00282	0.0309	1	04/22/2020 21:23	WG1464831

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Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Methyl tert-butyl ether	U		0.000433	0.00124	1	04/22/2020 21:23	WG1464831
Naphthalene	U		0.00604	0.0155	1	04/22/2020 21:23	WG1464831
n-Propylbenzene	U		0.00118	0.00619	1	04/22/2020 21:23	WG1464831
Styrene	U		0.000283	0.0155	1	04/22/2020 21:23	WG1464831
1,1,1,2-Tetrachloroethane	U		0.00117	0.00309	1	04/22/2020 21:23	WG1464831
1,1,2,2-Tetrachloroethane	U		0.000860	0.00309	1	04/22/2020 21:23	WG1464831
1,1,2-Trichlorotrifluoroethane	U		0.000933	0.00309	1	04/22/2020 21:23	WG1464831
Tetrachloroethene	U		0.00111	0.00309	1	04/22/2020 21:23	WG1464831
Toluene	U		0.00161	0.00619	1	04/22/2020 21:23	WG1464831
1,2,3-Trichlorobenzene	U		0.00907	0.0155	1	04/28/2020 02:45	WG1466991
1,2,4-Trichlorobenzene	U		0.00544	0.0155	1	04/22/2020 21:23	WG1464831
1,1,1-Trichloroethane	U		0.00114	0.00309	1	04/22/2020 21:23	WG1464831
1,1,2-Trichloroethane	U		0.000739	0.00309	1	04/22/2020 21:23	WG1464831
Trichloroethene	U		0.000723	0.00124	1	04/22/2020 21:23	WG1464831
Trichlorofluoromethane	U		0.00102	0.00309	1	04/22/2020 21:23	WG1464831
1,2,3-Trichloropropane	U		0.00200	0.0155	1	04/22/2020 21:23	WG1464831
1,2,4-Trimethylbenzene	U		0.00195	0.00619	1	04/22/2020 21:23	WG1464831
1,2,3-Trimethylbenzene	U		0.00195	0.00619	1	04/22/2020 21:23	WG1464831
1,3,5-Trimethylbenzene	U		0.00247	0.00619	1	04/22/2020 21:23	WG1464831
Vinyl acetate	U		0.00314	0.0155	1	04/22/2020 21:23	WG1464831
Vinyl chloride	U	~~J4~~	0.00144	0.00309	1	04/22/2020 21:23	WG1464831
Xylenes, Total	U		0.00109	0.00804	1	04/22/2020 21:23	WG1464831
(S) Toluene-d8	*105*			*75.0-131*		*04/22/2020 21:23*	WG1464831
(S) Toluene-d8	*109*			*75.0-131*		*04/28/2020 02:45*	WG1466991
(S) 4-Bromofluorobenzene	*102*			*67.0-138*		*04/22/2020 21:23*	WG1464831
(S) 4-Bromofluorobenzene	*99.7*			*67.0-138*		*04/28/2020 02:45*	WG1466991
(S) 1,2-Dichloroethane-d4	*105*			*70.0-130*		*04/22/2020 21:23*	WG1464831
(S) 1,2-Dichloroethane-d4	*99.4*			*70.0-130*		*04/28/2020 02:45*	WG1466991

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

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MW-334-60

Collected date/time: 04/16/20 11:22

SAMPLE RESULTS - 13

L1210278

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	87.8		1	04/27/2020 12:02	WG1465756

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	U		0.0416	0.0569	1	04/22/2020 21:42	WG1464831
Acrylonitrile	U		0.00411	0.0142	1	04/22/2020 21:42	WG1464831
Benzene	U		0.000532	0.00114	1	04/22/2020 21:42	WG1464831
Bromobenzene	U		0.00102	0.0142	1	04/22/2020 21:42	WG1464831
Bromodichloromethane	U		0.000826	0.00285	1	04/22/2020 21:42	WG1464831
Bromochloromethane	U		0.000642	0.00569	1	04/22/2020 21:42	WG1464831
Bromoform	U		0.00133	0.0285	1	04/22/2020 21:42	WG1464831
Bromomethane	U		0.00224	0.0142	1	04/22/2020 21:42	WG1464831
n-Butylbenzene	U		0.00598	0.0142	1	04/22/2020 21:42	WG1464831
sec-Butylbenzene	U		0.00328	0.0142	1	04/22/2020 21:42	WG1464831
tert-Butylbenzene	U		0.00222	0.00569	1	04/22/2020 21:42	WG1464831
Carbon disulfide	U		0.000797	0.0142	1	04/22/2020 21:42	WG1464831
Carbon tetrachloride	U		0.00102	0.00569	1	04/22/2020 21:42	WG1464831
Chlorobenzene	U		0.000239	0.00285	1	04/22/2020 21:42	WG1464831
Chlorodibromomethane	U	~~J4~~	0.000697	0.00285	1	04/22/2020 21:42	WG1464831
Chloroethane	U		0.00194	0.00569	1	04/22/2020 21:42	WG1464831
Chloroform	U		0.00117	0.00285	1	04/22/2020 21:42	WG1464831
Chloromethane	U		0.00495	0.0142	1	04/22/2020 21:42	WG1464831
2-Chlorotoluene	U		0.000985	0.00285	1	04/22/2020 21:42	WG1464831
4-Chlorotoluene	U		0.000512	0.00569	1	04/22/2020 21:42	WG1464831
1,2-Dibromo-3-Chloropropane	U		0.00444	0.0285	1	04/22/2020 21:42	WG1464831
1,2-Dibromoethane	U		0.000738	0.00285	1	04/22/2020 21:42	WG1464831
Dibromomethane	U		0.000854	0.00569	1	04/22/2020 21:42	WG1464831
1,2-Dichlorobenzene	U		0.000484	0.00569	1	04/22/2020 21:42	WG1464831
1,3-Dichlorobenzene	U		0.000683	0.00569	1	04/22/2020 21:42	WG1464831
1,4-Dichlorobenzene	U		0.000797	0.00569	1	04/22/2020 21:42	WG1464831
Dichlorodifluoromethane	U		0.00183	0.00285	1	04/22/2020 21:42	WG1464831
1,1-Dichloroethane	U		0.000559	0.00285	1	04/22/2020 21:42	WG1464831
1,2-Dichloroethane	U		0.000739	0.00285	1	04/22/2020 21:42	WG1464831
1,1-Dichloroethene	U		0.000690	0.00285	1	04/22/2020 21:42	WG1464831
cis-1,2-Dichloroethene	U		0.000836	0.00285	1	04/22/2020 21:42	WG1464831
trans-1,2-Dichloroethene	U		0.00118	0.00569	1	04/22/2020 21:42	WG1464831
1,2-Dichloropropane	U		0.00162	0.00569	1	04/22/2020 21:42	WG1464831
1,1-Dichloropropene	U		0.000921	0.00285	1	04/22/2020 21:42	WG1464831
1,3-Dichloropropane	U		0.000570	0.00569	1	04/22/2020 21:42	WG1464831
cis-1,3-Dichloropropene	U		0.000862	0.00285	1	04/22/2020 21:42	WG1464831
trans-1,3-Dichloropropene	U		0.00130	0.00569	1	04/22/2020 21:42	WG1464831
trans-1,4-Dichloro-2-butene	U		0.00212	0.00569	1	04/22/2020 21:42	WG1464831
2,2-Dichloropropane	U	~~J4~~	0.00157	0.00285	1	04/22/2020 21:42	WG1464831
Di-isopropyl ether	U		0.000467	0.00114	1	04/22/2020 21:42	WG1464831
Ethylbenzene	U		0.000839	0.00285	1	04/22/2020 21:42	WG1464831
Hexachloro-1,3-butadiene	U		0.00683	0.0285	1	04/22/2020 21:42	WG1464831
2-Hexanone	U		0.00383	0.0285	1	04/22/2020 21:42	WG1464831
n-Hexane	U		0.00257	0.00569	1	04/22/2020 21:42	WG1464831
Iodomethane	U		0.00264	0.0142	1	04/22/2020 21:42	WG1464831
Isopropylbenzene	U		0.000484	0.00285	1	04/22/2020 21:42	WG1464831
p-Isopropyltoluene	U		0.00290	0.00569	1	04/22/2020 21:42	WG1464831
2-Butanone (MEK)	U		0.0723	0.114	1	04/22/2020 21:42	WG1464831
Methylene Chloride	U		0.00756	0.0285	1	04/22/2020 21:42	WG1464831
4-Methyl-2-pentanone (MIBK)	U		0.00260	0.0285	1	04/22/2020 21:42	WG1464831

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Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.000399	0.00114	1	04/22/2020 21:42	WG1464831
Naphthalene	U		0.00556	0.0142	1	04/22/2020 21:42	WG1464831
n-Propylbenzene	U		0.00108	0.00569	1	04/22/2020 21:42	WG1464831
Styrene	U		0.000261	0.0142	1	04/22/2020 21:42	WG1464831
1,1,1,2-Tetrachloroethane	U		0.00108	0.00285	1	04/22/2020 21:42	WG1464831
1,1,2,2-Tetrachloroethane	U		0.000791	0.00285	1	04/22/2020 21:42	WG1464831
1,1,2-Trichlorotrifluoroethane	U		0.000859	0.00285	1	04/22/2020 21:42	WG1464831
Tetrachloroethene	U		0.00102	0.00285	1	04/22/2020 21:42	WG1464831
Toluene	U		0.00148	0.00569	1	04/22/2020 21:42	WG1464831
1,2,3-Trichlorobenzene	U		0.00835	0.0142	1	04/28/2020 03:04	WG1466991
1,2,4-Trichlorobenzene	U		0.00501	0.0142	1	04/22/2020 21:42	WG1464831
1,1,1-Trichloroethane	U		0.00105	0.00285	1	04/22/2020 21:42	WG1464831
1,1,2-Trichloroethane	U		0.000680	0.00285	1	04/22/2020 21:42	WG1464831
Trichloroethene	U		0.000665	0.00114	1	04/22/2020 21:42	WG1464831
Trichlorofluoromethane	U		0.000942	0.00285	1	04/22/2020 21:42	WG1464831
1,2,3-Trichloropropane	U		0.00184	0.0142	1	04/22/2020 21:42	WG1464831
1,2,4-Trimethylbenzene	U		0.00180	0.00569	1	04/22/2020 21:42	WG1464831
1,2,3-Trimethylbenzene	U		0.00180	0.00569	1	04/22/2020 21:42	WG1464831
1,3,5-Trimethylbenzene	U		0.00228	0.00569	1	04/22/2020 21:42	WG1464831
Vinyl acetate	U		0.00289	0.0142	1	04/22/2020 21:42	WG1464831
Vinyl chloride	U	~~J4~~	0.00132	0.00285	1	04/22/2020 21:42	WG1464831
Xylenes, Total	U		0.00100	0.00740	1	04/22/2020 21:42	WG1464831
(S) Toluene-d8	*107*			*75.0-131*		*04/22/2020 21:42*	WG1464831
(S) Toluene-d8	*105*			*75.0-131*		*04/28/2020 03:04*	WG1466991
(S) 4-Bromofluorobenzene	*97.6*			*67.0-138*		*04/22/2020 21:42*	WG1464831
(S) 4-Bromofluorobenzene	*97.1*			*67.0-138*		*04/28/2020 03:04*	WG1466991
(S) 1,2-Dichloroethane-d4	*108*			*70.0-130*		*04/22/2020 21:42*	WG1464831
(S) 1,2-Dichloroethane-d4	*99.6*			*70.0-130*		*04/28/2020 03:04*	WG1466991

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Total Solids by Method 2540 G-2011

	Result	Qualifier	Dilution	Analysis	Batch
Analyte	%			date / time	
Total Solids	83.6		1	04/27/2020 11:49	WG1465757

Volatile Organic Compounds (GC/MS) by Method 8260D

	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg		date / time	
Acetone	U		0.0437	0.0598	1	04/22/2020 22:02	WG1464831
Acrylonitrile	U		0.00432	0.0149	1	04/22/2020 22:02	WG1464831
Benzene	0.000794	J	0.000559	0.00120	1	04/22/2020 22:02	WG1464831
Bromobenzene	U		0.00108	0.0149	1	04/22/2020 22:02	WG1464831
Bromodichloromethane	U		0.000867	0.00299	1	04/22/2020 22:02	WG1464831
Bromochloromethane	U		0.000675	0.00598	1	04/22/2020 22:02	WG1464831
Bromoform	U		0.00140	0.0299	1	04/22/2020 22:02	WG1464831
Bromomethane	U		0.00236	0.0149	1	04/22/2020 22:02	WG1464831
n-Butylbenzene	U		0.00628	0.0149	1	04/22/2020 22:02	WG1464831
sec-Butylbenzene	U		0.00344	0.0149	1	04/22/2020 22:02	WG1464831
tert-Butylbenzene	U		0.00233	0.00598	1	04/22/2020 22:02	WG1464831
Carbon disulfide	U		0.000837	0.0149	1	04/22/2020 22:02	WG1464831
Carbon tetrachloride	U		0.00107	0.00598	1	04/22/2020 22:02	WG1464831
Chlorobenzene	U		0.000251	0.00299	1	04/22/2020 22:02	WG1464831
Chlorodibromomethane	U	~~J4~~	0.000732	0.00299	1	04/22/2020 22:02	WG1464831
Chloroethane	U		0.00203	0.00598	1	04/22/2020 22:02	WG1464831
Chloroform	0.00157	U ~~B J~~	0.00123	0.00299	1	04/22/2020 22:02	WG1464831
Chloromethane	U		0.00520	0.0149	1	04/22/2020 22:02	WG1464831
2-Chlorotoluene	U		0.00103	0.00299	1	04/22/2020 22:02	WG1464831
4-Chlorotoluene	U		0.000538	0.00598	1	04/22/2020 22:02	WG1464831
1,2-Dibromo-3-Chloropropane	U		0.00466	0.0299	1	04/22/2020 22:02	WG1464831
1,2-Dibromoethane	U		0.000775	0.00299	1	04/22/2020 22:02	WG1464831
Dibromomethane	U		0.000897	0.00598	1	04/22/2020 22:02	WG1464831
1,2-Dichlorobenzene	U		0.000508	0.00598	1	04/22/2020 22:02	WG1464831
1,3-Dichlorobenzene	U		0.000718	0.00598	1	04/22/2020 22:02	WG1464831
1,4-Dichlorobenzene	U		0.000837	0.00598	1	04/22/2020 22:02	WG1464831
Dichlorodifluoromethane	U		0.00193	0.00299	1	04/22/2020 22:02	WG1464831
1,1-Dichloroethane	U		0.000587	0.00299	1	04/22/2020 22:02	WG1464831
1,2-Dichloroethane	U		0.000776	0.00299	1	04/22/2020 22:02	WG1464831
1,1-Dichloroethene	U		0.000725	0.00299	1	04/22/2020 22:02	WG1464831
cis-1,2-Dichloroethene	U		0.000878	0.00299	1	04/22/2020 22:02	WG1464831
trans-1,2-Dichloroethene	U		0.00124	0.00598	1	04/22/2020 22:02	WG1464831
1,2-Dichloropropane	U		0.00170	0.00598	1	04/22/2020 22:02	WG1464831
1,1-Dichloropropene	U		0.000968	0.00299	1	04/22/2020 22:02	WG1464831
1,3-Dichloropropane	U		0.000599	0.00598	1	04/22/2020 22:02	WG1464831
cis-1,3-Dichloropropene	U		0.000905	0.00299	1	04/22/2020 22:02	WG1464831
trans-1,3-Dichloropropene	U		0.00136	0.00598	1	04/22/2020 22:02	WG1464831
trans-1,4-Dichloro-2-butene	0.00240	J	0.00222	0.00598	1	04/22/2020 22:02	WG1464831
2,2-Dichloropropane	U	~~J4~~	0.00165	0.00299	1	04/22/2020 22:02	WG1464831
Di-isopropyl ether	U		0.000490	0.00120	1	04/22/2020 22:02	WG1464831
Ethylbenzene	U		0.000881	0.00299	1	04/22/2020 22:02	WG1464831
Hexachloro-1,3-butadiene	U		0.00718	0.0299	1	04/22/2020 22:02	WG1464831
2-Hexanone	U		0.00402	0.0299	1	04/22/2020 22:02	WG1464831
n-Hexane	U		0.00270	0.00598	1	04/22/2020 22:02	WG1464831
Iodomethane	U		0.00277	0.0149	1	04/22/2020 22:02	WG1464831
Isopropylbenzene	U		0.000508	0.00299	1	04/22/2020 22:02	WG1464831
p-Isopropyltoluene	U		0.00305	0.00598	1	04/22/2020 22:02	WG1464831
2-Butanone (MEK)	U		0.0759	0.120	1	04/22/2020 22:02	WG1464831
Methylene Chloride	U		0.00794	0.0299	1	04/22/2020 22:02	WG1464831
4-Methyl-2-pentanone (MIBK)	U		0.00273	0.0299	1	04/22/2020 22:02	WG1464831

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Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.000419	0.00120	1	04/22/2020 22:02	WG1464831
Naphthalene	U		0.00584	0.0149	1	04/22/2020 22:02	WG1464831
n-Propylbenzene	U		0.00114	0.00598	1	04/22/2020 22:02	WG1464831
Styrene	U		0.000274	0.0149	1	04/22/2020 22:02	WG1464831
1,1,1,2-Tetrachloroethane	U		0.00113	0.00299	1	04/22/2020 22:02	WG1464831
1,1,2,2-Tetrachloroethane	U		0.000831	0.00299	1	04/22/2020 22:02	WG1464831
1,1,2-Trichlorotrifluoroethane	U		0.000902	0.00299	1	04/22/2020 22:02	WG1464831
Tetrachloroethene	U		0.00107	0.00299	1	04/22/2020 22:02	WG1464831
Toluene	U		0.00155	0.00598	1	04/22/2020 22:02	WG1464831
1,2,3-Trichlorobenzene	U		0.00877	0.0149	1	04/28/2020 03:23	WG1466991
1,2,4-Trichlorobenzene	U		0.00526	0.0149	1	04/22/2020 22:02	WG1464831
1,1,1-Trichloroethane	U		0.00110	0.00299	1	04/22/2020 22:02	WG1464831
1,1,2-Trichloroethane	U		0.000714	0.00299	1	04/22/2020 22:02	WG1464831
Trichloroethene	U		0.000698	0.00120	1	04/22/2020 22:02	WG1464831
Trichlorofluoromethane	U		0.000989	0.00299	1	04/22/2020 22:02	WG1464831
1,2,3-Trichloropropane	U		0.00194	0.0149	1	04/22/2020 22:02	WG1464831
1,2,4-Trimethylbenzene	U		0.00189	0.00598	1	04/22/2020 22:02	WG1464831
1,2,3-Trimethylbenzene	U		0.00189	0.00598	1	04/22/2020 22:02	WG1464831
1,3,5-Trimethylbenzene	U		0.00239	0.00598	1	04/22/2020 22:02	WG1464831
Vinyl acetate	U		0.00304	0.0149	1	04/22/2020 22:02	WG1464831
Vinyl chloride	U	~~J4~~	0.00139	0.00299	1	04/22/2020 22:02	WG1464831
Xylenes, Total	0.00127	J	0.00105	0.00777	1	04/22/2020 22:02	WG1464831
(S) Toluene-d8	*108*			*75.0-131*		*04/22/2020 22:02*	WG1464831
(S) Toluene-d8	*106*			*75.0-131*		*04/28/2020 03:23*	WG1466991
(S) 4-Bromofluorobenzene	*95.5*			*67.0-138*		*04/22/2020 22:02*	WG1464831
(S) 4-Bromofluorobenzene	*97.9*			*67.0-138*		*04/28/2020 03:23*	WG1466991
(S) 1,2-Dichloroethane-d4	*105*			*70.0-130*		*04/22/2020 22:02*	WG1464831
(S) 1,2-Dichloroethane-d4	*100*			*70.0-130*		*04/28/2020 03:23*	WG1466991

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

JC 5/28/2020

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	89.2		1	04/27/2020 11:49	WG1465757

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	U		0.0409	0.0561	1	04/22/2020 22:22	WG1464831
Acrylonitrile	U		0.00405	0.0140	1	04/22/2020 22:22	WG1464831
Benzene	0.00384		0.000524	0.00112	1	04/22/2020 22:22	WG1464831
Bromobenzene	U		0.00101	0.0140	1	04/22/2020 22:22	WG1464831
Bromodichloromethane	U		0.000813	0.00280	1	04/22/2020 22:22	WG1464831
Bromochloromethane	U		0.000632	0.00561	1	04/22/2020 22:22	WG1464831
Bromoform	U		0.00131	0.0280	1	04/22/2020 22:22	WG1464831
Bromomethane	U		0.00221	0.0140	1	04/22/2020 22:22	WG1464831
n-Butylbenzene	U		0.00589	0.0140	1	04/22/2020 22:22	WG1464831
sec-Butylbenzene	U		0.00323	0.0140	1	04/22/2020 22:22	WG1464831
tert-Butylbenzene	U		0.00219	0.00561	1	04/22/2020 22:22	WG1464831
Carbon disulfide	0.00133	J	0.000785	0.0140	1	04/22/2020 22:22	WG1464831
Carbon tetrachloride	U		0.00101	0.00561	1	04/22/2020 22:22	WG1464831
Chlorobenzene	U		0.000235	0.00280	1	04/22/2020 22:22	WG1464831
Chlorodibromomethane	U	~~J4~~	0.000686	0.00280	1	04/22/2020 22:22	WG1464831
Chloroethane	U		0.00191	0.00561	1	04/22/2020 22:22	WG1464831
Chloroform	U		0.00116	0.00280	1	04/22/2020 22:22	WG1464831
Chloromethane	U		0.00488	0.0140	1	04/22/2020 22:22	WG1464831
2-Chlorotoluene	U		0.000970	0.00280	1	04/22/2020 22:22	WG1464831
4-Chlorotoluene	U		0.000505	0.00561	1	04/22/2020 22:22	WG1464831
1,2-Dibromo-3-Chloropropane	U		0.00437	0.0280	1	04/22/2020 22:22	WG1464831
1,2-Dibromoethane	U		0.000727	0.00280	1	04/22/2020 22:22	WG1464831
Dibromomethane	U		0.000841	0.00561	1	04/22/2020 22:22	WG1464831
1,2-Dichlorobenzene	U		0.000477	0.00561	1	04/22/2020 22:22	WG1464831
1,3-Dichlorobenzene	U		0.000673	0.00561	1	04/22/2020 22:22	WG1464831
1,4-Dichlorobenzene	U		0.000785	0.00561	1	04/22/2020 22:22	WG1464831
Dichlorodifluoromethane	U		0.00181	0.00280	1	04/22/2020 22:22	WG1464831
1,1-Dichloroethane	U		0.000551	0.00280	1	04/22/2020 22:22	WG1464831
1,2-Dichloroethane	U		0.000728	0.00280	1	04/22/2020 22:22	WG1464831
1,1-Dichloroethene	U		0.000680	0.00280	1	04/22/2020 22:22	WG1464831
cis-1,2-Dichloroethene	U		0.000823	0.00280	1	04/22/2020 22:22	WG1464831
trans-1,2-Dichloroethene	U		0.00117	0.00561	1	04/22/2020 22:22	WG1464831
1,2-Dichloropropane	U		0.00159	0.00561	1	04/22/2020 22:22	WG1464831
1,1-Dichloropropene	U		0.000907	0.00280	1	04/22/2020 22:22	WG1464831
1,3-Dichloropropane	U		0.000562	0.00561	1	04/22/2020 22:22	WG1464831
cis-1,3-Dichloropropene	U		0.000849	0.00280	1	04/22/2020 22:22	WG1464831
trans-1,3-Dichloropropene	U		0.00128	0.00561	1	04/22/2020 22:22	WG1464831
trans-1,4-Dichloro-2-butene	U		0.00209	0.00561	1	04/22/2020 22:22	WG1464831
2,2-Dichloropropane	U	~~J4~~	0.00155	0.00280	1	04/22/2020 22:22	WG1464831
Di-isopropyl ether	U		0.000460	0.00112	1	04/22/2020 22:22	WG1464831
Ethylbenzene	0.00157	J	0.000826	0.00280	1	04/22/2020 22:22	WG1464831
Hexachloro-1,3-butadiene	U		0.00673	0.0280	1	04/22/2020 22:22	WG1464831
2-Hexanone	U		0.00377	0.0280	1	04/22/2020 22:22	WG1464831
n-Hexane	U		0.00253	0.00561	1	04/22/2020 22:22	WG1464831
Iodomethane	U		0.00260	0.0140	1	04/22/2020 22:22	WG1464831
Isopropylbenzene	U		0.000477	0.00280	1	04/22/2020 22:22	WG1464831
p-Isopropyltoluene	U		0.00286	0.00561	1	04/22/2020 22:22	WG1464831
2-Butanone (MEK)	U		0.0712	0.112	1	04/22/2020 22:22	WG1464831
Methylene Chloride	U		0.00745	0.0280	1	04/22/2020 22:22	WG1464831
4-Methyl-2-pentanone (MIBK)	U		0.00256	0.0280	1	04/22/2020 22:22	WG1464831

JC 5/28/2020

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.000392	0.00112	1	04/22/2020 22:22	WG1464831
Naphthalene	U		0.00547	0.0140	1	04/22/2020 22:22	WG1464831
n-Propylbenzene	U		0.00107	0.00561	1	04/22/2020 22:22	WG1464831
Styrene	0.00155	J	0.000257	0.0140	1	04/22/2020 22:22	WG1464831
1,1,1,2-Tetrachloroethane	U		0.00106	0.00280	1	04/22/2020 22:22	WG1464831
1,1,2,2-Tetrachloroethane	U		0.000779	0.00280	1	04/22/2020 22:22	WG1464831
1,1,2-Trichlorotrifluoroethane	U		0.000846	0.00280	1	04/22/2020 22:22	WG1464831
Tetrachloroethene	0.00835		0.00100	0.00280	1	04/22/2020 22:22	WG1464831
Toluene	0.00963		0.00146	0.00561	1	04/22/2020 22:22	WG1464831
1,2,3-Trichlorobenzene	U		0.00822	0.0140	1	04/28/2020 03:43	WG1466991
1,2,4-Trichlorobenzene	U		0.00493	0.0140	1	04/22/2020 22:22	WG1464831
1,1,1-Trichloroethane	U		0.00104	0.00280	1	04/22/2020 22:22	WG1464831
1,1,2-Trichloroethane	U		0.000669	0.00280	1	04/22/2020 22:22	WG1464831
Trichloroethene	U		0.000655	0.00112	1	04/22/2020 22:22	WG1464831
Trichlorofluoromethane	U		0.000927	0.00280	1	04/22/2020 22:22	WG1464831
1,2,3-Trichloropropane	U		0.00182	0.0140	1	04/22/2020 22:22	WG1464831
1,2,4-Trimethylbenzene	0.00740		0.00177	0.00561	1	04/22/2020 22:22	WG1464831
1,2,3-Trimethylbenzene	0.00188	J	0.00177	0.00561	1	04/22/2020 22:22	WG1464831
1,3,5-Trimethylbenzene	0.00565		0.00224	0.00561	1	04/22/2020 22:22	WG1464831
Vinyl acetate	U		0.00285	0.0140	1	04/22/2020 22:22	WG1464831
Vinyl chloride	U	~~J4~~	0.00130	0.00280	1	04/22/2020 22:22	WG1464831
Xylenes, Total	0.0289		0.000987	0.00729	1	04/22/2020 22:22	WG1464831
(S) Toluene-d8	*107*			*75.0-131*		*04/22/2020 22:22*	WG1464831
(S) Toluene-d8	*106*			*75.0-131*		*04/28/2020 03:43*	WG1466991
(S) 4-Bromofluorobenzene	*99.5*			*67.0-138*		*04/22/2020 22:22*	WG1464831
(S) 4-Bromofluorobenzene	*100*			*67.0-138*		*04/28/2020 03:43*	WG1466991
(S) 1,2-Dichloroethane-d4	*98.1*			*70.0-130*		*04/22/2020 22:22*	WG1464831
(S) 1,2-Dichloroethane-d4	*102*			*70.0-130*		*04/28/2020 03:43*	WG1466991

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Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	84.9		1	04/27/2020 11:49	WG1465757

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	U		0.0430	0.0589	1	04/22/2020 22:42	WG1464831
Acrylonitrile	U		0.00425	0.0147	1	04/22/2020 22:42	WG1464831
Benzene	0.00539		0.000550	0.00118	1	04/22/2020 22:42	WG1464831
Bromobenzene	U		0.00106	0.0147	1	04/22/2020 22:42	WG1464831
Bromodichloromethane	U		0.000854	0.00294	1	04/22/2020 22:42	WG1464831
Bromochloromethane	U		0.000664	0.00589	1	04/22/2020 22:42	WG1464831
Bromoform	U		0.00138	0.0294	1	04/22/2020 22:42	WG1464831
Bromomethane	U		0.00232	0.0147	1	04/22/2020 22:42	WG1464831
n-Butylbenzene	U		0.00618	0.0147	1	04/22/2020 22:42	WG1464831
sec-Butylbenzene	U		0.00339	0.0147	1	04/22/2020 22:42	WG1464831
tert-Butylbenzene	U		0.00230	0.00589	1	04/22/2020 22:42	WG1464831
Carbon disulfide	U		0.000824	0.0147	1	04/22/2020 22:42	WG1464831
Carbon tetrachloride	U		0.00106	0.00589	1	04/22/2020 22:42	WG1464831
Chlorobenzene	U		0.000247	0.00294	1	04/22/2020 22:42	WG1464831
Chlorodibromomethane	U	~~J4~~	0.000721	0.00294	1	04/22/2020 22:42	WG1464831
Chloroethane	U		0.00200	0.00589	1	04/22/2020 22:42	WG1464831
Chloroform	U		0.00121	0.00294	1	04/22/2020 22:42	WG1464831
Chloromethane	U		0.00512	0.0147	1	04/22/2020 22:42	WG1464831
2-Chlorotoluene	U		0.00102	0.00294	1	04/22/2020 22:42	WG1464831
4-Chlorotoluene	U		0.000530	0.00589	1	04/22/2020 22:42	WG1464831
1,2-Dibromo-3-Chloropropane	U		0.00459	0.0294	1	04/22/2020 22:42	WG1464831
1,2-Dibromoethane	U		0.000763	0.00294	1	04/22/2020 22:42	WG1464831
Dibromomethane	U		0.000883	0.00589	1	04/22/2020 22:42	WG1464831
1,2-Dichlorobenzene	U		0.000501	0.00589	1	04/22/2020 22:42	WG1464831
1,3-Dichlorobenzene	U		0.000707	0.00589	1	04/22/2020 22:42	WG1464831
1,4-Dichlorobenzene	U		0.000824	0.00589	1	04/22/2020 22:42	WG1464831
Dichlorodifluoromethane	U		0.00190	0.00294	1	04/22/2020 22:42	WG1464831
1,1-Dichloroethane	U		0.000578	0.00294	1	04/22/2020 22:42	WG1464831
1,2-Dichloroethane	U		0.000764	0.00294	1	04/22/2020 22:42	WG1464831
1,1-Dichloroethene	U		0.000714	0.00294	1	04/22/2020 22:42	WG1464831
cis-1,2-Dichloroethene	U		0.000864	0.00294	1	04/22/2020 22:42	WG1464831
trans-1,2-Dichloroethene	U		0.00122	0.00589	1	04/22/2020 22:42	WG1464831
1,2-Dichloropropane	U		0.00167	0.00589	1	04/22/2020 22:42	WG1464831
1,1-Dichloropropene	U		0.000953	0.00294	1	04/22/2020 22:42	WG1464831
1,3-Dichloropropane	U		0.000590	0.00589	1	04/22/2020 22:42	WG1464831
cis-1,3-Dichloropropene	U		0.000892	0.00294	1	04/22/2020 22:42	WG1464831
trans-1,3-Dichloropropene	U		0.00134	0.00589	1	04/22/2020 22:42	WG1464831
trans-1,4-Dichloro-2-butene	U		0.00219	0.00589	1	04/22/2020 22:42	WG1464831
2,2-Dichloropropane	U	~~J4~~	0.00163	0.00294	1	04/22/2020 22:42	WG1464831
Di-isopropyl ether	U		0.000483	0.00118	1	04/22/2020 22:42	WG1464831
Ethylbenzene	0.00137	J	0.000868	0.00294	1	04/22/2020 22:42	WG1464831
Hexachloro-1,3-butadiene	U		0.00707	0.0294	1	04/22/2020 22:42	WG1464831
2-Hexanone	U		0.00396	0.0294	1	04/22/2020 22:42	WG1464831
n-Hexane	0.0204 J	J0	0.00266	0.00589	1	04/22/2020 22:42	WG1464831
Iodomethane	U		0.00273	0.0147	1	04/22/2020 22:42	WG1464831
Isopropylbenzene	U		0.000501	0.00294	1	04/22/2020 22:42	WG1464831
p-Isopropyltoluene	U		0.00300	0.00589	1	04/22/2020 22:42	WG1464831
2-Butanone (MEK)	U		0.0748	0.118	1	04/22/2020 22:42	WG1464831
Methylene Chloride	U		0.00782	0.0294	1	04/22/2020 22:42	WG1464831
4-Methyl-2-pentanone (MIBK)	U		0.00269	0.0294	1	04/22/2020 22:42	WG1464831

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Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.000412	0.00118	1	04/22/2020 22:42	WG1464831
Naphthalene	U		0.00575	0.0147	1	04/22/2020 22:42	WG1464831
n-Propylbenzene	0.00112	J	0.00112	0.00589	1	04/22/2020 22:42	WG1464831
Styrene	U		0.000270	0.0147	1	04/22/2020 22:42	WG1464831
1,1,1,2-Tetrachloroethane	U		0.00112	0.00294	1	04/22/2020 22:42	WG1464831
1,1,2,2-Tetrachloroethane	U		0.000819	0.00294	1	04/22/2020 22:42	WG1464831
1,1,2-Trichlorotrifluoroethane	U		0.000888	0.00294	1	04/22/2020 22:42	WG1464831
Tetrachloroethene	0.00309		0.00106	0.00294	1	04/22/2020 22:42	WG1464831
Toluene	0.00790		0.00153	0.00589	1	04/22/2020 22:42	WG1464831
1,2,3-Trichlorobenzene	U		0.00863	0.0147	1	04/28/2020 04:02	WG1466991
1,2,4-Trichlorobenzene	U		0.00518	0.0147	1	04/22/2020 22:42	WG1464831
1,1,1-Trichloroethane	U		0.00109	0.00294	1	04/22/2020 22:42	WG1464831
1,1,2-Trichloroethane	U		0.000703	0.00294	1	04/22/2020 22:42	WG1464831
Trichloroethene	U		0.000688	0.00118	1	04/22/2020 22:42	WG1464831
Trichlorofluoromethane	U		0.000974	0.00294	1	04/22/2020 22:42	WG1464831
1,2,3-Trichloropropane	U		0.00191	0.0147	1	04/22/2020 22:42	WG1464831
1,2,4-Trimethylbenzene	0.00910		0.00186	0.00589	1	04/22/2020 22:42	WG1464831
1,2,3-Trimethylbenzene	0.00647		0.00186	0.00589	1	04/22/2020 22:42	WG1464831
1,3,5-Trimethylbenzene	0.00440	J	0.00236	0.00589	1	04/22/2020 22:42	WG1464831
Vinyl acetate	U		0.00299	0.0147	1	04/22/2020 22:42	WG1464831
Vinyl chloride	U	~~J4~~	0.00137	0.00294	1	04/22/2020 22:42	WG1464831
Xylenes, Total	0.0199		0.00104	0.00766	1	04/22/2020 22:42	WG1464831
(S) Toluene-d8	*102*			*75.0-131*		*04/22/2020 22:42*	WG1464831
(S) Toluene-d8	*105*			*75.0-131*		*04/28/2020 04:02*	WG1466991
(S) 4-Bromofluorobenzene	*99.9*			*67.0-138*		*04/22/2020 22:42*	WG1464831
(S) 4-Bromofluorobenzene	*99.9*			*67.0-138*		*04/28/2020 04:02*	WG1466991
(S) 1,2-Dichloroethane-d4	*105*			*70.0-130*		*04/22/2020 22:42*	WG1464831
(S) 1,2-Dichloroethane-d4	*104*			*70.0-130*		*04/28/2020 04:02*	WG1466991

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Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	86.7		1	04/27/2020 11:49	WG1465757

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	U		0.0421	0.0577	1	04/22/2020 23:03	WG1464831
Acrylonitrile	U		0.00416	0.0144	1	04/22/2020 23:03	WG1464831
Benzene	0.00223		0.000539	0.00115	1	04/22/2020 23:03	WG1464831
Bromobenzene	U		0.00104	0.0144	1	04/22/2020 23:03	WG1464831
Bromodichloromethane	U		0.000836	0.00288	1	04/22/2020 23:03	WG1464831
Bromochloromethane	U		0.000651	0.00577	1	04/22/2020 23:03	WG1464831
Bromoform	U		0.00135	0.0288	1	04/22/2020 23:03	WG1464831
Bromomethane	U		0.00227	0.0144	1	04/22/2020 23:03	WG1464831
n-Butylbenzene	U		0.00606	0.0144	1	04/22/2020 23:03	WG1464831
sec-Butylbenzene	U		0.00332	0.0144	1	04/22/2020 23:03	WG1464831
tert-Butylbenzene	U		0.00225	0.00577	1	04/22/2020 23:03	WG1464831
Carbon disulfide	U		0.000807	0.0144	1	04/22/2020 23:03	WG1464831
Carbon tetrachloride	U		0.00104	0.00577	1	04/22/2020 23:03	WG1464831
Chlorobenzene	U		0.000242	0.00288	1	04/22/2020 23:03	WG1464831
Chlorodibromomethane	U	~~J4~~	0.000706	0.00288	1	04/22/2020 23:03	WG1464831
Chloroethane	U		0.00196	0.00577	1	04/22/2020 23:03	WG1464831
Chloroform	U		0.00119	0.00288	1	04/22/2020 23:03	WG1464831
Chloromethane	U		0.00502	0.0144	1	04/22/2020 23:03	WG1464831
2-Chlorotoluene	U		0.000998	0.00288	1	04/22/2020 23:03	WG1464831
4-Chlorotoluene	U		0.000519	0.00577	1	04/22/2020 23:03	WG1464831
1,2-Dibromo-3-Chloropropane	U		0.00450	0.0288	1	04/22/2020 23:03	WG1464831
1,2-Dibromoethane	U		0.000747	0.00288	1	04/22/2020 23:03	WG1464831
Dibromomethane	U		0.000865	0.00577	1	04/22/2020 23:03	WG1464831
1,2-Dichlorobenzene	U		0.000490	0.00577	1	04/22/2020 23:03	WG1464831
1,3-Dichlorobenzene	U		0.000692	0.00577	1	04/22/2020 23:03	WG1464831
1,4-Dichlorobenzene	U		0.000807	0.00577	1	04/22/2020 23:03	WG1464831
Dichlorodifluoromethane	U		0.00186	0.00288	1	04/22/2020 23:03	WG1464831
1,1-Dichloroethane	U		0.000566	0.00288	1	04/22/2020 23:03	WG1464831
1,2-Dichloroethane	U		0.000749	0.00288	1	04/22/2020 23:03	WG1464831
1,1-Dichloroethene	U		0.000699	0.00288	1	04/22/2020 23:03	WG1464831
cis-1,2-Dichloroethene	U		0.000847	0.00288	1	04/22/2020 23:03	WG1464831
trans-1,2-Dichloroethene	U		0.00120	0.00577	1	04/22/2020 23:03	WG1464831
1,2-Dichloropropane	U		0.00164	0.00577	1	04/22/2020 23:03	WG1464831
1,1-Dichloropropene	U		0.000933	0.00288	1	04/22/2020 23:03	WG1464831
1,3-Dichloropropane	U		0.000578	0.00577	1	04/22/2020 23:03	WG1464831
cis-1,3-Dichloropropene	U		0.000873	0.00288	1	04/22/2020 23:03	WG1464831
trans-1,3-Dichloropropene	U		0.00132	0.00577	1	04/22/2020 23:03	WG1464831
trans-1,4-Dichloro-2-butene	U		0.00215	0.00577	1	04/22/2020 23:03	WG1464831
2,2-Dichloropropane	U	~~J4~~	0.00159	0.00288	1	04/22/2020 23:03	WG1464831
Di-isopropyl ether	U		0.000473	0.00115	1	04/22/2020 23:03	WG1464831
Ethylbenzene	U		0.000850	0.00288	1	04/22/2020 23:03	WG1464831
Hexachloro-1,3-butadiene	U		0.00692	0.0288	1	04/22/2020 23:03	WG1464831
2-Hexanone	U		0.00388	0.0288	1	04/22/2020 23:03	WG1464831
n-Hexane	U		0.00261	0.00577	1	04/22/2020 23:03	WG1464831
Iodomethane	U		0.00268	0.0144	1	04/22/2020 23:03	WG1464831
Isopropylbenzene	U		0.000490	0.00288	1	04/22/2020 23:03	WG1464831
p-Isopropyltoluene	U		0.00294	0.00577	1	04/22/2020 23:03	WG1464831
2-Butanone (MEK)	U		0.0733	0.115	1	04/22/2020 23:03	WG1464831
Methylene Chloride	U		0.00766	0.0288	1	04/22/2020 23:03	WG1464831
4-Methyl-2-pentanone (MIBK)	U		0.00263	0.0288	1	04/22/2020 23:03	WG1464831

JC
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1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.000404	0.00115	1	04/22/2020 23:03	WG1464831
Naphthalene	U		0.00563	0.0144	1	04/22/2020 23:03	WG1464831
n-Propylbenzene	U		0.00110	0.00577	1	04/22/2020 23:03	WG1464831
Styrene	U		0.000264	0.0144	1	04/22/2020 23:03	WG1464831
1,1,1,2-Tetrachloroethane	U		0.00109	0.00288	1	04/22/2020 23:03	WG1464831
1,1,2,2-Tetrachloroethane	U		0.000802	0.00288	1	04/22/2020 23:03	WG1464831
1,1,2-Trichlorotrifluoroethane	U		0.000870	0.00288	1	04/22/2020 23:03	WG1464831
Tetrachloroethene	0.00161	J	0.00103	0.00288	1	04/22/2020 23:03	WG1464831
Toluene	0.0121		0.00150	0.00577	1	04/22/2020 23:03	WG1464831
1,2,3-Trichlorobenzene	U		0.00846	0.0144	1	04/28/2020 04:21	WG1466991
1,2,4-Trichlorobenzene	U		0.00508	0.0144	1	04/22/2020 23:03	WG1464831
1,1,1-Trichloroethane	U		0.00106	0.00288	1	04/22/2020 23:03	WG1464831
1,1,2-Trichloroethane	U		0.000689	0.00288	1	04/22/2020 23:03	WG1464831
Trichloroethene	U		0.000674	0.00115	1	04/22/2020 23:03	WG1464831
Trichlorofluoromethane	U		0.000954	0.00288	1	04/22/2020 23:03	WG1464831
1,2,3-Trichloropropane	U		0.00187	0.0144	1	04/22/2020 23:03	WG1464831
1,2,4-Trimethylbenzene	U		0.00182	0.00577	1	04/22/2020 23:03	WG1464831
1,2,3-Trimethylbenzene	U		0.00182	0.00577	1	04/22/2020 23:03	WG1464831
1,3,5-Trimethylbenzene	U		0.00231	0.00577	1	04/22/2020 23:03	WG1464831
Vinyl acetate	U		0.00293	0.0144	1	04/22/2020 23:03	WG1464831
Vinyl chloride	U	~~J4~~	0.00134	0.00288	1	04/22/2020 23:03	WG1464831
Xylenes, Total	0.00232	J	0.00102	0.00750	1	04/22/2020 23:03	WG1464831
(S) Toluene-d8	*105*			*75.0-131*		*04/22/2020 23:03*	WG1464831
(S) Toluene-d8	*106*			*75.0-131*		*04/28/2020 04:21*	WG1466991
(S) 4-Bromofluorobenzene	*96.1*			*67.0-138*		*04/22/2020 23:03*	WG1464831
(S) 4-Bromofluorobenzene	*97.0*			*67.0-138*		*04/28/2020 04:21*	WG1466991
(S) 1,2-Dichloroethane-d4	*104*			*70.0-130*		*04/22/2020 23:03*	WG1464831
(S) 1,2-Dichloroethane-d4	*98.3*			*70.0-130*		*04/28/2020 04:21*	WG1466991

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Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	85.3		1	04/27/2020 11:49	WG1465757

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	U		0.0428	0.0586	1	04/22/2020 23:23	WG1464831
Acrylonitrile	U		0.00423	0.0146	1	04/22/2020 23:23	WG1464831
Benzene	0.00100	J	0.000547	0.00117	1	04/22/2020 23:23	WG1464831
Bromobenzene	U		0.00105	0.0146	1	04/22/2020 23:23	WG1464831
Bromodichloromethane	U		0.000850	0.00293	1	04/22/2020 23:23	WG1464831
Bromochloromethane	U		0.000661	0.00586	1	04/22/2020 23:23	WG1464831
Bromoform	U		0.00137	0.0293	1	04/22/2020 23:23	WG1464831
Bromomethane	U		0.00231	0.0146	1	04/22/2020 23:23	WG1464831
n-Butylbenzene	U		0.00615	0.0146	1	04/22/2020 23:23	WG1464831
sec-Butylbenzene	U		0.00338	0.0146	1	04/22/2020 23:23	WG1464831
tert-Butylbenzene	U		0.00229	0.00586	1	04/22/2020 23:23	WG1464831
Carbon disulfide	U		0.000820	0.0146	1	04/22/2020 23:23	WG1464831
Carbon tetrachloride	U		0.00105	0.00586	1	04/22/2020 23:23	WG1464831
Chlorobenzene	U		0.000246	0.00293	1	04/22/2020 23:23	WG1464831
Chlorodibromomethane	U	~~J4~~	0.000717	0.00293	1	04/22/2020 23:23	WG1464831
Chloroethane	U		0.00199	0.00586	1	04/22/2020 23:23	WG1464831
Chloroform	U		0.00121	0.00293	1	04/22/2020 23:23	WG1464831
Chloromethane	U		0.00510	0.0146	1	04/22/2020 23:23	WG1464831
2-Chlorotoluene	U		0.00101	0.00293	1	04/22/2020 23:23	WG1464831
4-Chlorotoluene	U		0.000527	0.00586	1	04/22/2020 23:23	WG1464831
1,2-Dibromo-3-Chloropropane	U		0.00457	0.0293	1	04/22/2020 23:23	WG1464831
1,2-Dibromoethane	U		0.000759	0.00293	1	04/22/2020 23:23	WG1464831
Dibromomethane	U		0.000879	0.00586	1	04/22/2020 23:23	WG1464831
1,2-Dichlorobenzene	U		0.000498	0.00586	1	04/22/2020 23:23	WG1464831
1,3-Dichlorobenzene	U		0.000703	0.00586	1	04/22/2020 23:23	WG1464831
1,4-Dichlorobenzene	U		0.000820	0.00586	1	04/22/2020 23:23	WG1464831
Dichlorodifluoromethane	U		0.00189	0.00293	1	04/22/2020 23:23	WG1464831
1,1-Dichloroethane	U		0.000575	0.00293	1	04/22/2020 23:23	WG1464831
1,2-Dichloroethane	U		0.000761	0.00293	1	04/22/2020 23:23	WG1464831
1,1-Dichloroethene	U		0.000710	0.00293	1	04/22/2020 23:23	WG1464831
cis-1,2-Dichloroethene	U		0.000860	0.00293	1	04/22/2020 23:23	WG1464831
trans-1,2-Dichloroethene	U		0.00122	0.00586	1	04/22/2020 23:23	WG1464831
1,2-Dichloropropane	U		0.00166	0.00586	1	04/22/2020 23:23	WG1464831
1,1-Dichloropropene	U		0.000948	0.00293	1	04/22/2020 23:23	WG1464831
1,3-Dichloropropane	U		0.000587	0.00586	1	04/22/2020 23:23	WG1464831
cis-1,3-Dichloropropene	U		0.000887	0.00293	1	04/22/2020 23:23	WG1464831
trans-1,3-Dichloropropene	U		0.00134	0.00586	1	04/22/2020 23:23	WG1464831
trans-1,4-Dichloro-2-butene	U		0.00218	0.00586	1	04/22/2020 23:23	WG1464831
2,2-Dichloropropane	U	~~J4~~	0.00162	0.00293	1	04/22/2020 23:23	WG1464831
Di-isopropyl ether	U		0.000480	0.00117	1	04/22/2020 23:23	WG1464831
Ethylbenzene	U		0.000864	0.00293	1	04/22/2020 23:23	WG1464831
Hexachloro-1,3-butadiene	U		0.00703	0.0293	1	04/22/2020 23:23	WG1464831
2-Hexanone	U		0.00394	0.0293	1	04/22/2020 23:23	WG1464831
n-Hexane	U		0.00265	0.00586	1	04/22/2020 23:23	WG1464831
Iodomethane	U		0.00272	0.0146	1	04/22/2020 23:23	WG1464831
Isopropylbenzene	U		0.000498	0.00293	1	04/22/2020 23:23	WG1464831
p-Isopropyltoluene	U		0.00299	0.00586	1	04/22/2020 23:23	WG1464831
2-Butanone (MEK)	U		0.0744	0.117	1	04/22/2020 23:23	WG1464831
Methylene Chloride	U		0.00778	0.0293	1	04/22/2020 23:23	WG1464831
4-Methyl-2-pentanone (MIBK)	U		0.00267	0.0293	1	04/22/2020 23:23	WG1464831

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Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.000410	0.00117	1	04/22/2020 23:23	WG1464831
Naphthalene	U		0.00572	0.0146	1	04/22/2020 23:23	WG1464831
n-Propylbenzene	U		0.00111	0.00586	1	04/22/2020 23:23	WG1464831
Styrene	U		0.000268	0.0146	1	04/22/2020 23:23	WG1464831
1,1,1,2-Tetrachloroethane	U		0.00111	0.00293	1	04/22/2020 23:23	WG1464831
1,1,2,2-Tetrachloroethane	U		0.000814	0.00293	1	04/22/2020 23:23	WG1464831
1,1,2-Trichlorotrifluoroethane	U		0.000884	0.00293	1	04/22/2020 23:23	WG1464831
Tetrachloroethene	U		0.00105	0.00293	1	04/22/2020 23:23	WG1464831
Toluene	0.00648		0.00152	0.00586	1	04/22/2020 23:23	WG1464831
1,2,3-Trichlorobenzene	U		0.00859	0.0146	1	04/28/2020 04:40	WG1466991
1,2,4-Trichlorobenzene	U		0.00516	0.0146	1	04/22/2020 23:23	WG1464831
1,1,1-Trichloroethane	U		0.00108	0.00293	1	04/22/2020 23:23	WG1464831
1,1,2-Trichloroethane	U		0.000700	0.00293	1	04/22/2020 23:23	WG1464831
Trichloroethene	U		0.000684	0.00117	1	04/22/2020 23:23	WG1464831
Trichlorofluoromethane	U		0.000969	0.00293	1	04/22/2020 23:23	WG1464831
1,2,3-Trichloropropane	U		0.00190	0.0146	1	04/22/2020 23:23	WG1464831
1,2,4-Trimethylbenzene	U		0.00185	0.00586	1	04/22/2020 23:23	WG1464831
1,2,3-Trimethylbenzene	U		0.00185	0.00586	1	04/22/2020 23:23	WG1464831
1,3,5-Trimethylbenzene	U		0.00234	0.00586	1	04/22/2020 23:23	WG1464831
Vinyl acetate	U		0.00298	0.0146	1	04/22/2020 23:23	WG1464831
Vinyl chloride	U	~~J4~~	0.00136	0.00293	1	04/22/2020 23:23	WG1464831
Xylenes, Total	0.00156	J	0.00103	0.00762	1	04/22/2020 23:23	WG1464831
(S) Toluene-d8	*108*			*75.0-131*		*04/22/2020 23:23*	WG1464831
(S) Toluene-d8	*107*			*75.0-131*		*04/28/2020 04:40*	WG1466991
(S) 4-Bromofluorobenzene	*104*			*67.0-138*		*04/22/2020 23:23*	WG1464831
(S) 4-Bromofluorobenzene	*97.4*			*67.0-138*		*04/28/2020 04:40*	WG1466991
(S) 1,2-Dichloroethane-d4	*105*			*70.0-130*		*04/22/2020 23:23*	WG1464831
(S) 1,2-Dichloroethane-d4	*106*			*70.0-130*		*04/28/2020 04:40*	WG1466991

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

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Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	82.4		1	04/27/2020 11:49	WG1465757

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	U		0.0443	0.0607	1	04/22/2020 23:43	WG1464831
Acrylonitrile	U		0.00438	0.0152	1	04/22/2020 23:43	WG1464831
Benzene	U		0.000567	0.00121	1	04/22/2020 23:43	WG1464831
Bromobenzene	U		0.00109	0.0152	1	04/22/2020 23:43	WG1464831
Bromodichloromethane	U		0.000880	0.00303	1	04/22/2020 23:43	WG1464831
Bromochloromethane	U		0.000684	0.00607	1	04/22/2020 23:43	WG1464831
Bromoform	U		0.00142	0.0303	1	04/22/2020 23:43	WG1464831
Bromomethane	U		0.00239	0.0152	1	04/22/2020 23:43	WG1464831
n-Butylbenzene	U		0.00637	0.0152	1	04/22/2020 23:43	WG1464831
sec-Butylbenzene	U		0.00349	0.0152	1	04/22/2020 23:43	WG1464831
tert-Butylbenzene	U		0.00237	0.00607	1	04/22/2020 23:43	WG1464831
Carbon disulfide	U		0.000849	0.0152	1	04/22/2020 23:43	WG1464831
Carbon tetrachloride	U		0.00109	0.00607	1	04/22/2020 23:43	WG1464831
Chlorobenzene	U		0.000255	0.00303	1	04/22/2020 23:43	WG1464831
Chlorodibromomethane	U	~~J4~~	0.000743	0.00303	1	04/22/2020 23:43	WG1464831
Chloroethane	U		0.00206	0.00607	1	04/22/2020 23:43	WG1464831
Chloroform	0.00136	U B J	0.00125	0.00303	1	04/22/2020 23:43	WG1464831
Chloromethane	U		0.00528	0.0152	1	04/22/2020 23:43	WG1464831
2-Chlorotoluene	U		0.00105	0.00303	1	04/22/2020 23:43	WG1464831
4-Chlorotoluene	U		0.000546	0.00607	1	04/22/2020 23:43	WG1464831
1,2-Dibromo-3-Chloropropane	U		0.00473	0.0303	1	04/22/2020 23:43	WG1464831
1,2-Dibromoethane	U		0.000786	0.00303	1	04/22/2020 23:43	WG1464831
Dibromomethane	U		0.000910	0.00607	1	04/22/2020 23:43	WG1464831
1,2-Dichlorobenzene	U		0.000516	0.00607	1	04/22/2020 23:43	WG1464831
1,3-Dichlorobenzene	U		0.000728	0.00607	1	04/22/2020 23:43	WG1464831
1,4-Dichlorobenzene	U		0.000849	0.00607	1	04/22/2020 23:43	WG1464831
Dichlorodifluoromethane	U		0.00195	0.00303	1	04/22/2020 23:43	WG1464831
1,1-Dichloroethane	U		0.000596	0.00303	1	04/22/2020 23:43	WG1464831
1,2-Dichloroethane	U		0.000788	0.00303	1	04/22/2020 23:43	WG1464831
1,1-Dichloroethene	U		0.000735	0.00303	1	04/22/2020 23:43	WG1464831
cis-1,2-Dichloroethene	U		0.000891	0.00303	1	04/22/2020 23:43	WG1464831
trans-1,2-Dichloroethene	U		0.00126	0.00607	1	04/22/2020 23:43	WG1464831
1,2-Dichloropropane	U		0.00172	0.00607	1	04/22/2020 23:43	WG1464831
1,1-Dichloropropene	U		0.000982	0.00303	1	04/22/2020 23:43	WG1464831
1,3-Dichloropropane	U		0.000608	0.00607	1	04/22/2020 23:43	WG1464831
cis-1,3-Dichloropropene	U		0.000919	0.00303	1	04/22/2020 23:43	WG1464831
trans-1,3-Dichloropropene	U		0.00138	0.00607	1	04/22/2020 23:43	WG1464831
trans-1,4-Dichloro-2-butene	U		0.00226	0.00607	1	04/22/2020 23:43	WG1464831
2,2-Dichloropropane	U	~~J4~~	0.00167	0.00303	1	04/22/2020 23:43	WG1464831
Di-isopropyl ether	U		0.000498	0.00121	1	04/22/2020 23:43	WG1464831
Ethylbenzene	U		0.000894	0.00303	1	04/22/2020 23:43	WG1464831
Hexachloro-1,3-butadiene	U		0.00728	0.0303	1	04/22/2020 23:43	WG1464831
2-Hexanone	U		0.00408	0.0303	1	04/22/2020 23:43	WG1464831
n-Hexane	U		0.00274	0.00607	1	04/22/2020 23:43	WG1464831
Iodomethane	U		0.00282	0.0152	1	04/22/2020 23:43	WG1464831
Isopropylbenzene	U		0.000516	0.00303	1	04/22/2020 23:43	WG1464831
p-Isopropyltoluene	U		0.00309	0.00607	1	04/22/2020 23:43	WG1464831
2-Butanone (MEK)	U		0.0771	0.121	1	04/22/2020 23:43	WG1464831
Methylene Chloride	U		0.00806	0.0303	1	04/22/2020 23:43	WG1464831
4-Methyl-2-pentanone (MIBK)	U		0.00277	0.0303	1	04/22/2020 23:43	WG1464831

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Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.000425	0.00121	1	04/22/2020 23:43	WG1464831
Naphthalene	U		0.00592	0.0152	1	04/22/2020 23:43	WG1464831
n-Propylbenzene	U		0.00115	0.00607	1	04/22/2020 23:43	WG1464831
Styrene	U		0.000278	0.0152	1	04/22/2020 23:43	WG1464831
1,1,1,2-Tetrachloroethane	U		0.00115	0.00303	1	04/22/2020 23:43	WG1464831
1,1,2,2-Tetrachloroethane	U		0.000843	0.00303	1	04/22/2020 23:43	WG1464831
1,1,2-Trichlorotrifluoroethane	U		0.000915	0.00303	1	04/22/2020 23:43	WG1464831
Tetrachloroethene	U		0.00109	0.00303	1	04/22/2020 23:43	WG1464831
Toluene	U		0.00158	0.00607	1	04/22/2020 23:43	WG1464831
1,2,3-Trichlorobenzene	U		0.00889	0.0152	1	04/28/2020 05:00	WG1466991
1,2,4-Trichlorobenzene	U		0.00534	0.0152	1	04/22/2020 23:43	WG1464831
1,1,1-Trichloroethane	U		0.00112	0.00303	1	04/22/2020 23:43	WG1464831
1,1,2-Trichloroethane	U		0.000724	0.00303	1	04/22/2020 23:43	WG1464831
Trichloroethene	U		0.000709	0.00121	1	04/22/2020 23:43	WG1464831
Trichlorofluoromethane	U		0.00100	0.00303	1	04/22/2020 23:43	WG1464831
1,2,3-Trichloropropane	U		0.00197	0.0152	1	04/22/2020 23:43	WG1464831
1,2,4-Trimethylbenzene	U		0.00192	0.00607	1	04/22/2020 23:43	WG1464831
1,2,3-Trimethylbenzene	U		0.00192	0.00607	1	04/22/2020 23:43	WG1464831
1,3,5-Trimethylbenzene	U		0.00243	0.00607	1	04/22/2020 23:43	WG1464831
Vinyl acetate	U		0.00308	0.0152	1	04/22/2020 23:43	WG1464831
Vinyl chloride	U	~~J4~~	0.00141	0.00303	1	04/22/2020 23:43	WG1464831
Xylenes, Total	U		0.00107	0.00789	1	04/22/2020 23:43	WG1464831
(S) Toluene-d8	*102*			*75.0-131*		*04/22/2020 23:43*	WG1464831
(S) Toluene-d8	*106*			*75.0-131*		*04/28/2020 05:00*	WG1466991
(S) 4-Bromofluorobenzene	*96.7*			*67.0-138*		*04/22/2020 23:43*	WG1464831
(S) 4-Bromofluorobenzene	*98.4*			*67.0-138*		*04/28/2020 05:00*	WG1466991
(S) 1,2-Dichloroethane-d4	*99.2*			*70.0-130*		*04/22/2020 23:43*	WG1464831
(S) 1,2-Dichloroethane-d4	*104*			*70.0-130*		*04/28/2020 05:00*	WG1466991

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

JC 5/28/2020

MW-332-30

Collected date/time: 04/17/20 09:38

SAMPLE RESULTS - 20

L1210278

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	80.7		1	04/27/2020 11:49	WG1465757

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	U		0.0452	0.0620	1	04/23/2020 00:03	WG1464831
Acrylonitrile	U		0.00447	0.0155	1	04/23/2020 00:03	WG1464831
Benzene	U		0.000579	0.00124	1	04/23/2020 00:03	WG1464831
Bromobenzene	U		0.00112	0.0155	1	04/23/2020 00:03	WG1464831
Bromodichloromethane	U		0.000899	0.00310	1	04/23/2020 00:03	WG1464831
Bromochloromethane	U		0.000699	0.00620	1	04/23/2020 00:03	WG1464831
Bromoform	U		0.00145	0.0310	1	04/23/2020 00:03	WG1464831
Bromomethane	U		0.00244	0.0155	1	04/23/2020 00:03	WG1464831
n-Butylbenzene	U		0.00651	0.0155	1	04/23/2020 00:03	WG1464831
sec-Butylbenzene	U		0.00357	0.0155	1	04/23/2020 00:03	WG1464831
tert-Butylbenzene	U		0.00242	0.00620	1	04/23/2020 00:03	WG1464831
Carbon disulfide	U		0.000868	0.0155	1	04/23/2020 00:03	WG1464831
Carbon tetrachloride	U		0.00111	0.00620	1	04/23/2020 00:03	WG1464831
Chlorobenzene	U		0.000260	0.00310	1	04/23/2020 00:03	WG1464831
Chlorodibromomethane	U	~~J4~~	0.000759	0.00310	1	04/23/2020 00:03	WG1464831
Chloroethane	U		0.00211	0.00620	1	04/23/2020 00:03	WG1464831
Chloroform	U		0.00128	0.00310	1	04/23/2020 00:03	WG1464831
Chloromethane	U		0.00539	0.0155	1	04/23/2020 00:03	WG1464831
2-Chlorotoluene	U		0.00107	0.00310	1	04/23/2020 00:03	WG1464831
4-Chlorotoluene	U		0.000558	0.00620	1	04/23/2020 00:03	WG1464831
1,2-Dibromo-3-Chloropropane	U		0.00483	0.0310	1	04/23/2020 00:03	WG1464831
1,2-Dibromoethane	U		0.000803	0.00310	1	04/23/2020 00:03	WG1464831
Dibromomethane	U		0.000930	0.00620	1	04/23/2020 00:03	WG1464831
1,2-Dichlorobenzene	U		0.000527	0.00620	1	04/23/2020 00:03	WG1464831
1,3-Dichlorobenzene	U		0.000744	0.00620	1	04/23/2020 00:03	WG1464831
1,4-Dichlorobenzene	U		0.000868	0.00620	1	04/23/2020 00:03	WG1464831
Dichlorodifluoromethane	U		0.00200	0.00310	1	04/23/2020 00:03	WG1464831
1,1-Dichloroethane	U		0.000609	0.00310	1	04/23/2020 00:03	WG1464831
1,2-Dichloroethane	U		0.000804	0.00310	1	04/23/2020 00:03	WG1464831
1,1-Dichloroethene	U		0.000751	0.00310	1	04/23/2020 00:03	WG1464831
cis-1,2-Dichloroethene	U		0.000910	0.00310	1	04/23/2020 00:03	WG1464831
trans-1,2-Dichloroethene	U		0.00129	0.00620	1	04/23/2020 00:03	WG1464831
1,2-Dichloropropane	U		0.00176	0.00620	1	04/23/2020 00:03	WG1464831
1,1-Dichloropropene	U		0.00100	0.00310	1	04/23/2020 00:03	WG1464831
1,3-Dichloropropane	U		0.000621	0.00620	1	04/23/2020 00:03	WG1464831
cis-1,3-Dichloropropene	U		0.000938	0.00310	1	04/23/2020 00:03	WG1464831
trans-1,3-Dichloropropene	U		0.00141	0.00620	1	04/23/2020 00:03	WG1464831
trans-1,4-Dichloro-2-butene	U		0.00231	0.00620	1	04/23/2020 00:03	WG1464831
2,2-Dichloropropane	U	~~J4~~	0.00171	0.00310	1	04/23/2020 00:03	WG1464831
Di-isopropyl ether	U		0.000508	0.00124	1	04/23/2020 00:03	WG1464831
Ethylbenzene	U		0.000914	0.00310	1	04/23/2020 00:03	WG1464831
Hexachloro-1,3-butadiene	U		0.00744	0.0310	1	04/23/2020 00:03	WG1464831
2-Hexanone	U		0.00416	0.0310	1	04/23/2020 00:03	WG1464831
n-Hexane	U		0.00280	0.00620	1	04/23/2020 00:03	WG1464831
Iodomethane	U		0.00288	0.0155	1	04/23/2020 00:03	WG1464831
Isopropylbenzene	U		0.000527	0.00310	1	04/23/2020 00:03	WG1464831
p-Isopropyltoluene	U		0.00316	0.00620	1	04/23/2020 00:03	WG1464831
2-Butanone (MEK)	U		0.0787	0.124	1	04/23/2020 00:03	WG1464831
Methylene Chloride	U		0.00823	0.0310	1	04/23/2020 00:03	WG1464831
4-Methyl-2-pentanone (MIBK)	U		0.00283	0.0310	1	04/23/2020 00:03	WG1464831

JC 5/28/2020

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.000434	0.00124	1	04/23/2020 00:03	WG1464831
Naphthalene	U		0.00605	0.0155	1	04/23/2020 00:03	WG1464831
n-Propylbenzene	U		0.00118	0.00620	1	04/23/2020 00:03	WG1464831
Styrene	U		0.000284	0.0155	1	04/23/2020 00:03	WG1464831
1,1,1,2-Tetrachloroethane	U		0.00118	0.00310	1	04/23/2020 00:03	WG1464831
1,1,2,2-Tetrachloroethane	U		0.000861	0.00310	1	04/23/2020 00:03	WG1464831
1,1,2-Trichlorotrifluoroethane	U		0.000935	0.00310	1	04/23/2020 00:03	WG1464831
Tetrachloroethene	U		0.00111	0.00310	1	04/23/2020 00:03	WG1464831
Toluene	U		0.00161	0.00620	1	04/23/2020 00:03	WG1464831
1,2,3-Trichlorobenzene	U		0.00909	0.0155	1	04/28/2020 05:19	WG1466991
1,2,4-Trichlorobenzene	U		0.00545	0.0155	1	04/23/2020 00:03	WG1464831
1,1,1-Trichloroethane	U		0.00114	0.00310	1	04/23/2020 00:03	WG1464831
1,1,2-Trichloroethane	U		0.000740	0.00310	1	04/23/2020 00:03	WG1464831
Trichloroethene	U		0.000724	0.00124	1	04/23/2020 00:03	WG1464831
Trichlorofluoromethane	U		0.00103	0.00310	1	04/23/2020 00:03	WG1464831
1,2,3-Trichloropropane	U		0.00201	0.0155	1	04/23/2020 00:03	WG1464831
1,2,4-Trimethylbenzene	U		0.00196	0.00620	1	04/23/2020 00:03	WG1464831
1,2,3-Trimethylbenzene	U		0.00196	0.00620	1	04/23/2020 00:03	WG1464831
1,3,5-Trimethylbenzene	U		0.00248	0.00620	1	04/23/2020 00:03	WG1464831
Vinyl acetate	U		0.00315	0.0155	1	04/23/2020 00:03	WG1464831
Vinyl chloride	U	~~J4~~	0.00144	0.00310	1	04/23/2020 00:03	WG1464831
Xylenes, Total	U		0.00109	0.00806	1	04/23/2020 00:03	WG1464831
(S) Toluene-d8	*105*			*75.0-131*		*04/23/2020 00:03*	WG1464831
(S) Toluene-d8	*106*			*75.0-131*		*04/28/2020 05:19*	WG1466991
(S) 4-Bromofluorobenzene	*103*			*67.0-138*		*04/23/2020 00:03*	WG1464831
(S) 4-Bromofluorobenzene	*97.6*			*67.0-138*		*04/28/2020 05:19*	WG1466991
(S) 1,2-Dichloroethane-d4	*106*			*70.0-130*		*04/23/2020 00:03*	WG1464831
(S) 1,2-Dichloroethane-d4	*102*			*70.0-130*		*04/28/2020 05:19*	WG1466991

JC 5/28/2020

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	64.8		1	04/27/2020 11:49	WG1465757

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	49.7	~~B~~	2.62	7.72	50	04/23/2020 19:41	WG1465276
(S) a,a,a-Trifluorotoluene(FID)	*104*			*77.0-120*		*04/23/2020 19:41*	WG1465276

Sample Narrative:

L1210278-21 WG1465276: Elevated RL due to limited sample volume. No discernable petroleum pattern present.

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	0.246		0.0564	0.0772	1	04/23/2020 00:23	WG1464831
Acrylonitrile	U		0.00557	0.0193	1	04/23/2020 00:23	WG1464831
Benzene	0.259		0.000721	0.00154	1	04/23/2020 00:23	WG1464831
Bromobenzene	U		0.00139	0.0193	1	04/23/2020 00:23	WG1464831
Bromodichloromethane	U		0.00112	0.00386	1	04/23/2020 00:23	WG1464831
Bromochloromethane	U		0.000871	0.00772	1	04/23/2020 00:23	WG1464831
Bromoform	U		0.00181	0.0386	1	04/23/2020 00:23	WG1464831
Bromomethane	U		0.00304	0.0193	1	04/23/2020 00:23	WG1464831
n-Butylbenzene	U		0.00811	0.0193	1	04/23/2020 00:23	WG1464831
sec-Butylbenzene	0.0205		0.00445	0.0193	1	04/23/2020 00:23	WG1464831
tert-Butylbenzene	U		0.00301	0.00772	1	04/23/2020 00:23	WG1464831
Carbon disulfide	0.0239		0.00108	0.0193	1	04/23/2020 00:23	WG1464831
Carbon tetrachloride	U		0.00139	0.00772	1	04/23/2020 00:23	WG1464831
Chlorobenzene	U		0.000324	0.00386	1	04/23/2020 00:23	WG1464831
Chlorodibromomethane	U	~~J4~~	0.000945	0.00386	1	04/23/2020 00:23	WG1464831
Chloroethane	U		0.00262	0.00772	1	04/23/2020 00:23	WG1464831
Chloroform	U		0.00159	0.00386	1	04/23/2020 00:23	WG1464831
Chloromethane	U		0.00672	0.0193	1	04/23/2020 00:23	WG1464831
2-Chlorotoluene	U		0.00134	0.00386	1	04/23/2020 00:23	WG1464831
4-Chlorotoluene	U		0.000695	0.00772	1	04/23/2020 00:23	WG1464831
1,2-Dibromo-3-Chloropropane	U		0.00602	0.0386	1	04/23/2020 00:23	WG1464831
1,2-Dibromoethane	U		0.00100	0.00386	1	04/23/2020 00:23	WG1464831
Dibromomethane	U		0.00116	0.00772	1	04/23/2020 00:23	WG1464831
1,2-Dichlorobenzene	U		0.000656	0.00772	1	04/23/2020 00:23	WG1464831
1,3-Dichlorobenzene	U		0.000926	0.00772	1	04/23/2020 00:23	WG1464831
1,4-Dichlorobenzene	U		0.00108	0.00772	1	04/23/2020 00:23	WG1464831
Dichlorodifluoromethane	U		0.00249	0.00386	1	04/23/2020 00:23	WG1464831
1,1-Dichloroethane	U		0.000758	0.00386	1	04/23/2020 00:23	WG1464831
1,2-Dichloroethane	U		0.00100	0.00386	1	04/23/2020 00:23	WG1464831
1,1-Dichloroethene	U		0.000936	0.00386	1	04/23/2020 00:23	WG1464831
cis-1,2-Dichloroethene	U		0.00113	0.00386	1	04/23/2020 00:23	WG1464831
trans-1,2-Dichloroethene	U		0.00161	0.00772	1	04/23/2020 00:23	WG1464831
1,2-Dichloropropane	U		0.00219	0.00772	1	04/23/2020 00:23	WG1464831
1,1-Dichloropropene	U		0.00125	0.00386	1	04/23/2020 00:23	WG1464831
1,3-Dichloropropane	U		0.000774	0.00772	1	04/23/2020 00:23	WG1464831
cis-1,3-Dichloropropene	U		0.00117	0.00386	1	04/23/2020 00:23	WG1464831
trans-1,3-Dichloropropene	U		0.00176	0.00772	1	04/23/2020 00:23	WG1464831
trans-1,4-Dichloro-2-butene	0.0202		0.00287	0.00772	1	04/23/2020 00:23	WG1464831
2,2-Dichloropropane	U	~~J4~~	0.00213	0.00386	1	04/23/2020 00:23	WG1464831
Di-isopropyl ether	U		0.000633	0.00154	1	04/23/2020 00:23	WG1464831
Ethylbenzene	0.133		0.00114	0.00386	1	04/23/2020 00:23	WG1464831

JC 5/28/2020

MW-331-7
Collected date/time: 04/17/20 11:47

SAMPLE RESULTS - 21

L1210278

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Hexachloro-1,3-butadiene	U		0.00926	0.0386	1	04/23/2020 00:23	WG1464831
2-Hexanone	0.0122	J	0.00519	0.0386	1	04/23/2020 00:23	WG1464831
n-Hexane	0.889	UJ J0	0.00349	0.00772	1	04/23/2020 00:23	WG1464831
Iodomethane	U		0.00358	0.0193	1	04/23/2020 00:23	WG1464831
Isopropylbenzene	0.0281		0.000656	0.00386	1	04/23/2020 00:23	WG1464831
p-Isopropyltoluene	0.108		0.00394	0.00772	1	04/23/2020 00:23	WG1464831
2-Butanone (MEK)	0.181		0.0981	0.154	1	04/23/2020 00:23	WG1464831
Methylene Chloride	U		0.0103	0.0386	1	04/23/2020 00:23	WG1464831
4-Methyl-2-pentanone (MIBK)	U		0.00352	0.0386	1	04/23/2020 00:23	WG1464831
Methyl tert-butyl ether	U		0.000540	0.00154	1	04/23/2020 00:23	WG1464831
Naphthalene	0.0141	J	0.00754	0.0193	1	04/23/2020 00:23	WG1464831
n-Propylbenzene	0.0426		0.00147	0.00772	1	04/23/2020 00:23	WG1464831
Styrene	U		0.000354	0.0193	1	04/23/2020 00:23	WG1464831
1,1,1,2-Tetrachloroethane	U		0.00146	0.00386	1	04/23/2020 00:23	WG1464831
1,1,2,2-Tetrachloroethane	U		0.00107	0.00386	1	04/23/2020 00:23	WG1464831
1,1,2-Trichlorotrifluoroethane	U		0.00116	0.00386	1	04/23/2020 00:23	WG1464831
Tetrachloroethene	U		0.00138	0.00386	1	04/23/2020 00:23	WG1464831
Toluene	0.126		0.00201	0.00772	1	04/23/2020 00:23	WG1464831
1,2,3-Trichlorobenzene	U		0.0113	0.0193	1	04/28/2020 06:04	WG1466991
1,2,4-Trichlorobenzene	U		0.00679	0.0193	1	04/23/2020 00:23	WG1464831
1,1,1-Trichloroethane	U		0.00143	0.00386	1	04/23/2020 00:23	WG1464831
1,1,2-Trichloroethane	U		0.000922	0.00386	1	04/23/2020 00:23	WG1464831
Trichloroethene	U		0.000902	0.00154	1	04/23/2020 00:23	WG1464831
Trichlorofluoromethane	U		0.00128	0.00386	1	04/23/2020 00:23	WG1464831
1,2,3-Trichloropropane	U		0.00250	0.0193	1	04/23/2020 00:23	WG1464831
1,2,4-Trimethylbenzene	0.124		0.00244	0.00772	1	04/23/2020 00:23	WG1464831
1,2,3-Trimethylbenzene	0.0479		0.00244	0.00772	1	04/23/2020 00:23	WG1464831
1,3,5-Trimethylbenzene	0.114		0.00309	0.00772	1	04/23/2020 00:23	WG1464831
Vinyl acetate	0.0588	UJ J0	0.00392	0.0193	1	04/23/2020 00:23	WG1464831
Vinyl chloride	U	~~J4~~	0.00179	0.00386	1	04/23/2020 00:23	WG1464831
Xylenes, Total	0.891		0.00136	0.0100	1	04/23/2020 00:23	WG1464831
(S) Toluene-d8	*103*			*75.0-131*		*04/23/2020 00:23*	WG1464831
(S) Toluene-d8	*105*			*75.0-131*		*04/28/2020 06:04*	WG1466991
(S) 4-Bromofluorobenzene	*104*			*67.0-138*		*04/23/2020 00:23*	WG1464831
(S) 4-Bromofluorobenzene	*100*			*67.0-138*		*04/28/2020 06:04*	WG1466991
(S) 1,2-Dichloroethane-d4	*111*			*70.0-130*		*04/23/2020 00:23*	WG1464831
(S) 1,2-Dichloroethane-d4	*109*			*70.0-130*		*04/28/2020 06:04*	WG1466991

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

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Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	89.3		1	04/27/2020 11:49	WG1465757

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	717		75.9	224	2000	04/27/2020 16:18	WG1466570
(S) a,a,a-Trifluorotoluene(FID)	*83.7*			*77.0-120*		*04/27/2020 16:18*	WG1466570

Sample Narrative:

L1210278-22 WG1466570: No discernable petroleum pattern present.

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	U		0.327	0.448	8	04/23/2020 05:48	WG1464913
Acrylonitrile	U		0.0324	0.112	8	04/23/2020 05:48	WG1464913
Benzene	U		0.00419	0.00896	8	04/23/2020 05:48	WG1464913
Bromobenzene	U		0.00807	0.112	8	04/23/2020 05:48	WG1464913
Bromodichloromethane	U		0.00650	0.0224	8	04/23/2020 05:48	WG1464913
Bromochloromethane	U	UJ ~~J4~~	0.00505	0.0448	8	04/23/2020 05:48	WG1464913
Bromoform	U		0.0105	0.224	8	04/23/2020 05:48	WG1464913
Bromomethane	U		0.0177	0.112	8	04/23/2020 05:48	WG1464913
n-Butylbenzene	5.35		0.0470	0.112	8	04/23/2020 05:48	WG1464913
sec-Butylbenzene	1.93		0.0258	0.112	8	04/23/2020 05:48	WG1464913
tert-Butylbenzene	0.0213	J	0.0175	0.0448	8	04/23/2020 05:48	WG1464913
Carbon disulfide	U		0.00627	0.112	8	04/23/2020 05:48	WG1464913
Carbon tetrachloride	U		0.00804	0.0448	8	04/23/2020 05:48	WG1464913
Chlorobenzene	U		0.00188	0.0224	8	04/23/2020 05:48	WG1464913
Chlorodibromomethane	U		0.00549	0.0224	8	04/23/2020 05:48	WG1464913
Chloroethane	U		0.0152	0.0448	8	04/23/2020 05:48	WG1464913
Chloroform	U		0.00923	0.0224	8	04/23/2020 05:48	WG1464913
Chloromethane	U		0.0390	0.112	8	04/23/2020 05:48	WG1464913
2-Chlorotoluene	U		0.00775	0.0224	8	04/23/2020 05:48	WG1464913
4-Chlorotoluene	U		0.00403	0.0448	8	04/23/2020 05:48	WG1464913
1,2-Dibromo-3-Chloropropane	U		0.0349	0.224	8	04/23/2020 05:48	WG1464913
1,2-Dibromoethane	U		0.00580	0.0224	8	04/23/2020 05:48	WG1464913
Dibromomethane	U		0.00672	0.0448	8	04/23/2020 05:48	WG1464913
1,2-Dichlorobenzene	U		0.00381	0.0448	8	04/23/2020 05:48	WG1464913
1,3-Dichlorobenzene	U		0.00538	0.0448	8	04/23/2020 05:48	WG1464913
1,4-Dichlorobenzene	U		0.00627	0.0448	8	04/23/2020 05:48	WG1464913
Dichlorodifluoromethane	U		0.0144	0.0224	8	04/23/2020 05:48	WG1464913
1,1-Dichloroethane	U		0.00440	0.0224	8	04/23/2020 05:48	WG1464913
1,2-Dichloroethane	U		0.00581	0.0224	8	04/23/2020 05:48	WG1464913
1,1-Dichloroethene	U		0.00543	0.0224	8	04/23/2020 05:48	WG1464913
cis-1,2-Dichloroethene	U		0.00658	0.0224	8	04/23/2020 05:48	WG1464913
trans-1,2-Dichloroethene	U		0.00932	0.0448	8	04/23/2020 05:48	WG1464913
1,2-Dichloropropane	U		0.0128	0.0448	8	04/23/2020 05:48	WG1464913
1,1-Dichloropropene	U		0.00725	0.0224	8	04/23/2020 05:48	WG1464913
1,3-Dichloropropane	U		0.00449	0.0448	8	04/23/2020 05:48	WG1464913
cis-1,3-Dichloropropene	U		0.00679	0.0224	8	04/23/2020 05:48	WG1464913
trans-1,3-Dichloropropene	U		0.0102	0.0448	8	04/23/2020 05:48	WG1464913
trans-1,4-Dichloro-2-butene	0.456		0.0167	0.0448	8	04/23/2020 05:48	WG1464913
2,2-Dichloropropane	U		0.0123	0.0224	8	04/23/2020 05:48	WG1464913
Di-isopropyl ether	U		0.00367	0.00896	8	04/23/2020 05:48	WG1464913
Ethylbenzene	3.01		0.00661	0.0224	8	04/23/2020 05:48	WG1464913

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Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg		Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Hexachloro-1,3-butadiene	U	UJ	J0	0.0538	0.224	8	04/23/2020 05:48	WG1464913
2-Hexanone	U			0.0301	0.224	8	04/23/2020 05:48	WG1464913
n-Hexane	3.06			0.0203	0.0448	8	04/23/2020 05:48	WG1464913
Iodomethane	U			0.0208	0.112	8	04/23/2020 05:48	WG1464913
Isopropylbenzene	4.94			0.00381	0.0224	8	04/23/2020 05:48	WG1464913
p-Isopropyltoluene	1.32			0.0229	0.0448	8	04/23/2020 05:48	WG1464913
2-Butanone (MEK)	U			0.569	0.896	8	04/23/2020 05:48	WG1464913
Methylene Chloride	U			0.0595	0.224	8	04/23/2020 05:48	WG1464913
4-Methyl-2-pentanone (MIBK)	U			0.0204	0.224	8	04/23/2020 05:48	WG1464913
Methyl tert-butyl ether	U			0.00314	0.00896	8	04/23/2020 05:48	WG1464913
Naphthalene	0.578			0.0437	0.112	8	04/23/2020 05:48	WG1464913
n-Propylbenzene	21.2			0.0426	0.224	40	04/23/2020 18:57	WG1465193
Styrene	U			0.00205	0.112	8	04/23/2020 05:48	WG1464913
1,1,1,2-Tetrachloroethane	U			0.00849	0.0224	8	04/23/2020 05:48	WG1464913
1,1,2,2-Tetrachloroethane	U			0.00623	0.0224	8	04/23/2020 05:48	WG1464913
1,1,2-Trichlorotrifluoroethane	U			0.00675	0.0224	8	04/23/2020 05:48	WG1464913
Tetrachloroethene	U			0.00803	0.0224	8	04/23/2020 05:48	WG1464913
Toluene	U			0.0116	0.0448	8	04/23/2020 05:48	WG1464913
1,2,3-Trichlorobenzene	U			0.0656	0.112	8	04/23/2020 05:48	WG1464913
1,2,4-Trichlorobenzene	U	UJ	J0	0.0394	0.112	8	04/23/2020 05:48	WG1464913
1,1,1-Trichloroethane	U			0.00827	0.0224	8	04/23/2020 05:48	WG1464913
1,1,2-Trichloroethane	U			0.00535	0.0224	8	04/23/2020 05:48	WG1464913
Trichloroethene	U			0.00523	0.00896	8	04/23/2020 05:48	WG1464913
Trichlorofluoromethane	U			0.00742	0.0224	8	04/23/2020 05:48	WG1464913
1,2,3-Trichloropropane	U			0.0146	0.112	8	04/23/2020 05:48	WG1464913
1,2,4-Trimethylbenzene	0.0557			0.0141	0.0448	8	04/23/2020 05:48	WG1464913
1,2,3-Trimethylbenzene	0.512			0.0141	0.0448	8	04/23/2020 05:48	WG1464913
1,3,5-Trimethylbenzene	0.330			0.0179	0.0448	8	04/23/2020 05:48	WG1464913
Vinyl acetate	U			0.0227	0.112	8	04/23/2020 05:48	WG1464913
Vinyl chloride	U			0.0104	0.0224	8	04/23/2020 05:48	WG1464913
Xylenes, Total	0.612			0.00789	0.0582	8	04/23/2020 05:48	WG1464913
(S) Toluene-d8	*127*				*75.0-131*		*04/23/2020 05:48*	WG1464913
(S) Toluene-d8	*106*				*75.0-131*		*04/23/2020 18:57*	WG1465193
(S) 4-Bromofluorobenzene	*124*				*67.0-138*		*04/23/2020 05:48*	WG1464913
(S) 4-Bromofluorobenzene	*106*				*67.0-138*		*04/23/2020 18:57*	WG1465193
(S) 1,2-Dichloroethane-d4	*99.6*				*70.0-130*		*04/23/2020 05:48*	WG1464913
(S) 1,2-Dichloroethane-d4	*94.3*				*70.0-130*		*04/23/2020 18:57*	WG1465193

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Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	84.7		1	04/27/2020 11:49	WG1465757

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	7.34		1.00	2.95	25	04/27/2020 14:55	WG1466570
(S) a,a,a-Trifluorotoluene(FID)	*85.8*			*77.0-120*		*04/27/2020 14:55*	WG1466570

Sample Narrative:

L1210278-23 WG1466570: No discernable petroleum pattern present.

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	U		0.0431	0.0590	1	04/23/2020 06:07	WG1464913
Acrylonitrile	U		0.00426	0.0148	1	04/23/2020 06:07	WG1464913
Benzene	0.00993		0.000551	0.00118	1	04/23/2020 06:07	WG1464913
Bromobenzene	U		0.00106	0.0148	1	04/23/2020 06:07	WG1464913
Bromodichloromethane	U		0.000856	0.00295	1	04/23/2020 06:07	WG1464913
Bromochloromethane	U	UJ J4	0.000666	0.00590	1	04/23/2020 06:07	WG1464913
Bromoform	U		0.00138	0.0295	1	04/23/2020 06:07	WG1464913
Bromomethane	U		0.00233	0.0148	1	04/23/2020 06:07	WG1464913
n-Butylbenzene	0.0648		0.00620	0.0148	1	04/23/2020 06:07	WG1464913
sec-Butylbenzene	0.0335		0.00340	0.0148	1	04/23/2020 06:07	WG1464913
tert-Butylbenzene	U		0.00230	0.00590	1	04/23/2020 06:07	WG1464913
Carbon disulfide	0.00107	J	0.000826	0.0148	1	04/23/2020 06:07	WG1464913
Carbon tetrachloride	U		0.00106	0.00590	1	04/23/2020 06:07	WG1464913
Chlorobenzene	U		0.000248	0.00295	1	04/23/2020 06:07	WG1464913
Chlorodibromomethane	U		0.000722	0.00295	1	04/23/2020 06:07	WG1464913
Chloroethane	U		0.00201	0.00590	1	04/23/2020 06:07	WG1464913
Chloroform	U		0.00122	0.00295	1	04/23/2020 06:07	WG1464913
Chloromethane	U		0.00513	0.0148	1	04/23/2020 06:07	WG1464913
2-Chlorotoluene	U		0.00102	0.00295	1	04/23/2020 06:07	WG1464913
4-Chlorotoluene	U		0.000531	0.00590	1	04/23/2020 06:07	WG1464913
1,2-Dibromo-3-Chloropropane	U		0.00460	0.0295	1	04/23/2020 06:07	WG1464913
1,2-Dibromoethane	U		0.000765	0.00295	1	04/23/2020 06:07	WG1464913
Dibromomethane	U		0.000885	0.00590	1	04/23/2020 06:07	WG1464913
1,2-Dichlorobenzene	U		0.000502	0.00590	1	04/23/2020 06:07	WG1464913
1,3-Dichlorobenzene	U		0.000708	0.00590	1	04/23/2020 06:07	WG1464913
1,4-Dichlorobenzene	U		0.000826	0.00590	1	04/23/2020 06:07	WG1464913
Dichlorodifluoromethane	U		0.00190	0.00295	1	04/23/2020 06:07	WG1464913
1,1-Dichloroethane	U		0.000580	0.00295	1	04/23/2020 06:07	WG1464913
1,2-Dichloroethane	U		0.000766	0.00295	1	04/23/2020 06:07	WG1464913
1,1-Dichloroethene	U		0.000715	0.00295	1	04/23/2020 06:07	WG1464913
cis-1,2-Dichloroethene	U		0.000866	0.00295	1	04/23/2020 06:07	WG1464913
trans-1,2-Dichloroethene	U		0.00123	0.00590	1	04/23/2020 06:07	WG1464913
1,2-Dichloropropane	U		0.00168	0.00590	1	04/23/2020 06:07	WG1464913
1,1-Dichloropropene	U		0.000955	0.00295	1	04/23/2020 06:07	WG1464913
1,3-Dichloropropane	U		0.000591	0.00590	1	04/23/2020 06:07	WG1464913
cis-1,3-Dichloropropene	U		0.000894	0.00295	1	04/23/2020 06:07	WG1464913
trans-1,3-Dichloropropene	U		0.00135	0.00590	1	04/23/2020 06:07	WG1464913
trans-1,4-Dichloro-2-butene	U		0.00220	0.00590	1	04/23/2020 06:07	WG1464913
2,2-Dichloropropane	U		0.00163	0.00295	1	04/23/2020 06:07	WG1464913
Di-isopropyl ether	U		0.000484	0.00118	1	04/23/2020 06:07	WG1464913
Ethylbenzene	0.0752		0.000870	0.00295	1	04/23/2020 06:07	WG1464913

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Hexachloro-1,3-butadiene	U	UJ J0	0.00708	0.0295	1	04/23/2020 06:07	WG1464913
2-Hexanone	U		0.00397	0.0295	1	04/23/2020 06:07	WG1464913
n-Hexane	0.0879		0.00267	0.00590	1	04/23/2020 06:07	WG1464913
Iodomethane	U		0.00274	0.0148	1	04/23/2020 06:07	WG1464913
Isopropylbenzene	0.137		0.000502	0.00295	1	04/23/2020 06:07	WG1464913
p-Isopropyltoluene	0.0110		0.00301	0.00590	1	04/23/2020 06:07	WG1464913
2-Butanone (MEK)	U		0.0750	0.118	1	04/23/2020 06:07	WG1464913
Methylene Chloride	U		0.00784	0.0295	1	04/23/2020 06:07	WG1464913
4-Methyl-2-pentanone (MIBK)	U		0.00269	0.0295	1	04/23/2020 06:07	WG1464913
Methyl tert-butyl ether	U		0.000413	0.00118	1	04/23/2020 06:07	WG1464913
Naphthalene	0.0284		0.00576	0.0148	1	04/23/2020 06:07	WG1464913
n-Propylbenzene	0.853		0.00112	0.00590	1	04/23/2020 06:07	WG1464913
Styrene	U		0.000270	0.0148	1	04/23/2020 06:07	WG1464913
1,1,1,2-Tetrachloroethane	U		0.00112	0.00295	1	04/23/2020 06:07	WG1464913
1,1,2,2-Tetrachloroethane	U		0.000820	0.00295	1	04/23/2020 06:07	WG1464913
1,1,2-Trichlorotrifluoroethane	U		0.000890	0.00295	1	04/23/2020 06:07	WG1464913
Tetrachloroethene	U		0.00106	0.00295	1	04/23/2020 06:07	WG1464913
Toluene	0.00643		0.00153	0.00590	1	04/23/2020 06:07	WG1464913
1,2,3-Trichlorobenzene	U		0.00865	0.0148	1	04/23/2020 06:07	WG1464913
1,2,4-Trichlorobenzene	U	UJ J0	0.00519	0.0148	1	04/23/2020 06:07	WG1464913
1,1,1-Trichloroethane	U		0.00109	0.00295	1	04/23/2020 06:07	WG1464913
1,1,2-Trichloroethane	U		0.000705	0.00295	1	04/23/2020 06:07	WG1464913
Trichloroethene	U		0.000689	0.00118	1	04/23/2020 06:07	WG1464913
Trichlorofluoromethane	U		0.000976	0.00295	1	04/23/2020 06:07	WG1464913
1,2,3-Trichloropropane	U		0.00191	0.0148	1	04/23/2020 06:07	WG1464913
1,2,4-Trimethylbenzene	0.00786		0.00187	0.00590	1	04/23/2020 06:07	WG1464913
1,2,3-Trimethylbenzene	0.0203		0.00187	0.00590	1	04/23/2020 06:07	WG1464913
1,3,5-Trimethylbenzene	0.00619		0.00236	0.00590	1	04/23/2020 06:07	WG1464913
Vinyl acetate	U		0.00300	0.0148	1	04/23/2020 06:07	WG1464913
Vinyl chloride	U		0.00137	0.00295	1	04/23/2020 06:07	WG1464913
Xylenes, Total	0.0511		0.00104	0.00767	1	04/23/2020 06:07	WG1464913
(S) Toluene-d8	*111*			*75.0-131*		*04/23/2020 06:07*	WG1464913
(S) 4-Bromofluorobenzene	*88.9*			*67.0-138*		*04/23/2020 06:07*	WG1464913
(S) 1,2-Dichloroethane-d4	*86.8*			*70.0-130*		*04/23/2020 06:07*	WG1464913

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Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	86.5		1	04/27/2020 11:28	WG1465758

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	2.81	J	0.980	2.89	25	04/27/2020 15:16	WG1466570
(S) a,a,a-Trifluorotoluene(FID)	*89.9*			*77.0-120*		*04/27/2020 15:16*	WG1466570

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	U		0.0422	0.0578	1	04/23/2020 06:25	WG1464913
Acrylonitrile	0.0289		0.00417	0.0144	1	04/23/2020 06:25	WG1464913
Benzene	0.0244		0.000540	0.00116	1	04/23/2020 06:25	WG1464913
Bromobenzene	U		0.00104	0.0144	1	04/23/2020 06:25	WG1464913
Bromodichloromethane	U		0.000838	0.00289	1	04/23/2020 06:25	WG1464913
Bromochloromethane	U	UJ J4	0.000652	0.00578	1	04/23/2020 06:25	WG1464913
Bromoform	U		0.00135	0.0289	1	04/23/2020 06:25	WG1464913
Bromomethane	U		0.00228	0.0144	1	04/23/2020 06:25	WG1464913
n-Butylbenzene	U		0.00607	0.0144	1	04/23/2020 06:25	WG1464913
sec-Butylbenzene	U		0.00333	0.0144	1	04/23/2020 06:25	WG1464913
tert-Butylbenzene	U		0.00225	0.00578	1	04/23/2020 06:25	WG1464913
Carbon disulfide	U		0.000809	0.0144	1	04/23/2020 06:25	WG1464913
Carbon tetrachloride	U		0.00104	0.00578	1	04/23/2020 06:25	WG1464913
Chlorobenzene	U		0.000243	0.00289	1	04/23/2020 06:25	WG1464913
Chlorodibromomethane	U		0.000707	0.00289	1	04/23/2020 06:25	WG1464913
Chloroethane	U		0.00196	0.00578	1	04/23/2020 06:25	WG1464913
Chloroform	U		0.00119	0.00289	1	04/23/2020 06:25	WG1464913
Chloromethane	U		0.00503	0.0144	1	04/23/2020 06:25	WG1464913
2-Chlorotoluene	U		0.00100	0.00289	1	04/23/2020 06:25	WG1464913
4-Chlorotoluene	U		0.000520	0.00578	1	04/23/2020 06:25	WG1464913
1,2-Dibromo-3-Chloropropane	U		0.00451	0.0289	1	04/23/2020 06:25	WG1464913
1,2-Dibromoethane	U		0.000749	0.00289	1	04/23/2020 06:25	WG1464913
Dibromomethane	U		0.000867	0.00578	1	04/23/2020 06:25	WG1464913
1,2-Dichlorobenzene	U		0.000491	0.00578	1	04/23/2020 06:25	WG1464913
1,3-Dichlorobenzene	U		0.000693	0.00578	1	04/23/2020 06:25	WG1464913
1,4-Dichlorobenzene	U		0.000809	0.00578	1	04/23/2020 06:25	WG1464913
Dichlorodifluoromethane	U		0.00186	0.00289	1	04/23/2020 06:25	WG1464913
1,1-Dichloroethane	U		0.000567	0.00289	1	04/23/2020 06:25	WG1464913
1,2-Dichloroethane	U		0.000750	0.00289	1	04/23/2020 06:25	WG1464913
1,1-Dichloroethene	U		0.000700	0.00289	1	04/23/2020 06:25	WG1464913
cis-1,2-Dichloroethene	U		0.000848	0.00289	1	04/23/2020 06:25	WG1464913
trans-1,2-Dichloroethene	U		0.00120	0.00578	1	04/23/2020 06:25	WG1464913
1,2-Dichloropropane	U		0.00164	0.00578	1	04/23/2020 06:25	WG1464913
1,1-Dichloropropene	U		0.000935	0.00289	1	04/23/2020 06:25	WG1464913
1,3-Dichloropropane	U		0.000579	0.00578	1	04/23/2020 06:25	WG1464913
cis-1,3-Dichloropropene	U		0.000875	0.00289	1	04/23/2020 06:25	WG1464913
trans-1,3-Dichloropropene	U		0.00132	0.00578	1	04/23/2020 06:25	WG1464913
trans-1,4-Dichloro-2-butene	U		0.00215	0.00578	1	04/23/2020 06:25	WG1464913
2,2-Dichloropropane	U		0.00159	0.00289	1	04/23/2020 06:25	WG1464913
Di-isopropyl ether	U		0.000474	0.00116	1	04/23/2020 06:25	WG1464913
Ethylbenzene	0.00404		0.000852	0.00289	1	04/23/2020 06:25	WG1464913
Hexachloro-1,3-butadiene	U	UJ J0	0.00693	0.0289	1	04/23/2020 06:25	WG1464913
2-Hexanone	U		0.00388	0.0289	1	04/23/2020 06:25	WG1464913
n-Hexane	0.0168		0.00261	0.00578	1	04/23/2020 06:25	WG1464913

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Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Iodomethane	U		0.00268	0.0144	1	04/23/2020 06:25	WG1464913
Isopropylbenzene	0.0417		0.000491	0.00289	1	04/23/2020 06:25	WG1464913
p-Isopropyltoluene	U		0.00295	0.00578	1	04/23/2020 06:25	WG1464913
2-Butanone (MEK)	U		0.0734	0.116	1	04/23/2020 06:25	WG1464913
Methylene Chloride	U		0.00767	0.0289	1	04/23/2020 06:25	WG1464913
4-Methyl-2-pentanone (MIBK)	U		0.00263	0.0289	1	04/23/2020 06:25	WG1464913
Methyl tert-butyl ether	U		0.000404	0.00116	1	04/23/2020 06:25	WG1464913
Naphthalene	U		0.00564	0.0144	1	04/23/2020 06:25	WG1464913
n-Propylbenzene	0.0704		0.00110	0.00578	1	04/23/2020 06:25	WG1464913
Styrene	U		0.000265	0.0144	1	04/23/2020 06:25	WG1464913
1,1,1,2-Tetrachloroethane	U		0.00110	0.00289	1	04/23/2020 06:25	WG1464913
1,1,2,2-Tetrachloroethane	U		0.000803	0.00289	1	04/23/2020 06:25	WG1464913
1,1,2-Trichlorotrifluoroethane	U		0.000871	0.00289	1	04/23/2020 06:25	WG1464913
Tetrachloroethene	U		0.00104	0.00289	1	04/23/2020 06:25	WG1464913
Toluene	0.00564	J	0.00150	0.00578	1	04/23/2020 06:25	WG1464913
1,2,3-Trichlorobenzene	U		0.00847	0.0144	1	04/23/2020 06:25	WG1464913
1,2,4-Trichlorobenzene	U UJ	J0	0.00508	0.0144	1	04/23/2020 06:25	WG1464913
1,1,1-Trichloroethane	U		0.00107	0.00289	1	04/23/2020 06:25	WG1464913
1,1,2-Trichloroethane	U		0.000690	0.00289	1	04/23/2020 06:25	WG1464913
Trichloroethene	U		0.000675	0.00116	1	04/23/2020 06:25	WG1464913
Trichlorofluoromethane	U		0.000956	0.00289	1	04/23/2020 06:25	WG1464913
1,2,3-Trichloropropane	U		0.00187	0.0144	1	04/23/2020 06:25	WG1464913
1,2,4-Trimethylbenzene	0.00205	J	0.00183	0.00578	1	04/23/2020 06:25	WG1464913
1,2,3-Trimethylbenzene	0.00909		0.00183	0.00578	1	04/23/2020 06:25	WG1464913
1,3,5-Trimethylbenzene	0.00243	J	0.00231	0.00578	1	04/23/2020 06:25	WG1464913
Vinyl acetate	U		0.00294	0.0144	1	04/23/2020 06:25	WG1464913
Vinyl chloride	U		0.00134	0.00289	1	04/23/2020 06:25	WG1464913
Xylenes, Total	0.0336		0.00102	0.00751	1	04/23/2020 06:25	WG1464913
(S) Toluene-d8	*111*			*75.0-131*		*04/23/2020 06:25*	WG1464913
(S) 4-Bromofluorobenzene	*88.8*			*67.0-138*		*04/23/2020 06:25*	WG1464913
(S) 1,2-Dichloroethane-d4	*84.3*			*70.0-130*		*04/23/2020 06:25*	WG1464913

JC 5/28/2020

MW-331-29.5

Collected date/time: 04/17/20 12:40

SAMPLE RESULTS - 25

L1210278

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	86.3		1	04/27/2020 11:28	WG1465758

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	1.85	J	0.983	2.90	25	04/27/2020 15:36	WG1466570
(S) a,a,a-Trifluorotoluene(FID)	*91.3*			*77.0-120*		*04/27/2020 15:36*	WG1466570

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	U		0.0423	0.0579	1	04/23/2020 06:44	WG1464913
Acrylonitrile	U		0.00418	0.0145	1	04/23/2020 06:44	WG1464913
Benzene	0.0618		0.000541	0.00116	1	04/23/2020 06:44	WG1464913
Bromobenzene	U		0.00104	0.0145	1	04/23/2020 06:44	WG1464913
Bromodichloromethane	U		0.000840	0.00290	1	04/23/2020 06:44	WG1464913
Bromochloromethane	U	UJ J4	0.000654	0.00579	1	04/23/2020 06:44	WG1464913
Bromoform	U		0.00136	0.0290	1	04/23/2020 06:44	WG1464913
Bromomethane	U		0.00228	0.0145	1	04/23/2020 06:44	WG1464913
n-Butylbenzene	U		0.00608	0.0145	1	04/23/2020 06:44	WG1464913
sec-Butylbenzene	U		0.00334	0.0145	1	04/23/2020 06:44	WG1464913
tert-Butylbenzene	U		0.00226	0.00579	1	04/23/2020 06:44	WG1464913
Carbon disulfide	U		0.000811	0.0145	1	04/23/2020 06:44	WG1464913
Carbon tetrachloride	U		0.00104	0.00579	1	04/23/2020 06:44	WG1464913
Chlorobenzene	U		0.000243	0.00290	1	04/23/2020 06:44	WG1464913
Chlorodibromomethane	U		0.000709	0.00290	1	04/23/2020 06:44	WG1464913
Chloroethane	U		0.00197	0.00579	1	04/23/2020 06:44	WG1464913
Chloroform	U		0.00119	0.00290	1	04/23/2020 06:44	WG1464913
Chloromethane	U		0.00504	0.0145	1	04/23/2020 06:44	WG1464913
2-Chlorotoluene	U		0.00100	0.00290	1	04/23/2020 06:44	WG1464913
4-Chlorotoluene	U		0.000522	0.00579	1	04/23/2020 06:44	WG1464913
1,2-Dibromo-3-Chloropropane	U		0.00452	0.0290	1	04/23/2020 06:44	WG1464913
1,2-Dibromoethane	U		0.000751	0.00290	1	04/23/2020 06:44	WG1464913
Dibromomethane	U		0.000869	0.00579	1	04/23/2020 06:44	WG1464913
1,2-Dichlorobenzene	U		0.000493	0.00579	1	04/23/2020 06:44	WG1464913
1,3-Dichlorobenzene	U		0.000695	0.00579	1	04/23/2020 06:44	WG1464913
1,4-Dichlorobenzene	U		0.000811	0.00579	1	04/23/2020 06:44	WG1464913
Dichlorodifluoromethane	U		0.00187	0.00290	1	04/23/2020 06:44	WG1464913
1,1-Dichloroethane	U		0.000569	0.00290	1	04/23/2020 06:44	WG1464913
1,2-Dichloroethane	U		0.000752	0.00290	1	04/23/2020 06:44	WG1464913
1,1-Dichloroethene	U		0.000702	0.00290	1	04/23/2020 06:44	WG1464913
cis-1,2-Dichloroethene	U		0.000851	0.00290	1	04/23/2020 06:44	WG1464913
trans-1,2-Dichloroethene	U		0.00121	0.00579	1	04/23/2020 06:44	WG1464913
1,2-Dichloropropane	U		0.00165	0.00579	1	04/23/2020 06:44	WG1464913
1,1-Dichloropropene	U		0.000938	0.00290	1	04/23/2020 06:44	WG1464913
1,3-Dichloropropane	U		0.000581	0.00579	1	04/23/2020 06:44	WG1464913
cis-1,3-Dichloropropene	U		0.000877	0.00290	1	04/23/2020 06:44	WG1464913
trans-1,3-Dichloropropene	U		0.00132	0.00579	1	04/23/2020 06:44	WG1464913
trans-1,4-Dichloro-2-butene	U		0.00216	0.00579	1	04/23/2020 06:44	WG1464913
2,2-Dichloropropane	U		0.00160	0.00290	1	04/23/2020 06:44	WG1464913
Di-isopropyl ether	U		0.000475	0.00116	1	04/23/2020 06:44	WG1464913
Ethylbenzene	0.00189	J	0.000854	0.00290	1	04/23/2020 06:44	WG1464913
Hexachloro-1,3-butadiene	U	UJ J0	0.00695	0.0290	1	04/23/2020 06:44	WG1464913
2-Hexanone	U		0.00389	0.0290	1	04/23/2020 06:44	WG1464913
n-Hexane	U		0.00262	0.00579	1	04/23/2020 06:44	WG1464913

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MW-331-29.5

Collected date/time: 04/17/20 12:40

SAMPLE RESULTS - 25

L1210278

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Iodomethane	U		0.00269	0.0145	1	04/23/2020 06:44	WG1464913
Isopropylbenzene	0.00654		0.000493	0.00290	1	04/23/2020 06:44	WG1464913
p-Isopropyltoluene	U		0.00296	0.00579	1	04/23/2020 06:44	WG1464913
2-Butanone (MEK)	U		0.0736	0.116	1	04/23/2020 06:44	WG1464913
Methylene Chloride	U		0.00770	0.0290	1	04/23/2020 06:44	WG1464913
4-Methyl-2-pentanone (MIBK)	U		0.00264	0.0290	1	04/23/2020 06:44	WG1464913
Methyl tert-butyl ether	U		0.000406	0.00116	1	04/23/2020 06:44	WG1464913
Naphthalene	U		0.00566	0.0145	1	04/23/2020 06:44	WG1464913
n-Propylbenzene	0.00563	J	0.00110	0.00579	1	04/23/2020 06:44	WG1464913
Styrene	0.00167	J	0.000265	0.0145	1	04/23/2020 06:44	WG1464913
1,1,1,2-Tetrachloroethane	U		0.00110	0.00290	1	04/23/2020 06:44	WG1464913
1,1,2,2-Tetrachloroethane	U		0.000805	0.00290	1	04/23/2020 06:44	WG1464913
1,1,2-Trichlorotrifluoroethane	U		0.000874	0.00290	1	04/23/2020 06:44	WG1464913
Tetrachloroethene	U		0.00104	0.00290	1	04/23/2020 06:44	WG1464913
Toluene	0.00724		0.00151	0.00579	1	04/23/2020 06:44	WG1464913
1,2,3-Trichlorobenzene	U UJ	J0	0.00850	0.0145	1	04/23/2020 06:44	WG1464913
1,2,4-Trichlorobenzene	U		0.00510	0.0145	1	04/23/2020 06:44	WG1464913
1,1,1-Trichloroethane	U		0.00107	0.00290	1	04/23/2020 06:44	WG1464913
1,1,2-Trichloroethane	U		0.000692	0.00290	1	04/23/2020 06:44	WG1464913
Trichloroethene	U		0.000677	0.00116	1	04/23/2020 06:44	WG1464913
Trichlorofluoromethane	U		0.000958	0.00290	1	04/23/2020 06:44	WG1464913
1,2,3-Trichloropropane	U		0.00188	0.0145	1	04/23/2020 06:44	WG1464913
1,2,4-Trimethylbenzene	U		0.00183	0.00579	1	04/23/2020 06:44	WG1464913
1,2,3-Trimethylbenzene	0.00387	J	0.00183	0.00579	1	04/23/2020 06:44	WG1464913
1,3,5-Trimethylbenzene	U		0.00232	0.00579	1	04/23/2020 06:44	WG1464913
Vinyl acetate	U		0.00294	0.0145	1	04/23/2020 06:44	WG1464913
Vinyl chloride	U		0.00134	0.00290	1	04/23/2020 06:44	WG1464913
Xylenes, Total	0.00932		0.00102	0.00753	1	04/23/2020 06:44	WG1464913
(S) Toluene-d8	*109*			*75.0-131*		*04/23/2020 06:44*	WG1464913
(S) 4-Bromofluorobenzene	*89.9*			*67.0-138*		*04/23/2020 06:44*	WG1464913
(S) 1,2-Dichloroethane-d4	*83.8*			*70.0-130*		*04/23/2020 06:44*	WG1464913

JC 5/28/2020

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	84.7		1	04/27/2020 11:28	WG1465758

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	U		0.0431	0.0590	1	04/23/2020 07:03	WG1464913
Acrylonitrile	U		0.00426	0.0148	1	04/23/2020 07:03	WG1464913
Benzene	U		0.000552	0.00118	1	04/23/2020 07:03	WG1464913
Bromobenzene	U		0.00106	0.0148	1	04/23/2020 07:03	WG1464913
Bromodichloromethane	U		0.000856	0.00295	1	04/23/2020 07:03	WG1464913
Bromochloromethane	U UJ	J4	0.000666	0.00590	1	04/23/2020 07:03	WG1464913
Bromoform	U		0.00138	0.0295	1	04/23/2020 07:03	WG1464913
Bromomethane	U		0.00233	0.0148	1	04/23/2020 07:03	WG1464913
n-Butylbenzene	U		0.00620	0.0148	1	04/23/2020 07:03	WG1464913
sec-Butylbenzene	U		0.00340	0.0148	1	04/23/2020 07:03	WG1464913
tert-Butylbenzene	U		0.00230	0.00590	1	04/23/2020 07:03	WG1464913
Carbon disulfide	U		0.000827	0.0148	1	04/23/2020 07:03	WG1464913
Carbon tetrachloride	U		0.00106	0.00590	1	04/23/2020 07:03	WG1464913
Chlorobenzene	U		0.000248	0.00295	1	04/23/2020 07:03	WG1464913
Chlorodibromomethane	U		0.000723	0.00295	1	04/23/2020 07:03	WG1464913
Chloroethane	U		0.00201	0.00590	1	04/23/2020 07:03	WG1464913
Chloroform	U		0.00122	0.00295	1	04/23/2020 07:03	WG1464913
Chloromethane	U		0.00514	0.0148	1	04/23/2020 07:03	WG1464913
2-Chlorotoluene	U		0.00102	0.00295	1	04/23/2020 07:03	WG1464913
4-Chlorotoluene	U		0.000531	0.00590	1	04/23/2020 07:03	WG1464913
1,2-Dibromo-3-Chloropropane	U		0.00461	0.0295	1	04/23/2020 07:03	WG1464913
1,2-Dibromoethane	U		0.000765	0.00295	1	04/23/2020 07:03	WG1464913
Dibromomethane	U		0.000886	0.00590	1	04/23/2020 07:03	WG1464913
1,2-Dichlorobenzene	U		0.000502	0.00590	1	04/23/2020 07:03	WG1464913
1,3-Dichlorobenzene	U		0.000709	0.00590	1	04/23/2020 07:03	WG1464913
1,4-Dichlorobenzene	U		0.000827	0.00590	1	04/23/2020 07:03	WG1464913
Dichlorodifluoromethane	U		0.00190	0.00295	1	04/23/2020 07:03	WG1464913
1,1-Dichloroethane	U		0.000580	0.00295	1	04/23/2020 07:03	WG1464913
1,2-Dichloroethane	U		0.000766	0.00295	1	04/23/2020 07:03	WG1464913
1,1-Dichloroethene	U		0.000716	0.00295	1	04/23/2020 07:03	WG1464913
cis-1,2-Dichloroethene	U		0.000867	0.00295	1	04/23/2020 07:03	WG1464913
trans-1,2-Dichloroethene	U		0.00123	0.00590	1	04/23/2020 07:03	WG1464913
1,2-Dichloropropane	U		0.00168	0.00590	1	04/23/2020 07:03	WG1464913
1,1-Dichloropropene	U		0.000955	0.00295	1	04/23/2020 07:03	WG1464913
1,3-Dichloropropane	U		0.000592	0.00590	1	04/23/2020 07:03	WG1464913
cis-1,3-Dichloropropene	U		0.000894	0.00295	1	04/23/2020 07:03	WG1464913
trans-1,3-Dichloropropene	U		0.00135	0.00590	1	04/23/2020 07:03	WG1464913
trans-1,4-Dichloro-2-butene	U		0.00220	0.00590	1	04/23/2020 07:03	WG1464913
2,2-Dichloropropane	U		0.00163	0.00295	1	04/23/2020 07:03	WG1464913
Di-isopropyl ether	U		0.000484	0.00118	1	04/23/2020 07:03	WG1464913
Ethylbenzene	U		0.000870	0.00295	1	04/23/2020 07:03	WG1464913
Hexachloro-1,3-butadiene	U UJ	J0	0.00709	0.0295	1	04/23/2020 07:03	WG1464913
2-Hexanone	U		0.00397	0.0295	1	04/23/2020 07:03	WG1464913
n-Hexane	U		0.00267	0.00590	1	04/23/2020 07:03	WG1464913
Iodomethane	U		0.00274	0.0148	1	04/23/2020 07:03	WG1464913
Isopropylbenzene	U		0.000502	0.00295	1	04/23/2020 07:03	WG1464913
p-Isopropyltoluene	U		0.00301	0.00590	1	04/23/2020 07:03	WG1464913
2-Butanone (MEK)	U		0.0750	0.118	1	04/23/2020 07:03	WG1464913
Methylene Chloride	U		0.00784	0.0295	1	04/23/2020 07:03	WG1464913
4-Methyl-2-pentanone (MIBK)	U		0.00269	0.0295	1	04/23/2020 07:03	WG1464913

JC 5/28/2020

MW-331-35

Collected date/time: 04/17/20 12:54

SAMPLE RESULTS - 26

L1210278

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.000413	0.00118	1	04/23/2020 07:03	WG1464913
Naphthalene	U		0.00576	0.0148	1	04/23/2020 07:03	WG1464913
n-Propylbenzene	U		0.00112	0.00590	1	04/23/2020 07:03	WG1464913
Styrene	U		0.000270	0.0148	1	04/23/2020 07:03	WG1464913
1,1,1,2-Tetrachloroethane	U		0.00112	0.00295	1	04/23/2020 07:03	WG1464913
1,1,2,2-Tetrachloroethane	U		0.000821	0.00295	1	04/23/2020 07:03	WG1464913
1,1,2-Trichlorotrifluoroethane	U		0.000890	0.00295	1	04/23/2020 07:03	WG1464913
Tetrachloroethene	U		0.00106	0.00295	1	04/23/2020 07:03	WG1464913
Toluene	U		0.00154	0.00590	1	04/23/2020 07:03	WG1464913
1,2,3-Trichlorobenzene	U UJ	J0	0.00866	0.0148	1	04/23/2020 07:03	WG1464913
1,2,4-Trichlorobenzene	U		0.00520	0.0148	1	04/23/2020 07:03	WG1464913
1,1,1-Trichloroethane	U		0.00109	0.00295	1	04/23/2020 07:03	WG1464913
1,1,2-Trichloroethane	U		0.000705	0.00295	1	04/23/2020 07:03	WG1464913
Trichloroethene	U		0.000690	0.00118	1	04/23/2020 07:03	WG1464913
Trichlorofluoromethane	U		0.000977	0.00295	1	04/23/2020 07:03	WG1464913
1,2,3-Trichloropropane	U		0.00191	0.0148	1	04/23/2020 07:03	WG1464913
1,2,4-Trimethylbenzene	U		0.00187	0.00590	1	04/23/2020 07:03	WG1464913
1,2,3-Trimethylbenzene	U		0.00187	0.00590	1	04/23/2020 07:03	WG1464913
1,3,5-Trimethylbenzene	U		0.00236	0.00590	1	04/23/2020 07:03	WG1464913
Vinyl acetate	U		0.00300	0.0148	1	04/23/2020 07:03	WG1464913
Vinyl chloride	U		0.00137	0.00295	1	04/23/2020 07:03	WG1464913
Xylenes, Total	0.00196	J	0.00104	0.00768	1	04/23/2020 07:03	WG1464913
(S) Toluene-d8	*110*			*75.0-131*		*04/23/2020 07:03*	WG1464913
(S) 4-Bromofluorobenzene	*90.5*			*67.0-138*		*04/23/2020 07:03*	WG1464913
(S) 1,2-Dichloroethane-d4	*86.6*			*70.0-130*		*04/23/2020 07:03*	WG1464913

JC 5/28/2020

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	82.9		1	04/27/2020 11:28	WG1465758

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	U		0.0440	0.0603	1	04/23/2020 07:22	WG1464913
Acrylonitrile	U		0.00436	0.0151	1	04/23/2020 07:22	WG1464913
Benzene	0.000668	J	0.000563	0.00121	1	04/23/2020 07:22	WG1464913
Bromobenzene	U		0.00109	0.0151	1	04/23/2020 07:22	WG1464913
Bromodichloromethane	U		0.000875	0.00302	1	04/23/2020 07:22	WG1464913
Bromochloromethane	U UJ	J4	0.000680	0.00603	1	04/23/2020 07:22	WG1464913
Bromoform	U		0.00141	0.0302	1	04/23/2020 07:22	WG1464913
Bromomethane	U		0.00238	0.0151	1	04/23/2020 07:22	WG1464913
n-Butylbenzene	U		0.00633	0.0151	1	04/23/2020 07:22	WG1464913
sec-Butylbenzene	U		0.00347	0.0151	1	04/23/2020 07:22	WG1464913
tert-Butylbenzene	U		0.00235	0.00603	1	04/23/2020 07:22	WG1464913
Carbon disulfide	U		0.000845	0.0151	1	04/23/2020 07:22	WG1464913
Carbon tetrachloride	U		0.00108	0.00603	1	04/23/2020 07:22	WG1464913
Chlorobenzene	U		0.000253	0.00302	1	04/23/2020 07:22	WG1464913
Chlorodibromomethane	U		0.000738	0.00302	1	04/23/2020 07:22	WG1464913
Chloroethane	U		0.00205	0.00603	1	04/23/2020 07:22	WG1464913
Chloroform	U		0.00124	0.00302	1	04/23/2020 07:22	WG1464913
Chloromethane	U		0.00525	0.0151	1	04/23/2020 07:22	WG1464913
2-Chlorotoluene	U		0.00104	0.00302	1	04/23/2020 07:22	WG1464913
4-Chlorotoluene	U		0.000543	0.00603	1	04/23/2020 07:22	WG1464913
1,2-Dibromo-3-Chloropropane	U		0.00471	0.0302	1	04/23/2020 07:22	WG1464913
1,2-Dibromoethane	U		0.000782	0.00302	1	04/23/2020 07:22	WG1464913
Dibromomethane	U		0.000905	0.00603	1	04/23/2020 07:22	WG1464913
1,2-Dichlorobenzene	U		0.000513	0.00603	1	04/23/2020 07:22	WG1464913
1,3-Dichlorobenzene	U		0.000724	0.00603	1	04/23/2020 07:22	WG1464913
1,4-Dichlorobenzene	U		0.000845	0.00603	1	04/23/2020 07:22	WG1464913
Dichlorodifluoromethane	U		0.00194	0.00302	1	04/23/2020 07:22	WG1464913
1,1-Dichloroethane	U		0.000592	0.00302	1	04/23/2020 07:22	WG1464913
1,2-Dichloroethane	U		0.000783	0.00302	1	04/23/2020 07:22	WG1464913
1,1-Dichloroethene	U		0.000731	0.00302	1	04/23/2020 07:22	WG1464913
cis-1,2-Dichloroethene	U		0.000886	0.00302	1	04/23/2020 07:22	WG1464913
trans-1,2-Dichloroethene	U		0.00125	0.00603	1	04/23/2020 07:22	WG1464913
1,2-Dichloropropane	U		0.00171	0.00603	1	04/23/2020 07:22	WG1464913
1,1-Dichloropropene	U		0.000976	0.00302	1	04/23/2020 07:22	WG1464913
1,3-Dichloropropane	U		0.000604	0.00603	1	04/23/2020 07:22	WG1464913
cis-1,3-Dichloropropene	U		0.000913	0.00302	1	04/23/2020 07:22	WG1464913
trans-1,3-Dichloropropene	U		0.00138	0.00603	1	04/23/2020 07:22	WG1464913
trans-1,4-Dichloro-2-butene	U		0.00224	0.00603	1	04/23/2020 07:22	WG1464913
2,2-Dichloropropane	U		0.00166	0.00302	1	04/23/2020 07:22	WG1464913
Di-isopropyl ether	U		0.000495	0.00121	1	04/23/2020 07:22	WG1464913
Ethylbenzene	U		0.000889	0.00302	1	04/23/2020 07:22	WG1464913
Hexachloro-1,3-butadiene	U UJ	J0	0.00724	0.0302	1	04/23/2020 07:22	WG1464913
2-Hexanone	U		0.00405	0.0302	1	04/23/2020 07:22	WG1464913
n-Hexane	U		0.00273	0.00603	1	04/23/2020 07:22	WG1464913
Iodomethane	U		0.00280	0.0151	1	04/23/2020 07:22	WG1464913
Isopropylbenzene	U		0.000513	0.00302	1	04/23/2020 07:22	WG1464913
p-Isopropyltoluene	U		0.00308	0.00603	1	04/23/2020 07:22	WG1464913
2-Butanone (MEK)	U		0.0766	0.121	1	04/23/2020 07:22	WG1464913
Methylene Chloride	U		0.00801	0.0302	1	04/23/2020 07:22	WG1464913
4-Methyl-2-pentanone (MIBK)	U		0.00275	0.0302	1	04/23/2020 07:22	WG1464913

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Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.000422	0.00121	1	04/23/2020 07:22	WG1464913
Naphthalene	U		0.00589	0.0151	1	04/23/2020 07:22	WG1464913
n-Propylbenzene	0.00200	J	0.00115	0.00603	1	04/23/2020 07:22	WG1464913
Styrene	U		0.000276	0.0151	1	04/23/2020 07:22	WG1464913
1,1,1,2-Tetrachloroethane	U		0.00114	0.00302	1	04/23/2020 07:22	WG1464913
1,1,2,2-Tetrachloroethane	U		0.000839	0.00302	1	04/23/2020 07:22	WG1464913
1,1,2-Trichlorotrifluoroethane	U		0.000910	0.00302	1	04/23/2020 07:22	WG1464913
Tetrachloroethene	U		0.00108	0.00302	1	04/23/2020 07:22	WG1464913
Toluene	U		0.00157	0.00603	1	04/23/2020 07:22	WG1464913
1,2,3-Trichlorobenzene	U		0.00884	0.0151	1	04/23/2020 07:22	WG1464913
1,2,4-Trichlorobenzene	U	UJ J0	0.00531	0.0151	1	04/23/2020 07:22	WG1464913
1,1,1-Trichloroethane	U		0.00111	0.00302	1	04/23/2020 07:22	WG1464913
1,1,2-Trichloroethane	U		0.000720	0.00302	1	04/23/2020 07:22	WG1464913
Trichloroethene	U		0.000705	0.00121	1	04/23/2020 07:22	WG1464913
Trichlorofluoromethane	U		0.000998	0.00302	1	04/23/2020 07:22	WG1464913
1,2,3-Trichloropropane	U		0.00195	0.0151	1	04/23/2020 07:22	WG1464913
1,2,4-Trimethylbenzene	U		0.00191	0.00603	1	04/23/2020 07:22	WG1464913
1,2,3-Trimethylbenzene	U		0.00191	0.00603	1	04/23/2020 07:22	WG1464913
1,3,5-Trimethylbenzene	U		0.00241	0.00603	1	04/23/2020 07:22	WG1464913
Vinyl acetate	U		0.00306	0.0151	1	04/23/2020 07:22	WG1464913
Vinyl chloride	U		0.00140	0.00302	1	04/23/2020 07:22	WG1464913
Xylenes, Total	0.00176	J	0.00106	0.00784	1	04/23/2020 07:22	WG1464913
(S) Toluene-d8	*109*			*75.0-131*		*04/23/2020 07:22*	WG1464913
(S) 4-Bromofluorobenzene	*92.0*			*67.0-138*		*04/23/2020 07:22*	WG1464913
(S) 1,2-Dichloroethane-d4	*88.9*			*70.0-130*		*04/23/2020 07:22*	WG1464913

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Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	83.2		1	04/27/2020 11:28	WG1465758

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	U		0.0439	0.0601	1	04/23/2020 07:41	WG1464913
Acrylonitrile	U		0.00434	0.0150	1	04/23/2020 07:41	WG1464913
Benzene	U		0.000562	0.00120	1	04/23/2020 07:41	WG1464913
Bromobenzene	U		0.00108	0.0150	1	04/23/2020 07:41	WG1464913
Bromodichloromethane	U		0.000872	0.00301	1	04/23/2020 07:41	WG1464913
Bromochloromethane	U UJ	J4	0.000678	0.00601	1	04/23/2020 07:41	WG1464913
Bromoform	U		0.00141	0.0301	1	04/23/2020 07:41	WG1464913
Bromomethane	U		0.00237	0.0150	1	04/23/2020 07:41	WG1464913
n-Butylbenzene	U		0.00631	0.0150	1	04/23/2020 07:41	WG1464913
sec-Butylbenzene	U		0.00346	0.0150	1	04/23/2020 07:41	WG1464913
tert-Butylbenzene	U		0.00234	0.00601	1	04/23/2020 07:41	WG1464913
Carbon disulfide	U		0.000842	0.0150	1	04/23/2020 07:41	WG1464913
Carbon tetrachloride	U		0.00108	0.00601	1	04/23/2020 07:41	WG1464913
Chlorobenzene	U		0.000253	0.00301	1	04/23/2020 07:41	WG1464913
Chlorodibromomethane	U		0.000736	0.00301	1	04/23/2020 07:41	WG1464913
Chloroethane	U		0.00204	0.00601	1	04/23/2020 07:41	WG1464913
Chloroform	U		0.00124	0.00301	1	04/23/2020 07:41	WG1464913
Chloromethane	U		0.00523	0.0150	1	04/23/2020 07:41	WG1464913
2-Chlorotoluene	U		0.00104	0.00301	1	04/23/2020 07:41	WG1464913
4-Chlorotoluene	U		0.000541	0.00601	1	04/23/2020 07:41	WG1464913
1,2-Dibromo-3-Chloropropane	U		0.00469	0.0301	1	04/23/2020 07:41	WG1464913
1,2-Dibromoethane	U		0.000779	0.00301	1	04/23/2020 07:41	WG1464913
Dibromomethane	U		0.000902	0.00601	1	04/23/2020 07:41	WG1464913
1,2-Dichlorobenzene	U		0.000511	0.00601	1	04/23/2020 07:41	WG1464913
1,3-Dichlorobenzene	U		0.000721	0.00601	1	04/23/2020 07:41	WG1464913
1,4-Dichlorobenzene	U		0.000842	0.00601	1	04/23/2020 07:41	WG1464913
Dichlorodifluoromethane	U		0.00194	0.00301	1	04/23/2020 07:41	WG1464913
1,1-Dichloroethane	U		0.000590	0.00301	1	04/23/2020 07:41	WG1464913
1,2-Dichloroethane	U		0.000780	0.00301	1	04/23/2020 07:41	WG1464913
1,1-Dichloroethene	U		0.000729	0.00301	1	04/23/2020 07:41	WG1464913
cis-1,2-Dichloroethene	U		0.000883	0.00301	1	04/23/2020 07:41	WG1464913
trans-1,2-Dichloroethene	U		0.00125	0.00601	1	04/23/2020 07:41	WG1464913
1,2-Dichloropropane	U		0.00171	0.00601	1	04/23/2020 07:41	WG1464913
1,1-Dichloropropene	U		0.000973	0.00301	1	04/23/2020 07:41	WG1464913
1,3-Dichloropropane	U		0.000602	0.00601	1	04/23/2020 07:41	WG1464913
cis-1,3-Dichloropropene	U		0.000910	0.00301	1	04/23/2020 07:41	WG1464913
trans-1,3-Dichloropropene	U		0.00137	0.00601	1	04/23/2020 07:41	WG1464913
trans-1,4-Dichloro-2-butene	U		0.00224	0.00601	1	04/23/2020 07:41	WG1464913
2,2-Dichloropropane	U		0.00166	0.00301	1	04/23/2020 07:41	WG1464913
Di-isopropyl ether	U		0.000493	0.00120	1	04/23/2020 07:41	WG1464913
Ethylbenzene	U		0.000886	0.00301	1	04/23/2020 07:41	WG1464913
Hexachloro-1,3-butadiene	U UJ	J0	0.00721	0.0301	1	04/23/2020 07:41	WG1464913
2-Hexanone	U		0.00404	0.0301	1	04/23/2020 07:41	WG1464913
n-Hexane	U		0.00272	0.00601	1	04/23/2020 07:41	WG1464913
Iodomethane	U		0.00279	0.0150	1	04/23/2020 07:41	WG1464913
Isopropylbenzene	U		0.000511	0.00301	1	04/23/2020 07:41	WG1464913
p-Isopropyltoluene	U		0.00307	0.00601	1	04/23/2020 07:41	WG1464913
2-Butanone (MEK)	U		0.0764	0.120	1	04/23/2020 07:41	WG1464913
Methylene Chloride	U		0.00798	0.0301	1	04/23/2020 07:41	WG1464913
4-Methyl-2-pentanone (MIBK)	U		0.00274	0.0301	1	04/23/2020 07:41	WG1464913

JC 5/28/2020

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.000421	0.00120	1	04/23/2020 07:41	WG1464913
Naphthalene	U		0.00587	0.0150	1	04/23/2020 07:41	WG1464913
n-Propylbenzene	U		0.00114	0.00601	1	04/23/2020 07:41	WG1464913
Styrene	U		0.000275	0.0150	1	04/23/2020 07:41	WG1464913
1,1,1,2-Tetrachloroethane	U		0.00114	0.00301	1	04/23/2020 07:41	WG1464913
1,1,2,2-Tetrachloroethane	U		0.000836	0.00301	1	04/23/2020 07:41	WG1464913
1,1,2-Trichlorotrifluoroethane	U		0.000907	0.00301	1	04/23/2020 07:41	WG1464913
Tetrachloroethene	U		0.00108	0.00301	1	04/23/2020 07:41	WG1464913
Toluene	U		0.00156	0.00601	1	04/23/2020 07:41	WG1464913
1,2,3-Trichlorobenzene	U		0.00881	0.0150	1	04/23/2020 07:41	WG1464913
1,2,4-Trichlorobenzene	U UJ	J0	0.00529	0.0150	1	04/23/2020 07:41	WG1464913
1,1,1-Trichloroethane	U		0.00111	0.00301	1	04/23/2020 07:41	WG1464913
1,1,2-Trichloroethane	U		0.000718	0.00301	1	04/23/2020 07:41	WG1464913
Trichloroethene	U		0.000702	0.00120	1	04/23/2020 07:41	WG1464913
Trichlorofluoromethane	U		0.000994	0.00301	1	04/23/2020 07:41	WG1464913
1,2,3-Trichloropropane	U		0.00195	0.0150	1	04/23/2020 07:41	WG1464913
1,2,4-Trimethylbenzene	U		0.00190	0.00601	1	04/23/2020 07:41	WG1464913
1,2,3-Trimethylbenzene	U		0.00190	0.00601	1	04/23/2020 07:41	WG1464913
1,3,5-Trimethylbenzene	U		0.00240	0.00601	1	04/23/2020 07:41	WG1464913
Vinyl acetate	U		0.00305	0.0150	1	04/23/2020 07:41	WG1464913
Vinyl chloride	U		0.00139	0.00301	1	04/23/2020 07:41	WG1464913
Xylenes, Total	0.00170	J	0.00106	0.00782	1	04/23/2020 07:41	WG1464913
(S) Toluene-d8	*110*			*75.0-131*		*04/23/2020 07:41*	WG1464913
(S) 4-Bromofluorobenzene	*90.6*			*67.0-138*		*04/23/2020 07:41*	WG1464913
(S) 1,2-Dichloroethane-d4	*87.2*			*70.0-130*		*04/23/2020 07:41*	WG1464913

JC 5/28/2020

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Total Solids by Method 2540 G-2011

	Result	Qualifier	Dilution	Analysis	Batch
Analyte	%			date / time	
Total Solids	83.2		1	04/27/2020 11:28	WG1465758

Volatile Organic Compounds (GC/MS) by Method 8260D

	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg		date / time	
Acetone	U		0.0439	0.0601	1	04/23/2020 08:00	WG1464913
Acrylonitrile	U		0.00434	0.0150	1	04/23/2020 08:00	WG1464913
Benzene	U		0.000561	0.00120	1	04/23/2020 08:00	WG1464913
Bromobenzene	U		0.00108	0.0150	1	04/23/2020 08:00	WG1464913
Bromodichloromethane	U		0.000871	0.00300	1	04/23/2020 08:00	WG1464913
Bromochloromethane	U UJ	J4	0.000678	0.00601	1	04/23/2020 08:00	WG1464913
Bromoform	U		0.00141	0.0300	1	04/23/2020 08:00	WG1464913
Bromomethane	U		0.00237	0.0150	1	04/23/2020 08:00	WG1464913
n-Butylbenzene	U		0.00631	0.0150	1	04/23/2020 08:00	WG1464913
sec-Butylbenzene	U		0.00346	0.0150	1	04/23/2020 08:00	WG1464913
tert-Butylbenzene	U		0.00234	0.00601	1	04/23/2020 08:00	WG1464913
Carbon disulfide	U		0.000841	0.0150	1	04/23/2020 08:00	WG1464913
Carbon tetrachloride	U		0.00108	0.00601	1	04/23/2020 08:00	WG1464913
Chlorobenzene	U		0.000252	0.00300	1	04/23/2020 08:00	WG1464913
Chlorodibromomethane	U		0.000735	0.00300	1	04/23/2020 08:00	WG1464913
Chloroethane	U		0.00204	0.00601	1	04/23/2020 08:00	WG1464913
Chloroform	U		0.00124	0.00300	1	04/23/2020 08:00	WG1464913
Chloromethane	U		0.00523	0.0150	1	04/23/2020 08:00	WG1464913
2-Chlorotoluene	U		0.00104	0.00300	1	04/23/2020 08:00	WG1464913
4-Chlorotoluene	U		0.000541	0.00601	1	04/23/2020 08:00	WG1464913
1,2-Dibromo-3-Chloropropane	U		0.00469	0.0300	1	04/23/2020 08:00	WG1464913
1,2-Dibromoethane	U		0.000779	0.00300	1	04/23/2020 08:00	WG1464913
Dibromomethane	U		0.000901	0.00601	1	04/23/2020 08:00	WG1464913
1,2-Dichlorobenzene	U		0.000511	0.00601	1	04/23/2020 08:00	WG1464913
1,3-Dichlorobenzene	U		0.000721	0.00601	1	04/23/2020 08:00	WG1464913
1,4-Dichlorobenzene	U		0.000841	0.00601	1	04/23/2020 08:00	WG1464913
Dichlorodifluoromethane	U		0.00193	0.00300	1	04/23/2020 08:00	WG1464913
1,1-Dichloroethane	U		0.000590	0.00300	1	04/23/2020 08:00	WG1464913
1,2-Dichloroethane	U		0.000780	0.00300	1	04/23/2020 08:00	WG1464913
1,1-Dichloroethene	U		0.000728	0.00300	1	04/23/2020 08:00	WG1464913
cis-1,2-Dichloroethene	U		0.000882	0.00300	1	04/23/2020 08:00	WG1464913
trans-1,2-Dichloroethene	U		0.00125	0.00601	1	04/23/2020 08:00	WG1464913
1,2-Dichloropropane	U		0.00171	0.00601	1	04/23/2020 08:00	WG1464913
1,1-Dichloropropene	U		0.000972	0.00300	1	04/23/2020 08:00	WG1464913
1,3-Dichloropropane	U		0.000602	0.00601	1	04/23/2020 08:00	WG1464913
cis-1,3-Dichloropropene	U		0.000910	0.00300	1	04/23/2020 08:00	WG1464913
trans-1,3-Dichloropropene	U		0.00137	0.00601	1	04/23/2020 08:00	WG1464913
trans-1,4-Dichloro-2-butene	U		0.00223	0.00601	1	04/23/2020 08:00	WG1464913
2,2-Dichloropropane	U		0.00166	0.00300	1	04/23/2020 08:00	WG1464913
Di-isopropyl ether	U		0.000493	0.00120	1	04/23/2020 08:00	WG1464913
Ethylbenzene	U		0.000885	0.00300	1	04/23/2020 08:00	WG1464913
Hexachloro-1,3-butadiene	U UJ	J0	0.00721	0.0300	1	04/23/2020 08:00	WG1464913
2-Hexanone	U		0.00404	0.0300	1	04/23/2020 08:00	WG1464913
n-Hexane	U		0.00272	0.00601	1	04/23/2020 08:00	WG1464913
Iodomethane	U		0.00279	0.0150	1	04/23/2020 08:00	WG1464913
Isopropylbenzene	U		0.000511	0.00300	1	04/23/2020 08:00	WG1464913
p-Isopropyltoluene	U		0.00306	0.00601	1	04/23/2020 08:00	WG1464913
2-Butanone (MEK)	U		0.0763	0.120	1	04/23/2020 08:00	WG1464913
Methylene Chloride	U		0.00798	0.0300	1	04/23/2020 08:00	WG1464913
4-Methyl-2-pentanone (MIBK)	U		0.00274	0.0300	1	04/23/2020 08:00	WG1464913

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1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.000421	0.00120	1	04/23/2020 08:00	WG1464913
Naphthalene	U		0.00586	0.0150	1	04/23/2020 08:00	WG1464913
n-Propylbenzene	U		0.00114	0.00601	1	04/23/2020 08:00	WG1464913
Styrene	U		0.000275	0.0150	1	04/23/2020 08:00	WG1464913
1,1,1,2-Tetrachloroethane	U		0.00114	0.00300	1	04/23/2020 08:00	WG1464913
1,1,2,2-Tetrachloroethane	U		0.000835	0.00300	1	04/23/2020 08:00	WG1464913
1,1,2-Trichlorotrifluoroethane	U		0.000906	0.00300	1	04/23/2020 08:00	WG1464913
Tetrachloroethene	U		0.00108	0.00300	1	04/23/2020 08:00	WG1464913
Toluene	U		0.00156	0.00601	1	04/23/2020 08:00	WG1464913
1,2,3-Trichlorobenzene	U		0.00881	0.0150	1	04/23/2020 08:00	WG1464913
1,2,4-Trichlorobenzene	U UJ	J0	0.00529	0.0150	1	04/23/2020 08:00	WG1464913
1,1,1-Trichloroethane	U		0.00111	0.00300	1	04/23/2020 08:00	WG1464913
1,1,2-Trichloroethane	U		0.000717	0.00300	1	04/23/2020 08:00	WG1464913
Trichloroethene	U		0.000702	0.00120	1	04/23/2020 08:00	WG1464913
Trichlorofluoromethane	U		0.000994	0.00300	1	04/23/2020 08:00	WG1464913
1,2,3-Trichloropropane	U		0.00195	0.0150	1	04/23/2020 08:00	WG1464913
1,2,4-Trimethylbenzene	U		0.00190	0.00601	1	04/23/2020 08:00	WG1464913
1,2,3-Trimethylbenzene	U		0.00190	0.00601	1	04/23/2020 08:00	WG1464913
1,3,5-Trimethylbenzene	U		0.00240	0.00601	1	04/23/2020 08:00	WG1464913
Vinyl acetate	U		0.00305	0.0150	1	04/23/2020 08:00	WG1464913
Vinyl chloride	U		0.00139	0.00300	1	04/23/2020 08:00	WG1464913
Xylenes, Total	0.00142	J	0.00106	0.00781	1	04/23/2020 08:00	WG1464913
(S) Toluene-d8	*111*			*75.0-131*		*04/23/2020 08:00*	WG1464913
(S) 4-Bromofluorobenzene	*91.2*			*67.0-138*		*04/23/2020 08:00*	WG1464913
(S) 1,2-Dichloroethane-d4	*85.4*			*70.0-130*		*04/23/2020 08:00*	WG1464913

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Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	88.0		1	05/02/2020 22:02	WG1469315

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	U		0.0415	0.0568	1	04/28/2020 18:44	WG1467660
Acrylonitrile	U		0.00410	0.0142	1	04/28/2020 18:44	WG1467660
Benzene	U		0.000530	0.00114	1	04/28/2020 18:44	WG1467660
Bromobenzene	U		0.00102	0.0142	1	04/28/2020 18:44	WG1467660
Bromodichloromethane	U		0.000823	0.00284	1	04/28/2020 18:44	WG1467660
Bromochloromethane	U		0.000641	0.00568	1	04/28/2020 18:44	WG1467660
Bromoform	U		0.00133	0.0284	1	04/28/2020 18:44	WG1467660
Bromomethane	U		0.00224	0.0142	1	04/28/2020 18:44	WG1467660
n-Butylbenzene	U		0.00596	0.0142	1	04/28/2020 18:44	WG1467660
sec-Butylbenzene	U		0.00327	0.0142	1	04/28/2020 18:44	WG1467660
tert-Butylbenzene	U		0.00221	0.00568	1	04/28/2020 18:44	WG1467660
Carbon disulfide	U		0.000795	0.0142	1	04/28/2020 18:44	WG1467660
Carbon tetrachloride	U		0.00102	0.00568	1	04/28/2020 18:44	WG1467660
Chlorobenzene	U		0.000239	0.00284	1	04/28/2020 18:44	WG1467660
Chlorodibromomethane	U		0.000695	0.00284	1	04/28/2020 18:44	WG1467660
Chloroethane	U		0.00193	0.00568	1	04/28/2020 18:44	WG1467660
Chloroform	U		0.00117	0.00284	1	04/28/2020 18:44	WG1467660
Chloromethane	U	UJ J0	0.00494	0.0142	1	04/28/2020 18:44	WG1467660
2-Chlorotoluene	U		0.000982	0.00284	1	04/28/2020 18:44	WG1467660
4-Chlorotoluene	U		0.000511	0.00568	1	04/28/2020 18:44	WG1467660
1,2-Dibromo-3-Chloropropane	U		0.00443	0.0284	1	04/28/2020 18:44	WG1467660
1,2-Dibromoethane	U		0.000736	0.00284	1	04/28/2020 18:44	WG1467660
Dibromomethane	U		0.000852	0.00568	1	04/28/2020 18:44	WG1467660
1,2-Dichlorobenzene	U		0.000483	0.00568	1	04/28/2020 18:44	WG1467660
1,3-Dichlorobenzene	U		0.000681	0.00568	1	04/28/2020 18:44	WG1467660
1,4-Dichlorobenzene	U		0.000795	0.00568	1	04/28/2020 18:44	WG1467660
Dichlorodifluoromethane	U		0.00183	0.00284	1	04/28/2020 18:44	WG1467660
1,1-Dichloroethane	U		0.000558	0.00284	1	04/28/2020 18:44	WG1467660
1,2-Dichloroethane	U		0.000737	0.00284	1	04/28/2020 18:44	WG1467660
1,1-Dichloroethene	U		0.000688	0.00284	1	04/28/2020 18:44	WG1467660
cis-1,2-Dichloroethene	U		0.000834	0.00284	1	04/28/2020 18:44	WG1467660
trans-1,2-Dichloroethene	U		0.00118	0.00568	1	04/28/2020 18:44	WG1467660
1,2-Dichloropropane	U	~~J4~~	0.00161	0.00568	1	04/28/2020 18:44	WG1467660
1,1-Dichloropropene	U		0.000919	0.00284	1	04/28/2020 18:44	WG1467660
1,3-Dichloropropane	U		0.000569	0.00568	1	04/28/2020 18:44	WG1467660
cis-1,3-Dichloropropene	U		0.000860	0.00284	1	04/28/2020 18:44	WG1467660
trans-1,3-Dichloropropene	U		0.00129	0.00568	1	04/28/2020 18:44	WG1467660
trans-1,4-Dichloro-2-butene	U		0.00211	0.00568	1	04/28/2020 18:44	WG1467660
2,2-Dichloropropane	U		0.00157	0.00284	1	04/28/2020 18:44	WG1467660
Di-isopropyl ether	U		0.000466	0.00114	1	04/28/2020 18:44	WG1467660
Ethylbenzene	U		0.000837	0.00284	1	04/28/2020 18:44	WG1467660
Hexachloro-1,3-butadiene	U	UJ J0	0.00681	0.0284	1	04/28/2020 18:44	WG1467660
2-Hexanone	U	~~J4~~	0.00382	0.0284	1	04/28/2020 18:44	WG1467660
n-Hexane	U		0.00257	0.00568	1	04/28/2020 18:44	WG1467660
Iodomethane	U		0.00264	0.0142	1	04/28/2020 18:44	WG1467660
Isopropylbenzene	U		0.000483	0.00284	1	04/28/2020 18:44	WG1467660
p-Isopropyltoluene	U		0.00290	0.00568	1	04/28/2020 18:44	WG1467660
2-Butanone (MEK)	U		0.0721	0.114	1	04/28/2020 18:44	WG1467660
Methylene Chloride	U		0.00754	0.0284	1	04/28/2020 18:44	WG1467660
4-Methyl-2-pentanone (MIBK)	U	~~J4~~	0.00259	0.0284	1	04/28/2020 18:44	WG1467660

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Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg		Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U			0.000398	0.00114	1	04/28/2020 18:44	WG1467660
Naphthalene	U	UJ	J0	0.00554	0.0142	1	04/28/2020 18:44	WG1467660
n-Propylbenzene	U			0.00108	0.00568	1	04/28/2020 18:44	WG1467660
Styrene	U		~~J4~~	0.000260	0.0142	1	04/28/2020 18:44	WG1467660
1,1,1,2-Tetrachloroethane	U			0.00108	0.00284	1	04/28/2020 18:44	WG1467660
1,1,2,2-Tetrachloroethane	U			0.000789	0.00284	1	04/28/2020 18:44	WG1467660
1,1,2-Trichlorotrifluoroethane	U			0.000856	0.00284	1	04/28/2020 18:44	WG1467660
Tetrachloroethene	U			0.00102	0.00284	1	04/28/2020 18:44	WG1467660
Toluene	U			0.00148	0.00568	1	04/28/2020 18:44	WG1467660
1,2,3-Trichlorobenzene	U	UJ	J0	0.00833	0.0142	1	04/28/2020 18:44	WG1467660
1,2,4-Trichlorobenzene	U			0.00500	0.0142	1	04/28/2020 18:44	WG1467660
1,1,1-Trichloroethane	U			0.00105	0.00284	1	04/28/2020 18:44	WG1467660
1,1,2-Trichloroethane	U			0.000678	0.00284	1	04/28/2020 18:44	WG1467660
Trichloroethene	U			0.000663	0.00114	1	04/28/2020 18:44	WG1467660
Trichlorofluoromethane	U			0.000939	0.00284	1	04/28/2020 18:44	WG1467660
1,2,3-Trichloropropane	U			0.00184	0.0142	1	04/28/2020 18:44	WG1467660
1,2,4-Trimethylbenzene	U			0.00179	0.00568	1	04/28/2020 18:44	WG1467660
1,2,3-Trimethylbenzene	U			0.00179	0.00568	1	04/28/2020 18:44	WG1467660
1,3,5-Trimethylbenzene	U			0.00227	0.00568	1	04/28/2020 18:44	WG1467660
Vinyl acetate	U		~~J4~~	0.00288	0.0142	1	04/28/2020 18:44	WG1467660
Vinyl chloride	U		~~J4~~	0.00132	0.00284	1	04/28/2020 18:44	WG1467660
Xylenes, Total	U			0.00100	0.00738	1	04/28/2020 18:44	WG1467660
(S) Toluene-d8	*109*				*75.0-131*		*04/28/2020 18:44*	WG1467660
(S) 4-Bromofluorobenzene	*102*				*67.0-138*		*04/28/2020 18:44*	WG1467660
(S) 1,2-Dichloroethane-d4	*89.6*				*70.0-130*		*04/28/2020 18:44*	WG1467660

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

JC 5/28/2020

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	90.6		1	05/02/2020 22:02	WG1469315

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	U		0.0403	0.0552	1	04/28/2020 19:03	WG1467660
Acrylonitrile	U		0.00398	0.0138	1	04/28/2020 19:03	WG1467660
Benzene	0.00202		0.000515	0.00110	1	04/28/2020 19:03	WG1467660
Bromobenzene	U		0.000993	0.0138	1	04/28/2020 19:03	WG1467660
Bromodichloromethane	U		0.000800	0.00276	1	04/28/2020 19:03	WG1467660
Bromochloromethane	U		0.000622	0.00552	1	04/28/2020 19:03	WG1467660
Bromoform	U		0.00129	0.0276	1	04/28/2020 19:03	WG1467660
Bromomethane	U		0.00217	0.0138	1	04/28/2020 19:03	WG1467660
n-Butylbenzene	U		0.00579	0.0138	1	04/28/2020 19:03	WG1467660
sec-Butylbenzene	U		0.00318	0.0138	1	04/28/2020 19:03	WG1467660
tert-Butylbenzene	U		0.00215	0.00552	1	04/28/2020 19:03	WG1467660
Carbon disulfide	U		0.000772	0.0138	1	04/28/2020 19:03	WG1467660
Carbon tetrachloride	U		0.000991	0.00552	1	04/28/2020 19:03	WG1467660
Chlorobenzene	U		0.000232	0.00276	1	04/28/2020 19:03	WG1467660
Chlorodibromomethane	U		0.000675	0.00276	1	04/28/2020 19:03	WG1467660
Chloroethane	U		0.00188	0.00552	1	04/28/2020 19:03	WG1467660
Chloroform	U		0.00114	0.00276	1	04/28/2020 19:03	WG1467660
Chloromethane	U	UJ J0	0.00480	0.0138	1	04/28/2020 19:03	WG1467660
2-Chlorotoluene	U		0.000954	0.00276	1	04/28/2020 19:03	WG1467660
4-Chlorotoluene	U		0.000497	0.00552	1	04/28/2020 19:03	WG1467660
1,2-Dibromo-3-Chloropropane	U		0.00430	0.0276	1	04/28/2020 19:03	WG1467660
1,2-Dibromoethane	U		0.000715	0.00276	1	04/28/2020 19:03	WG1467660
Dibromomethane	U		0.000828	0.00552	1	04/28/2020 19:03	WG1467660
1,2-Dichlorobenzene	U		0.000469	0.00552	1	04/28/2020 19:03	WG1467660
1,3-Dichlorobenzene	U		0.000662	0.00552	1	04/28/2020 19:03	WG1467660
1,4-Dichlorobenzene	U		0.000772	0.00552	1	04/28/2020 19:03	WG1467660
Dichlorodifluoromethane	U		0.00178	0.00276	1	04/28/2020 19:03	WG1467660
1,1-Dichloroethane	U		0.000542	0.00276	1	04/28/2020 19:03	WG1467660
1,2-Dichloroethane	U		0.000716	0.00276	1	04/28/2020 19:03	WG1467660
1,1-Dichloroethene	U		0.000669	0.00276	1	04/28/2020 19:03	WG1467660
cis-1,2-Dichloroethene	U		0.000810	0.00276	1	04/28/2020 19:03	WG1467660
trans-1,2-Dichloroethene	U		0.00115	0.00552	1	04/28/2020 19:03	WG1467660
1,2-Dichloropropane	U	~~J4~~	0.00157	0.00552	1	04/28/2020 19:03	WG1467660
1,1-Dichloropropene	U		0.000893	0.00276	1	04/28/2020 19:03	WG1467660
1,3-Dichloropropane	U		0.000553	0.00552	1	04/28/2020 19:03	WG1467660
cis-1,3-Dichloropropene	U		0.000835	0.00276	1	04/28/2020 19:03	WG1467660
trans-1,3-Dichloropropene	U		0.00126	0.00552	1	04/28/2020 19:03	WG1467660
trans-1,4-Dichloro-2-butene	U		0.00205	0.00552	1	04/28/2020 19:03	WG1467660
2,2-Dichloropropane	U		0.00152	0.00276	1	04/28/2020 19:03	WG1467660
Di-isopropyl ether	U		0.000452	0.00110	1	04/28/2020 19:03	WG1467660
Ethylbenzene	U		0.000813	0.00276	1	04/28/2020 19:03	WG1467660
Hexachloro-1,3-butadiene	U	UJ J0	0.00662	0.0276	1	04/28/2020 19:03	WG1467660
2-Hexanone	U	~~J4~~	0.00371	0.0276	1	04/28/2020 19:03	WG1467660
n-Hexane	U		0.00249	0.00552	1	04/28/2020 19:03	WG1467660
Iodomethane	U		0.00256	0.0138	1	04/28/2020 19:03	WG1467660
Isopropylbenzene	U		0.000469	0.00276	1	04/28/2020 19:03	WG1467660
p-Isopropyltoluene	U		0.00281	0.00552	1	04/28/2020 19:03	WG1467660
2-Butanone (MEK)	U		0.0701	0.110	1	04/28/2020 19:03	WG1467660
Methylene Chloride	U		0.00733	0.0276	1	04/28/2020 19:03	WG1467660
4-Methyl-2-pentanone (MIBK)	U	J4	0.00252	0.0276	1	04/28/2020 19:03	WG1467660

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Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.000386	0.00110	1	04/28/2020 19:03	WG1467660
Naphthalene	U UJ	J0	0.00538	0.0138	1	04/28/2020 19:03	WG1467660
n-Propylbenzene	U		0.00105	0.00552	1	04/28/2020 19:03	WG1467660
Styrene	U	~~J4~~	0.000253	0.0138	1	04/28/2020 19:03	WG1467660
1,1,1,2-Tetrachloroethane	U		0.00105	0.00276	1	04/28/2020 19:03	WG1467660
1,1,2,2-Tetrachloroethane	U		0.000767	0.00276	1	04/28/2020 19:03	WG1467660
1,1,2-Trichlorotrifluoroethane	U		0.000832	0.00276	1	04/28/2020 19:03	WG1467660
Tetrachloroethene	U		0.000989	0.00276	1	04/28/2020 19:03	WG1467660
Toluene	0.00717		0.00143	0.00552	1	04/28/2020 19:03	WG1467660
1,2,3-Trichlorobenzene	U UJ	J0	0.00809	0.0138	1	04/28/2020 19:03	WG1467660
1,2,4-Trichlorobenzene	U		0.00485	0.0138	1	04/28/2020 19:03	WG1467660
1,1,1-Trichloroethane	U		0.00102	0.00276	1	04/28/2020 19:03	WG1467660
1,1,2-Trichloroethane	U		0.000659	0.00276	1	04/28/2020 19:03	WG1467660
Trichloroethene	U		0.000644	0.00110	1	04/28/2020 19:03	WG1467660
Trichlorofluoromethane	U		0.000913	0.00276	1	04/28/2020 19:03	WG1467660
1,2,3-Trichloropropane	U		0.00179	0.0138	1	04/28/2020 19:03	WG1467660
1,2,4-Trimethylbenzene	U		0.00174	0.00552	1	04/28/2020 19:03	WG1467660
1,2,3-Trimethylbenzene	U		0.00174	0.00552	1	04/28/2020 19:03	WG1467660
1,3,5-Trimethylbenzene	U		0.00221	0.00552	1	04/28/2020 19:03	WG1467660
Vinyl acetate	U	~~J4~~	0.00280	0.0138	1	04/28/2020 19:03	WG1467660
Vinyl chloride	U	~~J4~~	0.00128	0.00276	1	04/28/2020 19:03	WG1467660
Xylenes, Total	0.00404	J	0.000971	0.00717	1	04/28/2020 19:03	WG1467660
(S) Toluene-d8	*112*			*75.0-131*		*04/28/2020 19:03*	WG1467660
(S) 4-Bromofluorobenzene	*102*			*67.0-138*		*04/28/2020 19:03*	WG1467660
(S) 1,2-Dichloroethane-d4	*89.8*			*70.0-130*		*04/28/2020 19:03*	WG1467660

JC 5/28/2020

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	85.8		1	05/02/2020 22:02	WG1469315

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg		Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	0.0470	J	J J0	0.0426	0.0583	1	04/28/2020 19:22	WG1467660
Acrylonitrile	U			0.00421	0.0146	1	04/28/2020 19:22	WG1467660
Benzene	U			0.000544	0.00117	1	04/28/2020 19:22	WG1467660
Bromobenzene	U			0.00105	0.0146	1	04/28/2020 19:22	WG1467660
Bromodichloromethane	U			0.000845	0.00291	1	04/28/2020 19:22	WG1467660
Bromochloromethane	U			0.000658	0.00583	1	04/28/2020 19:22	WG1467660
Bromoform	U			0.00136	0.0291	1	04/28/2020 19:22	WG1467660
Bromomethane	U			0.00230	0.0146	1	04/28/2020 19:22	WG1467660
n-Butylbenzene	U			0.00612	0.0146	1	04/28/2020 19:22	WG1467660
sec-Butylbenzene	U			0.00336	0.0146	1	04/28/2020 19:22	WG1467660
tert-Butylbenzene	U			0.00227	0.00583	1	04/28/2020 19:22	WG1467660
Carbon disulfide	0.00216		J	0.000816	0.0146	1	04/28/2020 19:22	WG1467660
Carbon tetrachloride	U			0.00105	0.00583	1	04/28/2020 19:22	WG1467660
Chlorobenzene	U			0.000245	0.00291	1	04/28/2020 19:22	WG1467660
Chlorodibromomethane	U			0.000713	0.00291	1	04/28/2020 19:22	WG1467660
Chloroethane	U			0.00198	0.00583	1	04/28/2020 19:22	WG1467660
Chloroform	U			0.00120	0.00291	1	04/28/2020 19:22	WG1467660
Chloromethane	U	UJ	J0	0.00507	0.0146	1	04/28/2020 19:22	WG1467660
2-Chlorotoluene	U			0.00101	0.00291	1	04/28/2020 19:22	WG1467660
4-Chlorotoluene	U			0.000525	0.00583	1	04/28/2020 19:22	WG1467660
1,2-Dibromo-3-Chloropropane	U			0.00455	0.0291	1	04/28/2020 19:22	WG1467660
1,2-Dibromoethane	U			0.000755	0.00291	1	04/28/2020 19:22	WG1467660
Dibromomethane	U			0.000874	0.00583	1	04/28/2020 19:22	WG1467660
1,2-Dichlorobenzene	U			0.000495	0.00583	1	04/28/2020 19:22	WG1467660
1,3-Dichlorobenzene	U			0.000700	0.00583	1	04/28/2020 19:22	WG1467660
1,4-Dichlorobenzene	U			0.000816	0.00583	1	04/28/2020 19:22	WG1467660
Dichlorodifluoromethane	U			0.00188	0.00291	1	04/28/2020 19:22	WG1467660
1,1-Dichloroethane	U			0.000572	0.00291	1	04/28/2020 19:22	WG1467660
1,2-Dichloroethane	U			0.000757	0.00291	1	04/28/2020 19:22	WG1467660
1,1-Dichloroethene	U			0.000707	0.00291	1	04/28/2020 19:22	WG1467660
cis-1,2-Dichloroethene	U			0.000856	0.00291	1	04/28/2020 19:22	WG1467660
trans-1,2-Dichloroethene	U			0.00121	0.00583	1	04/28/2020 19:22	WG1467660
1,2-Dichloropropane	U		~~J4~~	0.00166	0.00583	1	04/28/2020 19:22	WG1467660
1,1-Dichloropropene	U			0.000943	0.00291	1	04/28/2020 19:22	WG1467660
1,3-Dichloropropane	U			0.000584	0.00583	1	04/28/2020 19:22	WG1467660
cis-1,3-Dichloropropene	U			0.000883	0.00291	1	04/28/2020 19:22	WG1467660
trans-1,3-Dichloropropene	U			0.00133	0.00583	1	04/28/2020 19:22	WG1467660
trans-1,4-Dichloro-2-butene	U			0.00217	0.00583	1	04/28/2020 19:22	WG1467660
2,2-Dichloropropane	U			0.00161	0.00291	1	04/28/2020 19:22	WG1467660
Di-isopropyl ether	U			0.000478	0.00117	1	04/28/2020 19:22	WG1467660
Ethylbenzene	U			0.000859	0.00291	1	04/28/2020 19:22	WG1467660
Hexachloro-1,3-butadiene	U	UJ	J0	0.00700	0.0291	1	04/28/2020 19:22	WG1467660
2-Hexanone	U		~~J4~~	0.00392	0.0291	1	04/28/2020 19:22	WG1467660
n-Hexane	U			0.00263	0.00583	1	04/28/2020 19:22	WG1467660
Iodomethane	U			0.00270	0.0146	1	04/28/2020 19:22	WG1467660
Isopropylbenzene	U			0.000495	0.00291	1	04/28/2020 19:22	WG1467660
p-Isopropyltoluene	2.51			0.0595	0.117	20	05/01/2020 01:28	WG1469033
2-Butanone (MEK)	U			0.0740	0.117	1	04/28/2020 19:22	WG1467660
Methylene Chloride	U			0.00774	0.0291	1	04/28/2020 19:22	WG1467660
4-Methyl-2-pentanone (MIBK)	U		~~J4~~	0.00266	0.0291	1	04/28/2020 19:22	WG1467660

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Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.000408	0.00117	1	04/28/2020 19:22	WG1467660
Naphthalene	U	UJ J0	0.00569	0.0146	1	04/28/2020 19:22	WG1467660
n-Propylbenzene	U		0.00111	0.00583	1	04/28/2020 19:22	WG1467660
Styrene	U	~~J4~~	0.000267	0.0146	1	04/28/2020 19:22	WG1467660
1,1,1,2-Tetrachloroethane	U		0.00111	0.00291	1	04/28/2020 19:22	WG1467660
1,1,2,2-Tetrachloroethane	U		0.000810	0.00291	1	04/28/2020 19:22	WG1467660
1,1,2-Trichlorotrifluoroethane	U		0.000879	0.00291	1	04/28/2020 19:22	WG1467660
Tetrachloroethene	U		0.00104	0.00291	1	04/28/2020 19:22	WG1467660
Toluene	U		0.00152	0.00583	1	04/28/2020 19:22	WG1467660
1,2,3-Trichlorobenzene	U	UJ J0	0.00855	0.0146	1	04/28/2020 19:22	WG1467660
1,2,4-Trichlorobenzene	U		0.00513	0.0146	1	04/28/2020 19:22	WG1467660
1,1,1-Trichloroethane	U		0.00108	0.00291	1	04/28/2020 19:22	WG1467660
1,1,2-Trichloroethane	U		0.000696	0.00291	1	04/28/2020 19:22	WG1467660
Trichloroethene	U		0.000681	0.00117	1	04/28/2020 19:22	WG1467660
Trichlorofluoromethane	U		0.000964	0.00291	1	04/28/2020 19:22	WG1467660
1,2,3-Trichloropropane	U		0.00189	0.0146	1	04/28/2020 19:22	WG1467660
1,2,4-Trimethylbenzene	U		0.00184	0.00583	1	04/28/2020 19:22	WG1467660
1,2,3-Trimethylbenzene	U		0.00184	0.00583	1	04/28/2020 19:22	WG1467660
1,3,5-Trimethylbenzene	U		0.00233	0.00583	1	04/28/2020 19:22	WG1467660
Vinyl acetate	U	~~J4~~	0.00296	0.0146	1	04/28/2020 19:22	WG1467660
Vinyl chloride	U	~~J4~~	0.00135	0.00291	1	04/28/2020 19:22	WG1467660
Xylenes, Total	U		0.00103	0.00758	1	04/28/2020 19:22	WG1467660
(S) Toluene-d8	*111*			*75.0-131*		*04/28/2020 19:22*	WG1467660
(S) Toluene-d8	*103*			*75.0-131*		*05/01/2020 01:28*	WG1469033
(S) 4-Bromofluorobenzene	*105*			*67.0-138*		*04/28/2020 19:22*	WG1467660
(S) 4-Bromofluorobenzene	*94.1*			*67.0-138*		*05/01/2020 01:28*	WG1469033
(S) 1,2-Dichloroethane-d4	*91.3*			*70.0-130*		*04/28/2020 19:22*	WG1467660
(S) 1,2-Dichloroethane-d4	*112*			*70.0-130*		*05/01/2020 01:28*	WG1469033

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

JC 5/28/2020

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	88.0		1	05/02/2020 22:02	WG1469315

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	U		0.0415	0.0568	1	04/28/2020 19:41	WG1467660
Acrylonitrile	U		0.00410	0.0142	1	04/28/2020 19:41	WG1467660
Benzene	U		0.000531	0.00114	1	04/28/2020 19:41	WG1467660
Bromobenzene	U		0.00102	0.0142	1	04/28/2020 19:41	WG1467660
Bromodichloromethane	U		0.000824	0.00284	1	04/28/2020 19:41	WG1467660
Bromochloromethane	U		0.000641	0.00568	1	04/28/2020 19:41	WG1467660
Bromoform	U		0.00133	0.0284	1	04/28/2020 19:41	WG1467660
Bromomethane	U		0.00224	0.0142	1	04/28/2020 19:41	WG1467660
n-Butylbenzene	U		0.00596	0.0142	1	04/28/2020 19:41	WG1467660
sec-Butylbenzene	U		0.00327	0.0142	1	04/28/2020 19:41	WG1467660
tert-Butylbenzene	U		0.00222	0.00568	1	04/28/2020 19:41	WG1467660
Carbon disulfide	U		0.000795	0.0142	1	04/28/2020 19:41	WG1467660
Carbon tetrachloride	U		0.00102	0.00568	1	04/28/2020 19:41	WG1467660
Chlorobenzene	U		0.000239	0.00284	1	04/28/2020 19:41	WG1467660
Chlorodibromomethane	U		0.000695	0.00284	1	04/28/2020 19:41	WG1467660
Chloroethane	U		0.00193	0.00568	1	04/28/2020 19:41	WG1467660
Chloroform	U		0.00117	0.00284	1	04/28/2020 19:41	WG1467660
Chloromethane	U	UJ J0	0.00494	0.0142	1	04/28/2020 19:41	WG1467660
2-Chlorotoluene	U		0.000983	0.00284	1	04/28/2020 19:41	WG1467660
4-Chlorotoluene	U		0.000511	0.00568	1	04/28/2020 19:41	WG1467660
1,2-Dibromo-3-Chloropropane	U		0.00443	0.0284	1	04/28/2020 19:41	WG1467660
1,2-Dibromoethane	U		0.000736	0.00284	1	04/28/2020 19:41	WG1467660
Dibromomethane	U		0.000852	0.00568	1	04/28/2020 19:41	WG1467660
1,2-Dichlorobenzene	U		0.000483	0.00568	1	04/28/2020 19:41	WG1467660
1,3-Dichlorobenzene	U		0.000682	0.00568	1	04/28/2020 19:41	WG1467660
1,4-Dichlorobenzene	U		0.000795	0.00568	1	04/28/2020 19:41	WG1467660
Dichlorodifluoromethane	U		0.00183	0.00284	1	04/28/2020 19:41	WG1467660
1,1-Dichloroethane	U		0.000558	0.00284	1	04/28/2020 19:41	WG1467660
1,2-Dichloroethane	U		0.000737	0.00284	1	04/28/2020 19:41	WG1467660
1,1-Dichloroethene	U		0.000688	0.00284	1	04/28/2020 19:41	WG1467660
cis-1,2-Dichloroethene	U		0.000834	0.00284	1	04/28/2020 19:41	WG1467660
trans-1,2-Dichloroethene	U		0.00118	0.00568	1	04/28/2020 19:41	WG1467660
1,2-Dichloropropane	U	~~J4~~	0.00161	0.00568	1	04/28/2020 19:41	WG1467660
1,1-Dichloropropene	U		0.000919	0.00284	1	04/28/2020 19:41	WG1467660
1,3-Dichloropropane	U		0.000569	0.00568	1	04/28/2020 19:41	WG1467660
cis-1,3-Dichloropropene	U		0.000860	0.00284	1	04/28/2020 19:41	WG1467660
trans-1,3-Dichloropropene	U		0.00130	0.00568	1	04/28/2020 19:41	WG1467660
trans-1,4-Dichloro-2-butene	U		0.00211	0.00568	1	04/28/2020 19:41	WG1467660
2,2-Dichloropropane	U		0.00157	0.00284	1	04/28/2020 19:41	WG1467660
Di-isopropyl ether	U		0.000466	0.00114	1	04/28/2020 19:41	WG1467660
Ethylbenzene	U		0.000837	0.00284	1	04/28/2020 19:41	WG1467660
Hexachloro-1,3-butadiene	U	UJ J0	0.00682	0.0284	1	04/28/2020 19:41	WG1467660
2-Hexanone	U	~~J4~~	0.00382	0.0284	1	04/28/2020 19:41	WG1467660
n-Hexane	U		0.00257	0.00568	1	04/28/2020 19:41	WG1467660
Iodomethane	U		0.00264	0.0142	1	04/28/2020 19:41	WG1467660
Isopropylbenzene	U		0.000483	0.00284	1	04/28/2020 19:41	WG1467660
p-Isopropyltoluene	0.00365	J	0.00290	0.00568	1	05/01/2020 00:11	WG1469033
2-Butanone (MEK)	U		0.0721	0.114	1	04/28/2020 19:41	WG1467660
Methylene Chloride	U		0.00754	0.0284	1	04/28/2020 19:41	WG1467660
4-Methyl-2-pentanone (MIBK)	U	~~J4~~	0.00259	0.0284	1	04/28/2020 19:41	WG1467660

JC 5/28/2020

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.000398	0.00114	1	04/28/2020 19:41	WG1467660
Naphthalene	U	UJ J0	0.00554	0.0142	1	04/28/2020 19:41	WG1467660
n-Propylbenzene	U		0.00108	0.00568	1	04/28/2020 19:41	WG1467660
Styrene	U	~~J4~~	0.000260	0.0142	1	04/28/2020 19:41	WG1467660
1,1,1,2-Tetrachloroethane	U		0.00108	0.00284	1	04/28/2020 19:41	WG1467660
1,1,2,2-Tetrachloroethane	U		0.000790	0.00284	1	04/28/2020 19:41	WG1467660
1,1,2-Trichlorotrifluoroethane	U		0.000857	0.00284	1	04/28/2020 19:41	WG1467660
Tetrachloroethene	U		0.00102	0.00284	1	04/28/2020 19:41	WG1467660
Toluene	0.00260	J	0.00148	0.00568	1	04/28/2020 19:41	WG1467660
1,2,3-Trichlorobenzene	U	UJ J0	0.00833	0.0142	1	04/28/2020 19:41	WG1467660
1,2,4-Trichlorobenzene	U		0.00500	0.0142	1	04/28/2020 19:41	WG1467660
1,1,1-Trichloroethane	U		0.00105	0.00284	1	04/28/2020 19:41	WG1467660
1,1,2-Trichloroethane	U		0.000678	0.00284	1	04/28/2020 19:41	WG1467660
Trichloroethene	U		0.000663	0.00114	1	04/28/2020 19:41	WG1467660
Trichlorofluoromethane	U		0.000940	0.00284	1	04/28/2020 19:41	WG1467660
1,2,3-Trichloropropane	U		0.00184	0.0142	1	04/28/2020 19:41	WG1467660
1,2,4-Trimethylbenzene	U		0.00179	0.00568	1	04/28/2020 19:41	WG1467660
1,2,3-Trimethylbenzene	U		0.00179	0.00568	1	04/28/2020 19:41	WG1467660
1,3,5-Trimethylbenzene	U		0.00227	0.00568	1	04/28/2020 19:41	WG1467660
Vinyl acetate	U	~~J4~~	0.00289	0.0142	1	04/28/2020 19:41	WG1467660
Vinyl chloride	U	~~J4~~	0.00132	0.00284	1	04/28/2020 19:41	WG1467660
Xylenes, Total	U		0.00100	0.00738	1	04/28/2020 19:41	WG1467660
(S) Toluene-d8	*109*			*75.0-131*		*04/28/2020 19:41*	WG1467660
(S) Toluene-d8	*106*			*75.0-131*		*05/01/2020 00:11*	WG1469033
(S) 4-Bromofluorobenzene	*103*			*67.0-138*		*04/28/2020 19:41*	WG1467660
(S) 4-Bromofluorobenzene	*98.9*			*67.0-138*		*05/01/2020 00:11*	WG1469033
(S) 1,2-Dichloroethane-d4	*92.4*			*70.0-130*		*04/28/2020 19:41*	WG1467660
(S) 1,2-Dichloroethane-d4	*104*			*70.0-130*		*05/01/2020 00:11*	WG1469033

JC 5/28/2020

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	93.9		1	05/02/2020 22:02	WG1469315

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	U		0.0389	0.0532	1	04/28/2020 20:00	WG1467660
Acrylonitrile	U		0.00384	0.0133	1	04/28/2020 20:00	WG1467660
Benzene	U		0.000497	0.00106	1	04/28/2020 20:00	WG1467660
Bromobenzene	U		0.000958	0.0133	1	04/28/2020 20:00	WG1467660
Bromodichloromethane	U		0.000772	0.00266	1	04/28/2020 20:00	WG1467660
Bromochloromethane	U		0.000601	0.00532	1	04/28/2020 20:00	WG1467660
Bromoform	U		0.00125	0.0266	1	04/28/2020 20:00	WG1467660
Bromomethane	U		0.00210	0.0133	1	04/28/2020 20:00	WG1467660
n-Butylbenzene	U		0.00559	0.0133	1	04/28/2020 20:00	WG1467660
sec-Butylbenzene	U		0.00307	0.0133	1	04/28/2020 20:00	WG1467660
tert-Butylbenzene	U		0.00208	0.00532	1	04/28/2020 20:00	WG1467660
Carbon disulfide	U		0.000745	0.0133	1	04/28/2020 20:00	WG1467660
Carbon tetrachloride	U		0.000956	0.00532	1	04/28/2020 20:00	WG1467660
Chlorobenzene	U		0.000224	0.00266	1	04/28/2020 20:00	WG1467660
Chlorodibromomethane	U		0.000652	0.00266	1	04/28/2020 20:00	WG1467660
Chloroethane	U		0.00181	0.00532	1	04/28/2020 20:00	WG1467660
Chloroform	U		0.00110	0.00266	1	04/28/2020 20:00	WG1467660
Chloromethane	U	UJ J0	0.00463	0.0133	1	04/28/2020 20:00	WG1467660
2-Chlorotoluene	U		0.000921	0.00266	1	04/28/2020 20:00	WG1467660
4-Chlorotoluene	U		0.000479	0.00532	1	04/28/2020 20:00	WG1467660
1,2-Dibromo-3-Chloropropane	U		0.00415	0.0266	1	04/28/2020 20:00	WG1467660
1,2-Dibromoethane	U		0.000690	0.00266	1	04/28/2020 20:00	WG1467660
Dibromomethane	U		0.000799	0.00532	1	04/28/2020 20:00	WG1467660
1,2-Dichlorobenzene	U		0.000453	0.00532	1	04/28/2020 20:00	WG1467660
1,3-Dichlorobenzene	U		0.000639	0.00532	1	04/28/2020 20:00	WG1467660
1,4-Dichlorobenzene	U		0.000745	0.00532	1	04/28/2020 20:00	WG1467660
Dichlorodifluoromethane	U		0.00171	0.00266	1	04/28/2020 20:00	WG1467660
1,1-Dichloroethane	U		0.000523	0.00266	1	04/28/2020 20:00	WG1467660
1,2-Dichloroethane	U		0.000691	0.00266	1	04/28/2020 20:00	WG1467660
1,1-Dichloroethene	U		0.000645	0.00266	1	04/28/2020 20:00	WG1467660
cis-1,2-Dichloroethene	U		0.000782	0.00266	1	04/28/2020 20:00	WG1467660
trans-1,2-Dichloroethene	U		0.00111	0.00532	1	04/28/2020 20:00	WG1467660
1,2-Dichloropropane	U	~~J4~~	0.00151	0.00532	1	04/28/2020 20:00	WG1467660
1,1-Dichloropropene	U		0.000861	0.00266	1	04/28/2020 20:00	WG1467660
1,3-Dichloropropane	U		0.000533	0.00532	1	04/28/2020 20:00	WG1467660
cis-1,3-Dichloropropene	U		0.000806	0.00266	1	04/28/2020 20:00	WG1467660
trans-1,3-Dichloropropene	U		0.00121	0.00532	1	04/28/2020 20:00	WG1467660
trans-1,4-Dichloro-2-butene	U		0.00198	0.00532	1	04/28/2020 20:00	WG1467660
2,2-Dichloropropane	U		0.00147	0.00266	1	04/28/2020 20:00	WG1467660
Di-isopropyl ether	U		0.000437	0.00106	1	04/28/2020 20:00	WG1467660
Ethylbenzene	U		0.000785	0.00266	1	04/28/2020 20:00	WG1467660
Hexachloro-1,3-butadiene	U	UJ J0	0.00639	0.0266	1	04/28/2020 20:00	WG1467660
2-Hexanone	U	~~J4~~	0.00358	0.0266	1	04/28/2020 20:00	WG1467660
n-Hexane	U		0.00241	0.00532	1	04/28/2020 20:00	WG1467660
Iodomethane	U		0.00247	0.0133	1	04/28/2020 20:00	WG1467660
Isopropylbenzene	U		0.000453	0.00266	1	04/28/2020 20:00	WG1467660
p-Isopropyltoluene	U		0.00272	0.00532	1	05/01/2020 00:30	WG1469033
2-Butanone (MEK)	U		0.0676	0.106	1	04/28/2020 20:00	WG1467660
Methylene Chloride	U		0.00707	0.0266	1	04/28/2020 20:00	WG1467660
4-Methyl-2-pentanone (MIBK)	U	~~J4~~	0.00243	0.0266	1	04/28/2020 20:00	WG1467660

JC 5/28/2020

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.000373	0.00106	1	04/28/2020 20:00	WG1467660
Naphthalene	U UJ	J0	0.00520	0.0133	1	04/28/2020 20:00	WG1467660
n-Propylbenzene	U		0.00101	0.00532	1	04/28/2020 20:00	WG1467660
Styrene	U	~~J4~~	0.000244	0.0133	1	04/28/2020 20:00	WG1467660
1,1,1,2-Tetrachloroethane	U		0.00101	0.00266	1	04/28/2020 20:00	WG1467660
1,1,2,2-Tetrachloroethane	U		0.000740	0.00266	1	04/28/2020 20:00	WG1467660
1,1,2-Trichlorotrifluoroethane	U		0.000803	0.00266	1	04/28/2020 20:00	WG1467660
Tetrachloroethene	U		0.000954	0.00266	1	04/28/2020 20:00	WG1467660
Toluene	U		0.00138	0.00532	1	04/28/2020 20:00	WG1467660
1,2,3-Trichlorobenzene	U UJ	J0	0.00780	0.0133	1	04/28/2020 20:00	WG1467660
1,2,4-Trichlorobenzene	U		0.00469	0.0133	1	04/28/2020 20:00	WG1467660
1,1,1-Trichloroethane	U		0.000983	0.00266	1	04/28/2020 20:00	WG1467660
1,1,2-Trichloroethane	U		0.000636	0.00266	1	04/28/2020 20:00	WG1467660
Trichloroethene	0.00194		0.000622	0.00106	1	04/28/2020 20:00	WG1467660
Trichlorofluoromethane	U		0.000881	0.00266	1	04/28/2020 20:00	WG1467660
1,2,3-Trichloropropane	U		0.00172	0.0133	1	04/28/2020 20:00	WG1467660
1,2,4-Trimethylbenzene	U		0.00168	0.00532	1	04/28/2020 20:00	WG1467660
1,2,3-Trimethylbenzene	U		0.00168	0.00532	1	04/28/2020 20:00	WG1467660
1,3,5-Trimethylbenzene	U		0.00213	0.00532	1	04/28/2020 20:00	WG1467660
Vinyl acetate	U	~~J4~~	0.00270	0.0133	1	04/28/2020 20:00	WG1467660
Vinyl chloride	U	~~J4~~	0.00124	0.00266	1	04/28/2020 20:00	WG1467660
Xylenes, Total	U		0.000937	0.00692	1	04/28/2020 20:00	WG1467660
(S) Toluene-d8	*112*			*75.0-131*		*04/28/2020 20:00*	WG1467660
(S) Toluene-d8	*105*			*75.0-131*		*05/01/2020 00:30*	WG1469033
(S) 4-Bromofluorobenzene	*103*			*67.0-138*		*04/28/2020 20:00*	WG1467660
(S) 4-Bromofluorobenzene	*98.3*			*67.0-138*		*05/01/2020 00:30*	WG1469033
(S) 1,2-Dichloroethane-d4	*89.5*			*70.0-130*		*04/28/2020 20:00*	WG1467660
(S) 1,2-Dichloroethane-d4	*105*			*70.0-130*		*05/01/2020 00:30*	WG1469033

JC 5/28/2020

MW-330-27
Collected date/time: 04/20/20 11:07

SAMPLE RESULTS - 06

L1212082

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	93.0		1	05/02/2020 22:02	WG1469315

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	U		0.0392	0.0538	1	04/28/2020 20:19	WG1467660
Acrylonitrile	U		0.00388	0.0134	1	04/28/2020 20:19	WG1467660
Benzene	U		0.000502	0.00108	1	04/28/2020 20:19	WG1467660
Bromobenzene	U		0.000968	0.0134	1	04/28/2020 20:19	WG1467660
Bromodichloromethane	U		0.000779	0.00269	1	04/28/2020 20:19	WG1467660
Bromochloromethane	U		0.000606	0.00538	1	04/28/2020 20:19	WG1467660
Bromoform	U		0.00126	0.0269	1	04/28/2020 20:19	WG1467660
Bromomethane	U		0.00212	0.0134	1	04/28/2020 20:19	WG1467660
n-Butylbenzene	U		0.00564	0.0134	1	04/28/2020 20:19	WG1467660
sec-Butylbenzene	U		0.00310	0.0134	1	04/28/2020 20:19	WG1467660
tert-Butylbenzene	U		0.00210	0.00538	1	04/28/2020 20:19	WG1467660
Carbon disulfide	U		0.000753	0.0134	1	04/28/2020 20:19	WG1467660
Carbon tetrachloride	U		0.000965	0.00538	1	04/28/2020 20:19	WG1467660
Chlorobenzene	U		0.000226	0.00269	1	04/28/2020 20:19	WG1467660
Chlorodibromomethane	U		0.000658	0.00269	1	04/28/2020 20:19	WG1467660
Chloroethane	U		0.00183	0.00538	1	04/28/2020 20:19	WG1467660
Chloroform	U		0.00111	0.00269	1	04/28/2020 20:19	WG1467660
Chloromethane	U	UJ J0	0.00468	0.0134	1	04/28/2020 20:19	WG1467660
2-Chlorotoluene	U		0.000930	0.00269	1	04/28/2020 20:19	WG1467660
4-Chlorotoluene	U		0.000484	0.00538	1	04/28/2020 20:19	WG1467660
1,2-Dibromo-3-Chloropropane	U		0.00419	0.0269	1	04/28/2020 20:19	WG1467660
1,2-Dibromoethane	U		0.000697	0.00269	1	04/28/2020 20:19	WG1467660
Dibromomethane	U		0.000806	0.00538	1	04/28/2020 20:19	WG1467660
1,2-Dichlorobenzene	U		0.000457	0.00538	1	04/28/2020 20:19	WG1467660
1,3-Dichlorobenzene	U		0.000645	0.00538	1	04/28/2020 20:19	WG1467660
1,4-Dichlorobenzene	U		0.000753	0.00538	1	04/28/2020 20:19	WG1467660
Dichlorodifluoromethane	U		0.00173	0.00269	1	04/28/2020 20:19	WG1467660
1,1-Dichloroethane	U		0.000528	0.00269	1	04/28/2020 20:19	WG1467660
1,2-Dichloroethane	U		0.000698	0.00269	1	04/28/2020 20:19	WG1467660
1,1-Dichloroethene	U		0.000652	0.00269	1	04/28/2020 20:19	WG1467660
cis-1,2-Dichloroethene	U		0.000789	0.00269	1	04/28/2020 20:19	WG1467660
trans-1,2-Dichloroethene	U		0.00112	0.00538	1	04/28/2020 20:19	WG1467660
1,2-Dichloropropane	U	~~J4~~	0.00153	0.00538	1	04/28/2020 20:19	WG1467660
1,1-Dichloropropene	U		0.000870	0.00269	1	04/28/2020 20:19	WG1467660
1,3-Dichloropropane	U		0.000539	0.00538	1	04/28/2020 20:19	WG1467660
cis-1,3-Dichloropropene	U		0.000814	0.00269	1	04/28/2020 20:19	WG1467660
trans-1,3-Dichloropropene	U		0.00123	0.00538	1	04/28/2020 20:19	WG1467660
trans-1,4-Dichloro-2-butene	U		0.00200	0.00538	1	04/28/2020 20:19	WG1467660
2,2-Dichloropropane	U		0.00148	0.00269	1	04/28/2020 20:19	WG1467660
Di-isopropyl ether	U		0.000441	0.00108	1	04/28/2020 20:19	WG1467660
Ethylbenzene	U		0.000792	0.00269	1	04/28/2020 20:19	WG1467660
Hexachloro-1,3-butadiene	U	UJ J0	0.00645	0.0269	1	04/28/2020 20:19	WG1467660
2-Hexanone	U	~~J4~~	0.00361	0.0269	1	04/28/2020 20:19	WG1467660
n-Hexane	U		0.00243	0.00538	1	04/28/2020 20:19	WG1467660
Iodomethane	U		0.00249	0.0134	1	04/28/2020 20:19	WG1467660
Isopropylbenzene	U		0.000457	0.00269	1	04/28/2020 20:19	WG1467660
p-Isopropyltoluene	U		0.00274	0.00538	1	05/01/2020 00:50	WG1469033
2-Butanone (MEK)	U		0.0683	0.108	1	04/28/2020 20:19	WG1467660
Methylene Chloride	U		0.00714	0.0269	1	04/28/2020 20:19	WG1467660
4-Methyl-2-pentanone (MIBK)	U	~~J4~~	0.00245	0.0269	1	04/28/2020 20:19	WG1467660

JC 5/28/2020

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.000376	0.00108	1	04/28/2020 20:19	WG1467660
Naphthalene	U UJ	J0	0.00525	0.0134	1	04/28/2020 20:19	WG1467660
n-Propylbenzene	U		0.00102	0.00538	1	04/28/2020 20:19	WG1467660
Styrene	U	~~J4~~	0.000246	0.0134	1	04/28/2020 20:19	WG1467660
1,1,1,2-Tetrachloroethane	U		0.00102	0.00269	1	04/28/2020 20:19	WG1467660
1,1,2,2-Tetrachloroethane	U		0.000747	0.00269	1	04/28/2020 20:19	WG1467660
1,1,2-Trichlorotrifluoroethane	U		0.000811	0.00269	1	04/28/2020 20:19	WG1467660
Tetrachloroethene	U		0.000963	0.00269	1	04/28/2020 20:19	WG1467660
Toluene	U		0.00140	0.00538	1	04/28/2020 20:19	WG1467660
1,2,3-Trichlorobenzene	U UJ	J0	0.00788	0.0134	1	04/28/2020 20:19	WG1467660
1,2,4-Trichlorobenzene	U		0.00473	0.0134	1	04/28/2020 20:19	WG1467660
1,1,1-Trichloroethane	U		0.000992	0.00269	1	04/28/2020 20:19	WG1467660
1,1,2-Trichloroethane	U		0.000642	0.00269	1	04/28/2020 20:19	WG1467660
Trichloroethene	0.00335		0.000628	0.00108	1	04/28/2020 20:19	WG1467660
Trichlorofluoromethane	U		0.000889	0.00269	1	04/28/2020 20:19	WG1467660
1,2,3-Trichloropropane	U		0.00174	0.0134	1	04/28/2020 20:19	WG1467660
1,2,4-Trimethylbenzene	U		0.00170	0.00538	1	04/28/2020 20:19	WG1467660
1,2,3-Trimethylbenzene	U		0.00170	0.00538	1	04/28/2020 20:19	WG1467660
1,3,5-Trimethylbenzene	U		0.00215	0.00538	1	04/28/2020 20:19	WG1467660
Vinyl acetate	U	~~J4~~	0.00273	0.0134	1	04/28/2020 20:19	WG1467660
Vinyl chloride	U	~~J4~~	0.00125	0.00269	1	04/28/2020 20:19	WG1467660
Xylenes, Total	U		0.000946	0.00699	1	04/28/2020 20:19	WG1467660
(S) Toluene-d8	*110*			*75.0-131*		*04/28/2020 20:19*	WG1467660
(S) Toluene-d8	*106*			*75.0-131*		*05/01/2020 00:50*	WG1469033
(S) 4-Bromofluorobenzene	*103*			*67.0-138*		*04/28/2020 20:19*	WG1467660
(S) 4-Bromofluorobenzene	*94.1*			*67.0-138*		*05/01/2020 00:50*	WG1469033
(S) 1,2-Dichloroethane-d4	*88.7*			*70.0-130*		*04/28/2020 20:19*	WG1467660
(S) 1,2-Dichloroethane-d4	*104*			*70.0-130*		*05/01/2020 00:50*	WG1469033

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Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	92.8		1	05/02/2020 22:02	WG1469315

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	U		0.0393	0.0539	1	04/28/2020 20:38	WG1467660
Acrylonitrile	U		0.00389	0.0135	1	04/28/2020 20:38	WG1467660
Benzene	U		0.000503	0.00108	1	04/28/2020 20:38	WG1467660
Bromobenzene	U		0.000969	0.0135	1	04/28/2020 20:38	WG1467660
Bromodichloromethane	U		0.000781	0.00269	1	04/28/2020 20:38	WG1467660
Bromochloromethane	U		0.000607	0.00539	1	04/28/2020 20:38	WG1467660
Bromoform	U		0.00126	0.0269	1	04/28/2020 20:38	WG1467660
Bromomethane	U		0.00212	0.0135	1	04/28/2020 20:38	WG1467660
n-Butylbenzene	U		0.00565	0.0135	1	04/28/2020 20:38	WG1467660
sec-Butylbenzene	U		0.00310	0.0135	1	04/28/2020 20:38	WG1467660
tert-Butylbenzene	U		0.00210	0.00539	1	04/28/2020 20:38	WG1467660
Carbon disulfide	U		0.000754	0.0135	1	04/28/2020 20:38	WG1467660
Carbon tetrachloride	U		0.000967	0.00539	1	04/28/2020 20:38	WG1467660
Chlorobenzene	U		0.000226	0.00269	1	04/28/2020 20:38	WG1467660
Chlorodibromomethane	U		0.000659	0.00269	1	04/28/2020 20:38	WG1467660
Chloroethane	U		0.00183	0.00539	1	04/28/2020 20:38	WG1467660
Chloroform	U		0.00111	0.00269	1	04/28/2020 20:38	WG1467660
Chloromethane	U	UJ J0	0.00469	0.0135	1	04/28/2020 20:38	WG1467660
2-Chlorotoluene	U		0.000932	0.00269	1	04/28/2020 20:38	WG1467660
4-Chlorotoluene	U		0.000485	0.00539	1	04/28/2020 20:38	WG1467660
1,2-Dibromo-3-Chloropropane	U		0.00420	0.0269	1	04/28/2020 20:38	WG1467660
1,2-Dibromoethane	U		0.000698	0.00269	1	04/28/2020 20:38	WG1467660
Dibromomethane	U		0.000808	0.00539	1	04/28/2020 20:38	WG1467660
1,2-Dichlorobenzene	U		0.000458	0.00539	1	04/28/2020 20:38	WG1467660
1,3-Dichlorobenzene	U		0.000646	0.00539	1	04/28/2020 20:38	WG1467660
1,4-Dichlorobenzene	U		0.000754	0.00539	1	04/28/2020 20:38	WG1467660
Dichlorodifluoromethane	U		0.00173	0.00269	1	04/28/2020 20:38	WG1467660
1,1-Dichloroethane	U		0.000529	0.00269	1	04/28/2020 20:38	WG1467660
1,2-Dichloroethane	U		0.000699	0.00269	1	04/28/2020 20:38	WG1467660
1,1-Dichloroethene	U		0.000653	0.00269	1	04/28/2020 20:38	WG1467660
cis-1,2-Dichloroethene	U		0.000791	0.00269	1	04/28/2020 20:38	WG1467660
trans-1,2-Dichloroethene	U		0.00112	0.00539	1	04/28/2020 20:38	WG1467660
1,2-Dichloropropane	U	~~J4~~	0.00153	0.00539	1	04/28/2020 20:38	WG1467660
1,1-Dichloropropene	U		0.000871	0.00269	1	04/28/2020 20:38	WG1467660
1,3-Dichloropropane	U		0.000540	0.00539	1	04/28/2020 20:38	WG1467660
cis-1,3-Dichloropropene	U		0.000815	0.00269	1	04/28/2020 20:38	WG1467660
trans-1,3-Dichloropropene	U		0.00123	0.00539	1	04/28/2020 20:38	WG1467660
trans-1,4-Dichloro-2-butene	U		0.00200	0.00539	1	04/28/2020 20:38	WG1467660
2,2-Dichloropropane	U		0.00149	0.00269	1	04/28/2020 20:38	WG1467660
Di-isopropyl ether	U		0.000442	0.00108	1	04/28/2020 20:38	WG1467660
Ethylbenzene	U		0.000794	0.00269	1	04/28/2020 20:38	WG1467660
Hexachloro-1,3-butadiene	U	UJ J0	0.00646	0.0269	1	04/28/2020 20:38	WG1467660
2-Hexanone	U	~~J4~~	0.00362	0.0269	1	04/28/2020 20:38	WG1467660
n-Hexane	U		0.00243	0.00539	1	04/28/2020 20:38	WG1467660
Iodomethane	U		0.00250	0.0135	1	04/28/2020 20:38	WG1467660
Isopropylbenzene	U		0.000458	0.00269	1	04/28/2020 20:38	WG1467660
p-Isopropyltoluene	U		0.00275	0.00539	1	05/01/2020 01:09	WG1469033
2-Butanone (MEK)	U		0.0684	0.108	1	04/28/2020 20:38	WG1467660
Methylene Chloride	U		0.00715	0.0269	1	04/28/2020 20:38	WG1467660
4-Methyl-2-pentanone (MIBK)	U	~~J4~~	0.00246	0.0269	1	04/28/2020 20:38	WG1467660

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MW-330-32
Collected date/time: 04/20/20 11:25

SAMPLE RESULTS - 07

L1212082

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.000377	0.00108	1	04/28/2020 20:38	WG1467660
Naphthalene	U	UJ J0	0.00526	0.0135	1	04/28/2020 20:38	WG1467660
n-Propylbenzene	U		0.00102	0.00539	1	04/28/2020 20:38	WG1467660
Styrene	U	~~J4~~	0.000247	0.0135	1	04/28/2020 20:38	WG1467660
1,1,1,2-Tetrachloroethane	U		0.00102	0.00269	1	04/28/2020 20:38	WG1467660
1,1,2,2-Tetrachloroethane	U		0.000749	0.00269	1	04/28/2020 20:38	WG1467660
1,1,2-Trichlorotrifluoroethane	U		0.000812	0.00269	1	04/28/2020 20:38	WG1467660
Tetrachloroethene	0.00128	J	0.000965	0.00269	1	04/28/2020 20:38	WG1467660
Toluene	U		0.00140	0.00539	1	04/28/2020 20:38	WG1467660
1,2,3-Trichlorobenzene	U	UJ J0	0.00790	0.0135	1	04/28/2020 20:38	WG1467660
1,2,4-Trichlorobenzene	U		0.00474	0.0135	1	04/28/2020 20:38	WG1467660
1,1,1-Trichloroethane	U		0.000994	0.00269	1	04/28/2020 20:38	WG1467660
1,1,2-Trichloroethane	U		0.000643	0.00269	1	04/28/2020 20:38	WG1467660
Trichloroethene	0.00868		0.000629	0.00108	1	04/28/2020 20:38	WG1467660
Trichlorofluoromethane	U		0.000891	0.00269	1	04/28/2020 20:38	WG1467660
1,2,3-Trichloropropane	U		0.00174	0.0135	1	04/28/2020 20:38	WG1467660
1,2,4-Trimethylbenzene	U		0.00170	0.00539	1	04/28/2020 20:38	WG1467660
1,2,3-Trimethylbenzene	U		0.00170	0.00539	1	04/28/2020 20:38	WG1467660
1,3,5-Trimethylbenzene	U		0.00215	0.00539	1	04/28/2020 20:38	WG1467660
Vinyl acetate	U	~~J4~~	0.00274	0.0135	1	04/28/2020 20:38	WG1467660
Vinyl chloride	U	~~J4~~	0.00125	0.00269	1	04/28/2020 20:38	WG1467660
Xylenes, Total	U		0.000948	0.00700	1	04/28/2020 20:38	WG1467660
(S) Toluene-d8	*112*			*75.0-131*		*04/28/2020 20:38*	WG1467660
(S) Toluene-d8	*107*			*75.0-131*		*05/01/2020 01:09*	WG1469033
(S) 4-Bromofluorobenzene	*96.4*			*67.0-138*		*04/28/2020 20:38*	WG1467660
(S) 4-Bromofluorobenzene	*96.0*			*67.0-138*		*05/01/2020 01:09*	WG1469033
(S) 1,2-Dichloroethane-d4	*88.1*			*70.0-130*		*04/28/2020 20:38*	WG1467660
(S) 1,2-Dichloroethane-d4	*104*			*70.0-130*		*05/01/2020 01:09*	WG1469033

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Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	92.9		1	05/04/2020 15:42	WG1469317

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	U		0.0393	0.0538	1	04/28/2020 20:57	WG1467660
Acrylonitrile	U		0.00388	0.0134	1	04/28/2020 20:57	WG1467660
Benzene	U		0.000502	0.00108	1	04/28/2020 20:57	WG1467660
Bromobenzene	U		0.000968	0.0134	1	04/28/2020 20:57	WG1467660
Bromodichloromethane	U		0.000780	0.00269	1	04/28/2020 20:57	WG1467660
Bromochloromethane	U		0.000607	0.00538	1	04/28/2020 20:57	WG1467660
Bromoform	U		0.00126	0.0269	1	04/28/2020 20:57	WG1467660
Bromomethane	U		0.00212	0.0134	1	04/28/2020 20:57	WG1467660
n-Butylbenzene	U		0.00565	0.0134	1	04/28/2020 20:57	WG1467660
sec-Butylbenzene	U		0.00310	0.0134	1	04/28/2020 20:57	WG1467660
tert-Butylbenzene	U		0.00210	0.00538	1	04/28/2020 20:57	WG1467660
Carbon disulfide	U		0.000753	0.0134	1	04/28/2020 20:57	WG1467660
Carbon tetrachloride	U		0.000966	0.00538	1	04/28/2020 20:57	WG1467660
Chlorobenzene	U		0.000226	0.00269	1	04/28/2020 20:57	WG1467660
Chlorodibromomethane	U		0.000658	0.00269	1	04/28/2020 20:57	WG1467660
Chloroethane	U		0.00183	0.00538	1	04/28/2020 20:57	WG1467660
Chloroform	U		0.00111	0.00269	1	04/28/2020 20:57	WG1467660
Chloromethane	U	UJ J0	0.00468	0.0134	1	04/28/2020 20:57	WG1467660
2-Chlorotoluene	U		0.000931	0.00269	1	04/28/2020 20:57	WG1467660
4-Chlorotoluene	U		0.000484	0.00538	1	04/28/2020 20:57	WG1467660
1,2-Dibromo-3-Chloropropane	U		0.00420	0.0269	1	04/28/2020 20:57	WG1467660
1,2-Dibromoethane	U		0.000697	0.00269	1	04/28/2020 20:57	WG1467660
Dibromomethane	U		0.000807	0.00538	1	04/28/2020 20:57	WG1467660
1,2-Dichlorobenzene	U		0.000457	0.00538	1	04/28/2020 20:57	WG1467660
1,3-Dichlorobenzene	U		0.000646	0.00538	1	04/28/2020 20:57	WG1467660
1,4-Dichlorobenzene	U		0.000753	0.00538	1	04/28/2020 20:57	WG1467660
Dichlorodifluoromethane	U		0.00173	0.00269	1	04/28/2020 20:57	WG1467660
1,1-Dichloroethane	U		0.000528	0.00269	1	04/28/2020 20:57	WG1467660
1,2-Dichloroethane	U		0.000698	0.00269	1	04/28/2020 20:57	WG1467660
1,1-Dichloroethene	U		0.000652	0.00269	1	04/28/2020 20:57	WG1467660
cis-1,2-Dichloroethene	U		0.000790	0.00269	1	04/28/2020 20:57	WG1467660
trans-1,2-Dichloroethene	U		0.00112	0.00538	1	04/28/2020 20:57	WG1467660
1,2-Dichloropropane	U	~~J4~~	0.00153	0.00538	1	04/28/2020 20:57	WG1467660
1,1-Dichloropropene	U		0.000870	0.00269	1	04/28/2020 20:57	WG1467660
1,3-Dichloropropane	U		0.000539	0.00538	1	04/28/2020 20:57	WG1467660
cis-1,3-Dichloropropene	U		0.000814	0.00269	1	04/28/2020 20:57	WG1467660
trans-1,3-Dichloropropene	U		0.00123	0.00538	1	04/28/2020 20:57	WG1467660
trans-1,4-Dichloro-2-butene	U		0.00200	0.00538	1	04/28/2020 20:57	WG1467660
2,2-Dichloropropane	U		0.00148	0.00269	1	04/28/2020 20:57	WG1467660
Di-isopropyl ether	U		0.000441	0.00108	1	04/28/2020 20:57	WG1467660
Ethylbenzene	U		0.000793	0.00269	1	04/28/2020 20:57	WG1467660
Hexachloro-1,3-butadiene	U	UJ J0	0.00646	0.0269	1	04/28/2020 20:57	WG1467660
2-Hexanone	U	~~J4~~	0.00361	0.0269	1	04/28/2020 20:57	WG1467660
n-Hexane	U		0.00243	0.00538	1	04/28/2020 20:57	WG1467660
Iodomethane	U		0.00250	0.0134	1	04/28/2020 20:57	WG1467660
Isopropylbenzene	U		0.000457	0.00269	1	04/28/2020 20:57	WG1467660
p-Isopropyltoluene	U		0.00274	0.00538	1	04/28/2020 20:57	WG1467660
2-Butanone (MEK)	U		0.0683	0.108	1	04/28/2020 20:57	WG1467660
Methylene Chloride	U		0.00714	0.0269	1	04/28/2020 20:57	WG1467660
4-Methyl-2-pentanone (MIBK)	U	~~J4~~	0.00245	0.0269	1	04/28/2020 20:57	WG1467660

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Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.000377	0.00108	1	04/28/2020 20:57	WG1467660
Naphthalene	U	UJ J0	0.00525	0.0134	1	04/28/2020 20:57	WG1467660
n-Propylbenzene	U		0.00102	0.00538	1	04/28/2020 20:57	WG1467660
Styrene	U	~~J4~~	0.000246	0.0134	1	04/28/2020 20:57	WG1467660
1,1,1,2-Tetrachloroethane	U		0.00102	0.00269	1	04/28/2020 20:57	WG1467660
1,1,2,2-Tetrachloroethane	U		0.000748	0.00269	1	04/28/2020 20:57	WG1467660
1,1,2-Trichlorotrifluoroethane	U		0.000811	0.00269	1	04/28/2020 20:57	WG1467660
Tetrachloroethene	U		0.000964	0.00269	1	04/28/2020 20:57	WG1467660
Toluene	U		0.00140	0.00538	1	04/28/2020 20:57	WG1467660
1,2,3-Trichlorobenzene	U	UJ J0	0.00789	0.0134	1	04/28/2020 20:57	WG1467660
1,2,4-Trichlorobenzene	U		0.00473	0.0134	1	04/28/2020 20:57	WG1467660
1,1,1-Trichloroethane	U		0.000993	0.00269	1	04/28/2020 20:57	WG1467660
1,1,2-Trichloroethane	U		0.000642	0.00269	1	04/28/2020 20:57	WG1467660
Trichloroethene	U		0.000628	0.00108	1	04/28/2020 20:57	WG1467660
Trichlorofluoromethane	U		0.000890	0.00269	1	04/28/2020 20:57	WG1467660
1,2,3-Trichloropropane	U		0.00174	0.0134	1	04/28/2020 20:57	WG1467660
1,2,4-Trimethylbenzene	U		0.00170	0.00538	1	04/28/2020 20:57	WG1467660
1,2,3-Trimethylbenzene	U		0.00170	0.00538	1	04/28/2020 20:57	WG1467660
1,3,5-Trimethylbenzene	U		0.00215	0.00538	1	04/28/2020 20:57	WG1467660
Vinyl acetate	U	~~J4~~	0.00273	0.0134	1	04/28/2020 20:57	WG1467660
Vinyl chloride	U	~~J4~~	0.00125	0.00269	1	04/28/2020 20:57	WG1467660
Xylenes, Total	U		0.000947	0.00699	1	04/28/2020 20:57	WG1467660
(S) Toluene-d8	*112*			*75.0-131*		*04/28/2020 20:57*	WG1467660
(S) 4-Bromofluorobenzene	*103*			*67.0-138*		*04/28/2020 20:57*	WG1467660
(S) 1,2-Dichloroethane-d4	*90.4*			*70.0-130*		*04/28/2020 20:57*	WG1467660

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

JC 5/28/2020

Total Solids by Method 2540 G-2011

	Result	Qualifier	Dilution	Analysis	Batch
Analyte	%			date / time	
Total Solids	95.5		1	05/04/2020 15:42	WG1469317

Volatile Organic Compounds (GC/MS) by Method 8260D

	Result (dry)		Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg			mg/kg	mg/kg		date / time	
Acetone	U			0.0382	0.0523	1	04/28/2020 21:16	WG1467660
Acrylonitrile	U			0.00378	0.0131	1	04/28/2020 21:16	WG1467660
Benzene	U			0.000489	0.00105	1	04/28/2020 21:16	WG1467660
Bromobenzene	U			0.000942	0.0131	1	04/28/2020 21:16	WG1467660
Bromodichloromethane	U			0.000759	0.00262	1	04/28/2020 21:16	WG1467660
Bromochloromethane	U			0.000590	0.00523	1	04/28/2020 21:16	WG1467660
Bromoform	U			0.00122	0.0262	1	04/28/2020 21:16	WG1467660
Bromomethane	U			0.00206	0.0131	1	04/28/2020 21:16	WG1467660
n-Butylbenzene	U			0.00550	0.0131	1	04/28/2020 21:16	WG1467660
sec-Butylbenzene	U			0.00302	0.0131	1	04/28/2020 21:16	WG1467660
tert-Butylbenzene	U			0.00204	0.00523	1	04/28/2020 21:16	WG1467660
Carbon disulfide	0.00310		J	0.000733	0.0131	1	04/28/2020 21:16	WG1467660
Carbon tetrachloride	U			0.000940	0.00523	1	04/28/2020 21:16	WG1467660
Chlorobenzene	U			0.000220	0.00262	1	04/28/2020 21:16	WG1467660
Chlorodibromomethane	U			0.000641	0.00262	1	04/28/2020 21:16	WG1467660
Chloroethane	U			0.00178	0.00523	1	04/28/2020 21:16	WG1467660
Chloroform	U			0.00108	0.00262	1	04/28/2020 21:16	WG1467660
Chloromethane	U	UJ	J0	0.00455	0.0131	1	04/28/2020 21:16	WG1467660
2-Chlorotoluene	U			0.000906	0.00262	1	04/28/2020 21:16	WG1467660
4-Chlorotoluene	U			0.000471	0.00523	1	04/28/2020 21:16	WG1467660
1,2-Dibromo-3-Chloropropane	U			0.00408	0.0262	1	04/28/2020 21:16	WG1467660
1,2-Dibromoethane	U			0.000678	0.00262	1	04/28/2020 21:16	WG1467660
Dibromomethane	U			0.000785	0.00523	1	04/28/2020 21:16	WG1467660
1,2-Dichlorobenzene	U			0.000445	0.00523	1	04/28/2020 21:16	WG1467660
1,3-Dichlorobenzene	U			0.000628	0.00523	1	04/28/2020 21:16	WG1467660
1,4-Dichlorobenzene	U			0.000733	0.00523	1	04/28/2020 21:16	WG1467660
Dichlorodifluoromethane	U			0.00169	0.00262	1	04/28/2020 21:16	WG1467660
1,1-Dichloroethane	U			0.000514	0.00262	1	04/28/2020 21:16	WG1467660
1,2-Dichloroethane	U			0.000679	0.00262	1	04/28/2020 21:16	WG1467660
1,1-Dichloroethene	U			0.000634	0.00262	1	04/28/2020 21:16	WG1467660
cis-1,2-Dichloroethene	U			0.000768	0.00262	1	04/28/2020 21:16	WG1467660
trans-1,2-Dichloroethene	U			0.00109	0.00523	1	04/28/2020 21:16	WG1467660
1,2-Dichloropropane	U		~~J4~~	0.00149	0.00523	1	04/28/2020 21:16	WG1467660
1,1-Dichloropropene	U			0.000847	0.00262	1	04/28/2020 21:16	WG1467660
1,3-Dichloropropane	U			0.000525	0.00523	1	04/28/2020 21:16	WG1467660
cis-1,3-Dichloropropene	U			0.000793	0.00262	1	04/28/2020 21:16	WG1467660
trans-1,3-Dichloropropene	U			0.00119	0.00523	1	04/28/2020 21:16	WG1467660
trans-1,4-Dichloro-2-butene	U			0.00195	0.00523	1	04/28/2020 21:16	WG1467660
2,2-Dichloropropane	U			0.00144	0.00262	1	04/28/2020 21:16	WG1467660
Di-isopropyl ether	U			0.000429	0.00105	1	04/28/2020 21:16	WG1467660
Ethylbenzene	U			0.000772	0.00262	1	04/28/2020 21:16	WG1467660
Hexachloro-1,3-butadiene	U	UJ	J0	0.00628	0.0262	1	04/28/2020 21:16	WG1467660
2-Hexanone	U		~~J4~~	0.00352	0.0262	1	04/28/2020 21:16	WG1467660
n-Hexane	U			0.00237	0.00523	1	04/28/2020 21:16	WG1467660
Iodomethane	U			0.00243	0.0131	1	04/28/2020 21:16	WG1467660
Isopropylbenzene	U			0.000445	0.00262	1	04/28/2020 21:16	WG1467660
p-Isopropyltoluene	U			0.00267	0.00523	1	04/28/2020 21:16	WG1467660
2-Butanone (MEK)	U			0.0665	0.105	1	04/28/2020 21:16	WG1467660
Methylene Chloride	U			0.00695	0.0262	1	04/28/2020 21:16	WG1467660
4-Methyl-2-pentanone (MIBK)	U		~~J4~~	0.00239	0.0262	1	04/28/2020 21:16	WG1467660

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Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.000366	0.00105	1	04/28/2020 21:16	WG1467660
Naphthalene	U	UJ J0	0.00511	0.0131	1	04/28/2020 21:16	WG1467660
n-Propylbenzene	U		0.000995	0.00523	1	04/28/2020 21:16	WG1467660
Styrene	U	~~J4~~	0.000240	0.0131	1	04/28/2020 21:16	WG1467660
1,1,1,2-Tetrachloroethane	U		0.000993	0.00262	1	04/28/2020 21:16	WG1467660
1,1,2,2-Tetrachloroethane	U		0.000728	0.00262	1	04/28/2020 21:16	WG1467660
1,1,2-Trichlorotrifluoroethane	U		0.000789	0.00262	1	04/28/2020 21:16	WG1467660
Tetrachloroethene	U		0.000938	0.00262	1	04/28/2020 21:16	WG1467660
Toluene	U		0.00136	0.00523	1	04/28/2020 21:16	WG1467660
1,2,3-Trichlorobenzene	U	UJ J0	0.00767	0.0131	1	04/28/2020 21:16	WG1467660
1,2,4-Trichlorobenzene	U		0.00461	0.0131	1	04/28/2020 21:16	WG1467660
1,1,1-Trichloroethane	U		0.000966	0.00262	1	04/28/2020 21:16	WG1467660
1,1,2-Trichloroethane	U		0.000625	0.00262	1	04/28/2020 21:16	WG1467660
Trichloroethene	U		0.000611	0.00105	1	04/28/2020 21:16	WG1467660
Trichlorofluoromethane	U		0.000866	0.00262	1	04/28/2020 21:16	WG1467660
1,2,3-Trichloropropane	U		0.00170	0.0131	1	04/28/2020 21:16	WG1467660
1,2,4-Trimethylbenzene	U		0.00165	0.00523	1	04/28/2020 21:16	WG1467660
1,2,3-Trimethylbenzene	U		0.00165	0.00523	1	04/28/2020 21:16	WG1467660
1,3,5-Trimethylbenzene	U		0.00209	0.00523	1	04/28/2020 21:16	WG1467660
Vinyl acetate	U	~~J4~~	0.00266	0.0131	1	04/28/2020 21:16	WG1467660
Vinyl chloride	U	~~J4~~	0.00121	0.00262	1	04/28/2020 21:16	WG1467660
Xylenes, Total	0.00161	J	0.000921	0.00681	1	04/28/2020 21:16	WG1467660
(S) Toluene-d8	*111*			*75.0-131*		*04/28/2020 21:16*	WG1467660
(S) 4-Bromofluorobenzene	*104*			*67.0-138*		*04/28/2020 21:16*	WG1467660
(S) 1,2-Dichloroethane-d4	*90.9*			*70.0-130*		*04/28/2020 21:16*	WG1467660

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

JC 5/28/2020

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	88.3		1	05/04/2020 15:42	WG1469317

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	U		0.0413	0.0566	1	04/28/2020 21:35	WG1467660
Acrylonitrile	U		0.00409	0.0142	1	04/28/2020 21:35	WG1467660
Benzene	U		0.000529	0.00113	1	04/28/2020 21:35	WG1467660
Bromobenzene	U		0.00102	0.0142	1	04/28/2020 21:35	WG1467660
Bromodichloromethane	U		0.000821	0.00283	1	04/28/2020 21:35	WG1467660
Bromochloromethane	U		0.000638	0.00566	1	04/28/2020 21:35	WG1467660
Bromoform	U		0.00132	0.0283	1	04/28/2020 21:35	WG1467660
Bromomethane	U		0.00223	0.0142	1	04/28/2020 21:35	WG1467660
n-Butylbenzene	U		0.00594	0.0142	1	04/28/2020 21:35	WG1467660
sec-Butylbenzene	U		0.00326	0.0142	1	04/28/2020 21:35	WG1467660
tert-Butylbenzene	U		0.00221	0.00566	1	04/28/2020 21:35	WG1467660
Carbon disulfide	0.00231	J	0.000792	0.0142	1	04/28/2020 21:35	WG1467660
Carbon tetrachloride	U		0.00102	0.00566	1	04/28/2020 21:35	WG1467660
Chlorobenzene	U		0.000238	0.00283	1	04/28/2020 21:35	WG1467660
Chlorodibromomethane	U		0.000693	0.00283	1	04/28/2020 21:35	WG1467660
Chloroethane	U		0.00192	0.00566	1	04/28/2020 21:35	WG1467660
Chloroform	U		0.00117	0.00283	1	04/28/2020 21:35	WG1467660
Chloromethane	U UJ	J0	0.00492	0.0142	1	04/28/2020 21:35	WG1467660
2-Chlorotoluene	U		0.000979	0.00283	1	04/28/2020 21:35	WG1467660
4-Chlorotoluene	U		0.000509	0.00566	1	04/28/2020 21:35	WG1467660
1,2-Dibromo-3-Chloropropane	U		0.00441	0.0283	1	04/28/2020 21:35	WG1467660
1,2-Dibromoethane	U		0.000734	0.00283	1	04/28/2020 21:35	WG1467660
Dibromomethane	U		0.000849	0.00566	1	04/28/2020 21:35	WG1467660
1,2-Dichlorobenzene	U		0.000481	0.00566	1	04/28/2020 21:35	WG1467660
1,3-Dichlorobenzene	U		0.000679	0.00566	1	04/28/2020 21:35	WG1467660
1,4-Dichlorobenzene	U		0.000792	0.00566	1	04/28/2020 21:35	WG1467660
Dichlorodifluoromethane	U		0.00182	0.00283	1	04/28/2020 21:35	WG1467660
1,1-Dichloroethane	U		0.000556	0.00283	1	04/28/2020 21:35	WG1467660
1,2-Dichloroethane	U		0.000735	0.00283	1	04/28/2020 21:35	WG1467660
1,1-Dichloroethene	U		0.000686	0.00283	1	04/28/2020 21:35	WG1467660
cis-1,2-Dichloroethene	U		0.000831	0.00283	1	04/28/2020 21:35	WG1467660
trans-1,2-Dichloroethene	U		0.00118	0.00566	1	04/28/2020 21:35	WG1467660
1,2-Dichloropropane	U	~~J4~~	0.00161	0.00566	1	04/28/2020 21:35	WG1467660
1,1-Dichloropropene	U		0.000916	0.00283	1	04/28/2020 21:35	WG1467660
1,3-Dichloropropane	U		0.000567	0.00566	1	04/28/2020 21:35	WG1467660
cis-1,3-Dichloropropene	U		0.000857	0.00283	1	04/28/2020 21:35	WG1467660
trans-1,3-Dichloropropene	U		0.00129	0.00566	1	04/28/2020 21:35	WG1467660
trans-1,4-Dichloro-2-butene	U		0.00211	0.00566	1	04/28/2020 21:35	WG1467660
2,2-Dichloropropane	U		0.00156	0.00283	1	04/28/2020 21:35	WG1467660
Di-isopropyl ether	U		0.000464	0.00113	1	04/28/2020 21:35	WG1467660
Ethylbenzene	U		0.000834	0.00283	1	04/28/2020 21:35	WG1467660
Hexachloro-1,3-butadiene	U UJ	J0	0.00679	0.0283	1	04/28/2020 21:35	WG1467660
2-Hexanone	U	~~J4~~	0.00380	0.0283	1	04/28/2020 21:35	WG1467660
n-Hexane	U		0.00256	0.00566	1	04/28/2020 21:35	WG1467660
Iodomethane	U		0.00263	0.0142	1	04/28/2020 21:35	WG1467660
Isopropylbenzene	U		0.000481	0.00283	1	04/28/2020 21:35	WG1467660
p-Isopropyltoluene	U		0.00289	0.00566	1	04/28/2020 21:35	WG1467660
2-Butanone (MEK)	U		0.0719	0.113	1	04/28/2020 21:35	WG1467660
Methylene Chloride	U		0.00752	0.0283	1	04/28/2020 21:35	WG1467660
4-Methyl-2-pentanone (MIBK)	U	~~J4~~	0.00258	0.0283	1	04/28/2020 21:35	WG1467660

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Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.000396	0.00113	1	04/28/2020 21:35	WG1467660
Naphthalene	U	UJ J0	0.00552	0.0142	1	04/28/2020 21:35	WG1467660
n-Propylbenzene	U		0.00108	0.00566	1	04/28/2020 21:35	WG1467660
Styrene	U	~~J4~~	0.000259	0.0142	1	04/28/2020 21:35	WG1467660
1,1,1,2-Tetrachloroethane	U		0.00107	0.00283	1	04/28/2020 21:35	WG1467660
1,1,2,2-Tetrachloroethane	U		0.000787	0.00283	1	04/28/2020 21:35	WG1467660
1,1,2-Trichlorotrifluoroethane	U		0.000854	0.00283	1	04/28/2020 21:35	WG1467660
Tetrachloroethene	U		0.00101	0.00283	1	04/28/2020 21:35	WG1467660
Toluene	U		0.00147	0.00566	1	04/28/2020 21:35	WG1467660
1,2,3-Trichlorobenzene	U	UJ J0	0.00830	0.0142	1	04/28/2020 21:35	WG1467660
1,2,4-Trichlorobenzene	U		0.00498	0.0142	1	04/28/2020 21:35	WG1467660
1,1,1-Trichloroethane	U		0.00104	0.00283	1	04/28/2020 21:35	WG1467660
1,1,2-Trichloroethane	U		0.000676	0.00283	1	04/28/2020 21:35	WG1467660
Trichloroethene	U		0.000661	0.00113	1	04/28/2020 21:35	WG1467660
Trichlorofluoromethane	U		0.000936	0.00283	1	04/28/2020 21:35	WG1467660
1,2,3-Trichloropropane	U		0.00183	0.0142	1	04/28/2020 21:35	WG1467660
1,2,4-Trimethylbenzene	U		0.00179	0.00566	1	04/28/2020 21:35	WG1467660
1,2,3-Trimethylbenzene	U		0.00179	0.00566	1	04/28/2020 21:35	WG1467660
1,3,5-Trimethylbenzene	U		0.00226	0.00566	1	04/28/2020 21:35	WG1467660
Vinyl acetate	U	~~J4~~	0.00288	0.0142	1	04/28/2020 21:35	WG1467660
Vinyl chloride	U	~~J4~~	0.00131	0.00283	1	04/28/2020 21:35	WG1467660
Xylenes, Total	U		0.000996	0.00736	1	04/28/2020 21:35	WG1467660
(S) Toluene-d8	*113*			*75.0-131*		*04/28/2020 21:35*	WG1467660
(S) 4-Bromofluorobenzene	*102*			*67.0-138*		*04/28/2020 21:35*	WG1467660
(S) 1,2-Dichloroethane-d4	*90.7*			*70.0-130*		*04/28/2020 21:35*	WG1467660

JC 5/28/2020

SAMPLE RESULTS - 11

L1212082

MW-330-52

Collected date/time: 04/20/20 12:40

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	91.1		1	05/04/2020 15:42	WG1469317

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	U		0.0401	0.0549	1	04/28/2020 21:54	WG1467660
Acrylonitrile	U		0.00396	0.0137	1	04/28/2020 21:54	WG1467660
Benzene	U		0.000513	0.00110	1	04/28/2020 21:54	WG1467660
Bromobenzene	U		0.000988	0.0137	1	04/28/2020 21:54	WG1467660
Bromodichloromethane	U		0.000796	0.00274	1	04/28/2020 21:54	WG1467660
Bromochloromethane	U		0.000619	0.00549	1	04/28/2020 21:54	WG1467660
Bromoform	U		0.00128	0.0274	1	04/28/2020 21:54	WG1467660
Bromomethane	U		0.00216	0.0137	1	04/28/2020 21:54	WG1467660
n-Butylbenzene	U		0.00576	0.0137	1	04/28/2020 21:54	WG1467660
sec-Butylbenzene	U		0.00316	0.0137	1	04/28/2020 21:54	WG1467660
tert-Butylbenzene	U		0.00214	0.00549	1	04/28/2020 21:54	WG1467660
Carbon disulfide	0.00138	J	0.000768	0.0137	1	04/28/2020 21:54	WG1467660
Carbon tetrachloride	U		0.000986	0.00549	1	04/28/2020 21:54	WG1467660
Chlorobenzene	U		0.000231	0.00274	1	04/28/2020 21:54	WG1467660
Chlorodibromomethane	U		0.000672	0.00274	1	04/28/2020 21:54	WG1467660
Chloroethane	U		0.00187	0.00549	1	04/28/2020 21:54	WG1467660
Chloroform	U		0.00113	0.00274	1	04/28/2020 21:54	WG1467660
Chloromethane	U	UJ J0	0.00477	0.0137	1	04/28/2020 21:54	WG1467660
2-Chlorotoluene	U		0.000949	0.00274	1	04/28/2020 21:54	WG1467660
4-Chlorotoluene	U		0.000494	0.00549	1	04/28/2020 21:54	WG1467660
1,2-Dibromo-3-Chloropropane	U		0.00428	0.0274	1	04/28/2020 21:54	WG1467660
1,2-Dibromoethane	U		0.000711	0.00274	1	04/28/2020 21:54	WG1467660
Dibromomethane	U		0.000823	0.00549	1	04/28/2020 21:54	WG1467660
1,2-Dichlorobenzene	U		0.000467	0.00549	1	04/28/2020 21:54	WG1467660
1,3-Dichlorobenzene	U		0.000659	0.00549	1	04/28/2020 21:54	WG1467660
1,4-Dichlorobenzene	U		0.000768	0.00549	1	04/28/2020 21:54	WG1467660
Dichlorodifluoromethane	U		0.00177	0.00274	1	04/28/2020 21:54	WG1467660
1,1-Dichloroethane	U		0.000539	0.00274	1	04/28/2020 21:54	WG1467660
1,2-Dichloroethane	U		0.000712	0.00274	1	04/28/2020 21:54	WG1467660
1,1-Dichloroethene	U		0.000665	0.00274	1	04/28/2020 21:54	WG1467660
cis-1,2-Dichloroethene	U		0.000806	0.00274	1	04/28/2020 21:54	WG1467660
trans-1,2-Dichloroethene	U		0.00114	0.00549	1	04/28/2020 21:54	WG1467660
1,2-Dichloropropane	U	~~J4~~	0.00156	0.00549	1	04/28/2020 21:54	WG1467660
1,1-Dichloropropene	U		0.000888	0.00274	1	04/28/2020 21:54	WG1467660
1,3-Dichloropropane	U		0.000550	0.00549	1	04/28/2020 21:54	WG1467660
cis-1,3-Dichloropropene	U		0.000831	0.00274	1	04/28/2020 21:54	WG1467660
trans-1,3-Dichloropropene	U		0.00125	0.00549	1	04/28/2020 21:54	WG1467660
trans-1,4-Dichloro-2-butene	U		0.00204	0.00549	1	04/28/2020 21:54	WG1467660
2,2-Dichloropropane	U		0.00151	0.00274	1	04/28/2020 21:54	WG1467660
Di-isopropyl ether	U		0.000450	0.00110	1	04/28/2020 21:54	WG1467660
Ethylbenzene	U		0.000809	0.00274	1	04/28/2020 21:54	WG1467660
Hexachloro-1,3-butadiene	U	UJ J0	0.00659	0.0274	1	04/28/2020 21:54	WG1467660
2-Hexanone	U	~~J4~~	0.00369	0.0274	1	04/28/2020 21:54	WG1467660
n-Hexane	U		0.00248	0.00549	1	04/28/2020 21:54	WG1467660
Iodomethane	U		0.00255	0.0137	1	04/28/2020 21:54	WG1467660
Isopropylbenzene	U		0.000467	0.00274	1	04/28/2020 21:54	WG1467660
p-Isopropyltoluene	U		0.00280	0.00549	1	04/28/2020 21:54	WG1467660
2-Butanone (MEK)	U		0.0697	0.110	1	04/28/2020 21:54	WG1467660
Methylene Chloride	U		0.00729	0.0274	1	04/28/2020 21:54	WG1467660
4-Methyl-2-pentanone (MIBK)	U	~~J4~~	0.00250	0.0274	1	04/28/2020 21:54	WG1467660

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MW-330-52

Collected date/time: 04/20/20 12:40

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.000384	0.00110	1	04/28/2020 21:54	WG1467660
Naphthalene	U	UJ J0	0.00536	0.0137	1	04/28/2020 21:54	WG1467660
n-Propylbenzene	U		0.00104	0.00549	1	04/28/2020 21:54	WG1467660
Styrene	U	~~J4~~	0.000251	0.0137	1	04/28/2020 21:54	WG1467660
1,1,1,2-Tetrachloroethane	U		0.00104	0.00274	1	04/28/2020 21:54	WG1467660
1,1,2,2-Tetrachloroethane	U		0.000763	0.00274	1	04/28/2020 21:54	WG1467660
1,1,2-Trichlorotrifluoroethane	U		0.000828	0.00274	1	04/28/2020 21:54	WG1467660
Tetrachloroethene	U		0.000984	0.00274	1	04/28/2020 21:54	WG1467660
Toluene	0.00272	J	0.00143	0.00549	1	04/28/2020 21:54	WG1467660
1,2,3-Trichlorobenzene	U	UJ J0	0.00805	0.0137	1	04/28/2020 21:54	WG1467660
1,2,4-Trichlorobenzene	U		0.00483	0.0137	1	04/28/2020 21:54	WG1467660
1,1,1-Trichloroethane	U		0.00101	0.00274	1	04/28/2020 21:54	WG1467660
1,1,2-Trichloroethane	U		0.000655	0.00274	1	04/28/2020 21:54	WG1467660
Trichloroethene	U		0.000641	0.00110	1	04/28/2020 21:54	WG1467660
Trichlorofluoromethane	U		0.000908	0.00274	1	04/28/2020 21:54	WG1467660
1,2,3-Trichloropropane	U		0.00178	0.0137	1	04/28/2020 21:54	WG1467660
1,2,4-Trimethylbenzene	U		0.00173	0.00549	1	04/28/2020 21:54	WG1467660
1,2,3-Trimethylbenzene	U		0.00173	0.00549	1	04/28/2020 21:54	WG1467660
1,3,5-Trimethylbenzene	U		0.00220	0.00549	1	04/28/2020 21:54	WG1467660
Vinyl acetate	U	~~J4~~	0.00279	0.0137	1	04/28/2020 21:54	WG1467660
Vinyl chloride	U	~~J4~~	0.00127	0.00274	1	04/28/2020 21:54	WG1467660
Xylenes, Total	0.00382	J	0.000966	0.00713	1	04/28/2020 21:54	WG1467660
(S) Toluene-d8	*111*			*75.0-131*		*04/28/2020 21:54*	WG1467660
(S) 4-Bromofluorobenzene	*103*			*67.0-138*		*04/28/2020 21:54*	WG1467660
(S) 1,2-Dichloroethane-d4	*91.1*			*70.0-130*		*04/28/2020 21:54*	WG1467660

JC 5/28/2020

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	91.9		1	05/04/2020 15:42	WG1469317

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	U		0.0397	0.0544	1	04/28/2020 22:13	WG1467660
Acrylonitrile	U		0.00393	0.0136	1	04/28/2020 22:13	WG1467660
Benzene	U		0.000508	0.00109	1	04/28/2020 22:13	WG1467660
Bromobenzene	U		0.000979	0.0136	1	04/28/2020 22:13	WG1467660
Bromodichloromethane	U		0.000789	0.00272	1	04/28/2020 22:13	WG1467660
Bromochloromethane	U		0.000614	0.00544	1	04/28/2020 22:13	WG1467660
Bromoform	U		0.00127	0.0272	1	04/28/2020 22:13	WG1467660
Bromomethane	U		0.00214	0.0136	1	04/28/2020 22:13	WG1467660
n-Butylbenzene	U		0.00571	0.0136	1	04/28/2020 22:13	WG1467660
sec-Butylbenzene	U		0.00313	0.0136	1	04/28/2020 22:13	WG1467660
tert-Butylbenzene	U		0.00212	0.00544	1	04/28/2020 22:13	WG1467660
Carbon disulfide	0.00466	J	0.000762	0.0136	1	04/28/2020 22:13	WG1467660
Carbon tetrachloride	U		0.000977	0.00544	1	04/28/2020 22:13	WG1467660
Chlorobenzene	U		0.000228	0.00272	1	04/28/2020 22:13	WG1467660
Chlorodibromomethane	U		0.000666	0.00272	1	04/28/2020 22:13	WG1467660
Chloroethane	U		0.00185	0.00544	1	04/28/2020 22:13	WG1467660
Chloroform	U		0.00112	0.00272	1	04/28/2020 22:13	WG1467660
Chloromethane	U	UJ J0	0.00473	0.0136	1	04/28/2020 22:13	WG1467660
2-Chlorotoluene	U		0.000941	0.00272	1	04/28/2020 22:13	WG1467660
4-Chlorotoluene	U		0.000490	0.00544	1	04/28/2020 22:13	WG1467660
1,2-Dibromo-3-Chloropropane	U		0.00424	0.0272	1	04/28/2020 22:13	WG1467660
1,2-Dibromoethane	U		0.000705	0.00272	1	04/28/2020 22:13	WG1467660
Dibromomethane	U		0.000816	0.00544	1	04/28/2020 22:13	WG1467660
1,2-Dichlorobenzene	U		0.000462	0.00544	1	04/28/2020 22:13	WG1467660
1,3-Dichlorobenzene	U		0.000653	0.00544	1	04/28/2020 22:13	WG1467660
1,4-Dichlorobenzene	U		0.000762	0.00544	1	04/28/2020 22:13	WG1467660
Dichlorodifluoromethane	U		0.00175	0.00272	1	04/28/2020 22:13	WG1467660
1,1-Dichloroethane	U		0.000534	0.00272	1	04/28/2020 22:13	WG1467660
1,2-Dichloroethane	U		0.000706	0.00272	1	04/28/2020 22:13	WG1467660
1,1-Dichloroethene	U		0.000659	0.00272	1	04/28/2020 22:13	WG1467660
cis-1,2-Dichloroethene	U		0.000799	0.00272	1	04/28/2020 22:13	WG1467660
trans-1,2-Dichloroethene	U		0.00113	0.00544	1	04/28/2020 22:13	WG1467660
1,2-Dichloropropane	U	~~J4~~	0.00155	0.00544	1	04/28/2020 22:13	WG1467660
1,1-Dichloropropene	U		0.000880	0.00272	1	04/28/2020 22:13	WG1467660
1,3-Dichloropropane	U		0.000545	0.00544	1	04/28/2020 22:13	WG1467660
cis-1,3-Dichloropropene	U		0.000824	0.00272	1	04/28/2020 22:13	WG1467660
trans-1,3-Dichloropropene	U		0.00124	0.00544	1	04/28/2020 22:13	WG1467660
trans-1,4-Dichloro-2-butene	U		0.00202	0.00544	1	04/28/2020 22:13	WG1467660
2,2-Dichloropropane	U		0.00150	0.00272	1	04/28/2020 22:13	WG1467660
Di-isopropyl ether	U		0.000446	0.00109	1	04/28/2020 22:13	WG1467660
Ethylbenzene	U		0.000802	0.00272	1	04/28/2020 22:13	WG1467660
Hexachloro-1,3-butadiene	U	UJ J0	0.00653	0.0272	1	04/28/2020 22:13	WG1467660
2-Hexanone	U	~~J4~~	0.00366	0.0272	1	04/28/2020 22:13	WG1467660
n-Hexane	U		0.00246	0.00544	1	04/28/2020 22:13	WG1467660
Iodomethane	U		0.00252	0.0136	1	04/28/2020 22:13	WG1467660
Isopropylbenzene	U		0.000462	0.00272	1	04/28/2020 22:13	WG1467660
p-Isopropyltoluene	U		0.00277	0.00544	1	04/28/2020 22:13	WG1467660
2-Butanone (MEK)	U		0.0691	0.109	1	04/28/2020 22:13	WG1467660
Methylene Chloride	U		0.00722	0.0272	1	04/28/2020 22:13	WG1467660
4-Methyl-2-pentanone (MIBK)	U	~~J4~~	0.00248	0.0272	1	04/28/2020 22:13	WG1467660

JC
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MW-330-58
Collected date/time: 04/20/20 12:42

SAMPLE RESULTS - 12

L1212082

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.000381	0.00109	1	04/28/2020 22:13	WG1467660
Naphthalene	U	UJ J0	0.00531	0.0136	1	04/28/2020 22:13	WG1467660
n-Propylbenzene	U		0.00103	0.00544	1	04/28/2020 22:13	WG1467660
Styrene	U	~~J4~~	0.000249	0.0136	1	04/28/2020 22:13	WG1467660
1,1,1,2-Tetrachloroethane	U		0.00103	0.00272	1	04/28/2020 22:13	WG1467660
1,1,2,2-Tetrachloroethane	U		0.000756	0.00272	1	04/28/2020 22:13	WG1467660
1,1,2-Trichlorotrifluoroethane	U		0.000820	0.00272	1	04/28/2020 22:13	WG1467660
Tetrachloroethene	U		0.000975	0.00272	1	04/28/2020 22:13	WG1467660
Toluene	0.00143	J	0.00141	0.00544	1	04/28/2020 22:13	WG1467660
1,2,3-Trichlorobenzene	U	UJ J0	0.00798	0.0136	1	04/28/2020 22:13	WG1467660
1,2,4-Trichlorobenzene	U		0.00479	0.0136	1	04/28/2020 22:13	WG1467660
1,1,1-Trichloroethane	U		0.00100	0.00272	1	04/28/2020 22:13	WG1467660
1,1,2-Trichloroethane	U		0.000650	0.00272	1	04/28/2020 22:13	WG1467660
Trichloroethene	U		0.000635	0.00109	1	04/28/2020 22:13	WG1467660
Trichlorofluoromethane	U		0.000900	0.00272	1	04/28/2020 22:13	WG1467660
1,2,3-Trichloropropane	U		0.00176	0.0136	1	04/28/2020 22:13	WG1467660
1,2,4-Trimethylbenzene	U		0.00172	0.00544	1	04/28/2020 22:13	WG1467660
1,2,3-Trimethylbenzene	U		0.00172	0.00544	1	04/28/2020 22:13	WG1467660
1,3,5-Trimethylbenzene	U		0.00218	0.00544	1	04/28/2020 22:13	WG1467660
Vinyl acetate	U	~~J4~~	0.00276	0.0136	1	04/28/2020 22:13	WG1467660
Vinyl chloride	U	~~J4~~	0.00126	0.00272	1	04/28/2020 22:13	WG1467660
Xylenes, Total	0.00374	J	0.000957	0.00707	1	04/28/2020 22:13	WG1467660
(S) Toluene-d8	*113*			*75.0-131*		*04/28/2020 22:13*	WG1467660
(S) 4-Bromofluorobenzene	*103*			*67.0-138*		*04/28/2020 22:13*	WG1467660
(S) 1,2-Dichloroethane-d4	*91.1*			*70.0-130*		*04/28/2020 22:13*	WG1467660

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

JC 5/28/2020

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	91.0		1	05/04/2020 15:42	WG1469317

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	U		0.0401	0.0549	1	04/28/2020 22:32	WG1467660
Acrylonitrile	U		0.00396	0.0137	1	04/28/2020 22:32	WG1467660
Benzene	U		0.000513	0.00110	1	04/28/2020 22:32	WG1467660
Bromobenzene	U		0.000989	0.0137	1	04/28/2020 22:32	WG1467660
Bromodichloromethane	U		0.000796	0.00275	1	04/28/2020 22:32	WG1467660
Bromochloromethane	U		0.000619	0.00549	1	04/28/2020 22:32	WG1467660
Bromoform	U		0.00129	0.0275	1	04/28/2020 22:32	WG1467660
Bromomethane	U		0.00216	0.0137	1	04/28/2020 22:32	WG1467660
n-Butylbenzene	U		0.00577	0.0137	1	04/28/2020 22:32	WG1467660
sec-Butylbenzene	U		0.00316	0.0137	1	04/28/2020 22:32	WG1467660
tert-Butylbenzene	U		0.00214	0.00549	1	04/28/2020 22:32	WG1467660
Carbon disulfide	U		0.000769	0.0137	1	04/28/2020 22:32	WG1467660
Carbon tetrachloride	U		0.000986	0.00549	1	04/28/2020 22:32	WG1467660
Chlorobenzene	U		0.000231	0.00275	1	04/28/2020 22:32	WG1467660
Chlorodibromomethane	U		0.000672	0.00275	1	04/28/2020 22:32	WG1467660
Chloroethane	U		0.00187	0.00549	1	04/28/2020 22:32	WG1467660
Chloroform	U		0.00113	0.00275	1	04/28/2020 22:32	WG1467660
Chloromethane	U	UJ J0	0.00478	0.0137	1	04/28/2020 22:32	WG1467660
2-Chlorotoluene	U		0.000950	0.00275	1	04/28/2020 22:32	WG1467660
4-Chlorotoluene	U		0.000494	0.00549	1	04/28/2020 22:32	WG1467660
1,2-Dibromo-3-Chloropropane	U		0.00428	0.0275	1	04/28/2020 22:32	WG1467660
1,2-Dibromoethane	U		0.000712	0.00275	1	04/28/2020 22:32	WG1467660
Dibromomethane	U		0.000824	0.00549	1	04/28/2020 22:32	WG1467660
1,2-Dichlorobenzene	U		0.000467	0.00549	1	04/28/2020 22:32	WG1467660
1,3-Dichlorobenzene	U		0.000659	0.00549	1	04/28/2020 22:32	WG1467660
1,4-Dichlorobenzene	U		0.000769	0.00549	1	04/28/2020 22:32	WG1467660
Dichlorodifluoromethane	U		0.00177	0.00275	1	04/28/2020 22:32	WG1467660
1,1-Dichloroethane	U		0.000539	0.00275	1	04/28/2020 22:32	WG1467660
1,2-Dichloroethane	U		0.000713	0.00275	1	04/28/2020 22:32	WG1467660
1,1-Dichloroethene	U		0.000666	0.00275	1	04/28/2020 22:32	WG1467660
cis-1,2-Dichloroethene	U		0.000806	0.00275	1	04/28/2020 22:32	WG1467660
trans-1,2-Dichloroethene	U		0.00114	0.00549	1	04/28/2020 22:32	WG1467660
1,2-Dichloropropane	U	~~J4~~	0.00156	0.00549	1	04/28/2020 22:32	WG1467660
1,1-Dichloropropene	U		0.000889	0.00275	1	04/28/2020 22:32	WG1467660
1,3-Dichloropropane	U		0.000550	0.00549	1	04/28/2020 22:32	WG1467660
cis-1,3-Dichloropropene	U		0.000831	0.00275	1	04/28/2020 22:32	WG1467660
trans-1,3-Dichloropropene	U		0.00125	0.00549	1	04/28/2020 22:32	WG1467660
trans-1,4-Dichloro-2-butene	U		0.00204	0.00549	1	04/28/2020 22:32	WG1467660
2,2-Dichloropropane	U		0.00152	0.00275	1	04/28/2020 22:32	WG1467660
Di-isopropyl ether	U		0.000450	0.00110	1	04/28/2020 22:32	WG1467660
Ethylbenzene	U		0.000809	0.00275	1	04/28/2020 22:32	WG1467660
Hexachloro-1,3-butadiene	U	UJ J0	0.00659	0.0275	1	04/28/2020 22:32	WG1467660
2-Hexanone	U	~~J4~~	0.00369	0.0275	1	04/28/2020 22:32	WG1467660
n-Hexane	U		0.00248	0.00549	1	04/28/2020 22:32	WG1467660
Iodomethane	U		0.00255	0.0137	1	04/28/2020 22:32	WG1467660
Isopropylbenzene	U		0.000467	0.00275	1	04/28/2020 22:32	WG1467660
p-Isopropyltoluene	U		0.00280	0.00549	1	04/28/2020 22:32	WG1467660
2-Butanone (MEK)	U		0.0697	0.110	1	04/28/2020 22:32	WG1467660
Methylene Chloride	U		0.00729	0.0275	1	04/28/2020 22:32	WG1467660
4-Methyl-2-pentanone (MIBK)	U	~~J4~~	0.00250	0.0275	1	04/28/2020 22:32	WG1467660

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MW-330-62

Collected date/time: 04/20/20 12:45

SAMPLE RESULTS - 13

L1212082

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.000384	0.00110	1	04/28/2020 22:32	WG1467660
Naphthalene	U	UJ J0	0.00536	0.0137	1	04/28/2020 22:32	WG1467660
n-Propylbenzene	U		0.00104	0.00549	1	04/28/2020 22:32	WG1467660
Styrene	U	~~J4~~	0.000252	0.0137	1	04/28/2020 22:32	WG1467660
1,1,1,2-Tetrachloroethane	U		0.00104	0.00275	1	04/28/2020 22:32	WG1467660
1,1,2,2-Tetrachloroethane	U		0.000763	0.00275	1	04/28/2020 22:32	WG1467660
1,1,2-Trichlorotrifluoroethane	U		0.000828	0.00275	1	04/28/2020 22:32	WG1467660
Tetrachloroethene	U		0.000984	0.00275	1	04/28/2020 22:32	WG1467660
Toluene	U		0.00143	0.00549	1	04/28/2020 22:32	WG1467660
1,2,3-Trichlorobenzene	U	UJ J0	0.00805	0.0137	1	04/28/2020 22:32	WG1467660
1,2,4-Trichlorobenzene	U		0.00483	0.0137	1	04/28/2020 22:32	WG1467660
1,1,1-Trichloroethane	U		0.00101	0.00275	1	04/28/2020 22:32	WG1467660
1,1,2-Trichloroethane	U		0.000656	0.00275	1	04/28/2020 22:32	WG1467660
Trichloroethene	U		0.000641	0.00110	1	04/28/2020 22:32	WG1467660
Trichlorofluoromethane	U		0.000908	0.00275	1	04/28/2020 22:32	WG1467660
1,2,3-Trichloropropane	U		0.00178	0.0137	1	04/28/2020 22:32	WG1467660
1,2,4-Trimethylbenzene	U		0.00174	0.00549	1	04/28/2020 22:32	WG1467660
1,2,3-Trimethylbenzene	U		0.00174	0.00549	1	04/28/2020 22:32	WG1467660
1,3,5-Trimethylbenzene	U		0.00220	0.00549	1	04/28/2020 22:32	WG1467660
Vinyl acetate	U	~~J4~~	0.00279	0.0137	1	04/28/2020 22:32	WG1467660
Vinyl chloride	U	~~J4~~	0.00127	0.00275	1	04/28/2020 22:32	WG1467660
Xylenes, Total	U		0.000967	0.00714	1	04/28/2020 22:32	WG1467660
(S) Toluene-d8	*111*			*75.0-131*		*04/28/2020 22:32*	WG1467660
(S) 4-Bromofluorobenzene	*103*			*67.0-138*		*04/28/2020 22:32*	WG1467660
(S) 1,2-Dichloroethane-d4	*92.2*			*70.0-130*		*04/28/2020 22:32*	WG1467660

JC 5/28/2020

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	89.6		1	05/04/2020 15:42	WG1469317

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	U		0.0407	0.0558	1	04/28/2020 22:51	WG1467660
Acrylonitrile	U		0.00403	0.0139	1	04/28/2020 22:51	WG1467660
Benzene	U		0.000521	0.00112	1	04/28/2020 22:51	WG1467660
Bromobenzene	U		0.00100	0.0139	1	04/28/2020 22:51	WG1467660
Bromodichloromethane	U		0.000809	0.00279	1	04/28/2020 22:51	WG1467660
Bromochloromethane	U		0.000629	0.00558	1	04/28/2020 22:51	WG1467660
Bromoform	U		0.00131	0.0279	1	04/28/2020 22:51	WG1467660
Bromomethane	U		0.00220	0.0139	1	04/28/2020 22:51	WG1467660
n-Butylbenzene	U		0.00586	0.0139	1	04/28/2020 22:51	WG1467660
sec-Butylbenzene	U		0.00321	0.0139	1	04/28/2020 22:51	WG1467660
tert-Butylbenzene	U		0.00218	0.00558	1	04/28/2020 22:51	WG1467660
Carbon disulfide	U		0.000781	0.0139	1	04/28/2020 22:51	WG1467660
Carbon tetrachloride	U		0.00100	0.00558	1	04/28/2020 22:51	WG1467660
Chlorobenzene	U		0.000234	0.00279	1	04/28/2020 22:51	WG1467660
Chlorodibromomethane	U		0.000683	0.00279	1	04/28/2020 22:51	WG1467660
Chloroethane	U		0.00190	0.00558	1	04/28/2020 22:51	WG1467660
Chloroform	U		0.00115	0.00279	1	04/28/2020 22:51	WG1467660
Chloromethane	U	UJ J0	0.00485	0.0139	1	04/28/2020 22:51	WG1467660
2-Chlorotoluene	U		0.000965	0.00279	1	04/28/2020 22:51	WG1467660
4-Chlorotoluene	U		0.000502	0.00558	1	04/28/2020 22:51	WG1467660
1,2-Dibromo-3-Chloropropane	U		0.00435	0.0279	1	04/28/2020 22:51	WG1467660
1,2-Dibromoethane	U		0.000723	0.00279	1	04/28/2020 22:51	WG1467660
Dibromomethane	U		0.000837	0.00558	1	04/28/2020 22:51	WG1467660
1,2-Dichlorobenzene	U		0.000474	0.00558	1	04/28/2020 22:51	WG1467660
1,3-Dichlorobenzene	U		0.000669	0.00558	1	04/28/2020 22:51	WG1467660
1,4-Dichlorobenzene	U		0.000781	0.00558	1	04/28/2020 22:51	WG1467660
Dichlorodifluoromethane	U		0.00180	0.00279	1	04/28/2020 22:51	WG1467660
1,1-Dichloroethane	U		0.000548	0.00279	1	04/28/2020 22:51	WG1467660
1,2-Dichloroethane	U		0.000724	0.00279	1	04/28/2020 22:51	WG1467660
1,1-Dichloroethene	U		0.000676	0.00279	1	04/28/2020 22:51	WG1467660
cis-1,2-Dichloroethene	U		0.000819	0.00279	1	04/28/2020 22:51	WG1467660
trans-1,2-Dichloroethene	U		0.00116	0.00558	1	04/28/2020 22:51	WG1467660
1,2-Dichloropropane	U	~~J4~~	0.00158	0.00558	1	04/28/2020 22:51	WG1467660
1,1-Dichloropropene	U		0.000903	0.00279	1	04/28/2020 22:51	WG1467660
1,3-Dichloropropane	U		0.000559	0.00558	1	04/28/2020 22:51	WG1467660
cis-1,3-Dichloropropene	U		0.000845	0.00279	1	04/28/2020 22:51	WG1467660
trans-1,3-Dichloropropene	U		0.00127	0.00558	1	04/28/2020 22:51	WG1467660
trans-1,4-Dichloro-2-butene	U		0.00208	0.00558	1	04/28/2020 22:51	WG1467660
2,2-Dichloropropane	U		0.00154	0.00279	1	04/28/2020 22:51	WG1467660
Di-isopropyl ether	U		0.000457	0.00112	1	04/28/2020 22:51	WG1467660
Ethylbenzene	U		0.000822	0.00279	1	04/28/2020 22:51	WG1467660
Hexachloro-1,3-butadiene	U	UJ J0	0.00669	0.0279	1	04/28/2020 22:51	WG1467660
2-Hexanone	U	~~J4~~	0.00375	0.0279	1	04/28/2020 22:51	WG1467660
n-Hexane	U		0.00252	0.00558	1	04/28/2020 22:51	WG1467660
Iodomethane	U		0.00259	0.0139	1	04/28/2020 22:51	WG1467660
Isopropylbenzene	U		0.000474	0.00279	1	04/28/2020 22:51	WG1467660
p-Isopropyltoluene	U		0.00284	0.00558	1	04/28/2020 22:51	WG1467660
2-Butanone (MEK)	U		0.0708	0.112	1	04/28/2020 22:51	WG1467660
Methylene Chloride	U		0.00741	0.0279	1	04/28/2020 22:51	WG1467660
4-Methyl-2-pentanone (MIBK)	U	~~J4~~	0.00254	0.0279	1	04/28/2020 22:51	WG1467660

JC 5/28/2020

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.000390	0.00112	1	04/28/2020 22:51	WG1467660
Naphthalene	U	UJ J0	0.00544	0.0139	1	04/28/2020 22:51	WG1467660
n-Propylbenzene	U		0.00106	0.00558	1	04/28/2020 22:51	WG1467660
Styrene	U	~~J4~~	0.000255	0.0139	1	04/28/2020 22:51	WG1467660
1,1,1,2-Tetrachloroethane	U		0.00106	0.00279	1	04/28/2020 22:51	WG1467660
1,1,2,2-Tetrachloroethane	U		0.000775	0.00279	1	04/28/2020 22:51	WG1467660
1,1,2-Trichlorotrifluoroethane	U		0.000841	0.00279	1	04/28/2020 22:51	WG1467660
Tetrachloroethene	U		0.00100	0.00279	1	04/28/2020 22:51	WG1467660
Toluene	U		0.00145	0.00558	1	04/28/2020 22:51	WG1467660
1,2,3-Trichlorobenzene	U	UJ J0	0.00818	0.0139	1	04/28/2020 22:51	WG1467660
1,2,4-Trichlorobenzene	U		0.00491	0.0139	1	04/28/2020 22:51	WG1467660
1,1,1-Trichloroethane	U		0.00103	0.00279	1	04/28/2020 22:51	WG1467660
1,1,2-Trichloroethane	U		0.000666	0.00279	1	04/28/2020 22:51	WG1467660
Trichloroethene	U		0.000652	0.00112	1	04/28/2020 22:51	WG1467660
Trichlorofluoromethane	U		0.000923	0.00279	1	04/28/2020 22:51	WG1467660
1,2,3-Trichloropropane	U		0.00181	0.0139	1	04/28/2020 22:51	WG1467660
1,2,4-Trimethylbenzene	U		0.00176	0.00558	1	04/28/2020 22:51	WG1467660
1,2,3-Trimethylbenzene	U		0.00176	0.00558	1	04/28/2020 22:51	WG1467660
1,3,5-Trimethylbenzene	U		0.00223	0.00558	1	04/28/2020 22:51	WG1467660
Vinyl acetate	U	~~J4~~	0.00283	0.0139	1	04/28/2020 22:51	WG1467660
Vinyl chloride	U	~~J4~~	0.00129	0.00279	1	04/28/2020 22:51	WG1467660
Xylenes, Total	U		0.000982	0.00725	1	04/28/2020 22:51	WG1467660
(S) Toluene-d8	*112*			*75.0-131*		*04/28/2020 22:51*	WG1467660
(S) 4-Bromofluorobenzene	*104*			*67.0-138*		*04/28/2020 22:51*	WG1467660
(S) 1,2-Dichloroethane-d4	*92.7*			*70.0-130*		*04/28/2020 22:51*	WG1467660

JC 5/28/2020

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	84.0		1	05/04/2020 15:42	WG1469317

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	U		0.0435	0.0595	1	04/28/2020 23:10	WG1467660
Acrylonitrile	U		0.00430	0.0149	1	04/28/2020 23:10	WG1467660
Benzene	U		0.000556	0.00119	1	04/28/2020 23:10	WG1467660
Bromobenzene	U		0.00107	0.0149	1	04/28/2020 23:10	WG1467660
Bromodichloromethane	U		0.000863	0.00298	1	04/28/2020 23:10	WG1467660
Bromochloromethane	U		0.000672	0.00595	1	04/28/2020 23:10	WG1467660
Bromoform	U		0.00139	0.0298	1	04/28/2020 23:10	WG1467660
Bromomethane	U		0.00235	0.0149	1	04/28/2020 23:10	WG1467660
n-Butylbenzene	U		0.00625	0.0149	1	04/28/2020 23:10	WG1467660
sec-Butylbenzene	U		0.00343	0.0149	1	04/28/2020 23:10	WG1467660
tert-Butylbenzene	U		0.00232	0.00595	1	04/28/2020 23:10	WG1467660
Carbon disulfide	0.00658	J	0.000833	0.0149	1	04/28/2020 23:10	WG1467660
Carbon tetrachloride	U		0.00107	0.00595	1	04/28/2020 23:10	WG1467660
Chlorobenzene	U		0.000250	0.00298	1	04/28/2020 23:10	WG1467660
Chlorodibromomethane	U		0.000729	0.00298	1	04/28/2020 23:10	WG1467660
Chloroethane	U		0.00202	0.00595	1	04/28/2020 23:10	WG1467660
Chloroform	U		0.00123	0.00298	1	04/28/2020 23:10	WG1467660
Chloromethane	U	UJ J0	0.00518	0.0149	1	04/28/2020 23:10	WG1467660
2-Chlorotoluene	U		0.00103	0.00298	1	04/28/2020 23:10	WG1467660
4-Chlorotoluene	U		0.000536	0.00595	1	04/28/2020 23:10	WG1467660
1,2-Dibromo-3-Chloropropane	U		0.00464	0.0298	1	04/28/2020 23:10	WG1467660
1,2-Dibromoethane	U		0.000772	0.00298	1	04/28/2020 23:10	WG1467660
Dibromomethane	U		0.000893	0.00595	1	04/28/2020 23:10	WG1467660
1,2-Dichlorobenzene	U		0.000506	0.00595	1	04/28/2020 23:10	WG1467660
1,3-Dichlorobenzene	U		0.000714	0.00595	1	04/28/2020 23:10	WG1467660
1,4-Dichlorobenzene	U		0.000833	0.00595	1	04/28/2020 23:10	WG1467660
Dichlorodifluoromethane	U		0.00192	0.00298	1	04/28/2020 23:10	WG1467660
1,1-Dichloroethane	U		0.000585	0.00298	1	04/28/2020 23:10	WG1467660
1,2-Dichloroethane	U		0.000773	0.00298	1	04/28/2020 23:10	WG1467660
1,1-Dichloroethene	U		0.000722	0.00298	1	04/28/2020 23:10	WG1467660
cis-1,2-Dichloroethene	U		0.000874	0.00298	1	04/28/2020 23:10	WG1467660
trans-1,2-Dichloroethene	U		0.00124	0.00595	1	04/28/2020 23:10	WG1467660
1,2-Dichloropropane	U	~~J4~~	0.00169	0.00595	1	04/28/2020 23:10	WG1467660
1,1-Dichloropropene	U		0.000963	0.00298	1	04/28/2020 23:10	WG1467660
1,3-Dichloropropane	U		0.000597	0.00595	1	04/28/2020 23:10	WG1467660
cis-1,3-Dichloropropene	U		0.000901	0.00298	1	04/28/2020 23:10	WG1467660
trans-1,3-Dichloropropene	U		0.00136	0.00595	1	04/28/2020 23:10	WG1467660
trans-1,4-Dichloro-2-butene	U		0.00221	0.00595	1	04/28/2020 23:10	WG1467660
2,2-Dichloropropane	U		0.00164	0.00298	1	04/28/2020 23:10	WG1467660
Di-isopropyl ether	U		0.000488	0.00119	1	04/28/2020 23:10	WG1467660
Ethylbenzene	U		0.000878	0.00298	1	04/28/2020 23:10	WG1467660
Hexachloro-1,3-butadiene	U	UJ J0	0.00714	0.0298	1	04/28/2020 23:10	WG1467660
2-Hexanone	U	~~J4~~	0.00400	0.0298	1	04/28/2020 23:10	WG1467660
n-Hexane	U		0.00269	0.00595	1	04/28/2020 23:10	WG1467660
Iodomethane	U		0.00276	0.0149	1	04/28/2020 23:10	WG1467660
Isopropylbenzene	U		0.000506	0.00298	1	04/28/2020 23:10	WG1467660
p-Isopropyltoluene	0.461	J	0.00304	0.00595	1	04/28/2020 23:10	WG1467660
2-Butanone (MEK)	U		0.0756	0.119	1	04/28/2020 23:10	WG1467660
Methylene Chloride	U		0.00791	0.0298	1	04/28/2020 23:10	WG1467660
4-Methyl-2-pentanone (MIBK)	U	~~J4~~	0.00271	0.0298	1	04/28/2020 23:10	WG1467660

JC 5/28/2020

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.000417	0.00119	1	04/28/2020 23:10	WG1467660
Naphthalene	U	UJ J0	0.00581	0.0149	1	04/28/2020 23:10	WG1467660
n-Propylbenzene	U		0.00113	0.00595	1	04/28/2020 23:10	WG1467660
Styrene	U	~~J4~~	0.000273	0.0149	1	04/28/2020 23:10	WG1467660
1,1,1,2-Tetrachloroethane	U		0.00113	0.00298	1	04/28/2020 23:10	WG1467660
1,1,2,2-Tetrachloroethane	U		0.000828	0.00298	1	04/28/2020 23:10	WG1467660
1,1,2-Trichlorotrifluoroethane	U		0.000898	0.00298	1	04/28/2020 23:10	WG1467660
Tetrachloroethene	U		0.00107	0.00298	1	04/28/2020 23:10	WG1467660
Toluene	0.00195	J	0.00155	0.00595	1	04/28/2020 23:10	WG1467660
1,2,3-Trichlorobenzene	U	UJ J0	0.00873	0.0149	1	04/28/2020 23:10	WG1467660
1,2,4-Trichlorobenzene	U		0.00524	0.0149	1	04/28/2020 23:10	WG1467660
1,1,1-Trichloroethane	U		0.00110	0.00298	1	04/28/2020 23:10	WG1467660
1,1,2-Trichloroethane	U		0.000711	0.00298	1	04/28/2020 23:10	WG1467660
Trichloroethene	U		0.000695	0.00119	1	04/28/2020 23:10	WG1467660
Trichlorofluoromethane	U		0.000985	0.00298	1	04/28/2020 23:10	WG1467660
1,2,3-Trichloropropane	U		0.00193	0.0149	1	04/28/2020 23:10	WG1467660
1,2,4-Trimethylbenzene	U		0.00188	0.00595	1	04/28/2020 23:10	WG1467660
1,2,3-Trimethylbenzene	U		0.00188	0.00595	1	04/28/2020 23:10	WG1467660
1,3,5-Trimethylbenzene	U		0.00238	0.00595	1	04/28/2020 23:10	WG1467660
Vinyl acetate	U	~~J4~~	0.00302	0.0149	1	04/28/2020 23:10	WG1467660
Vinyl chloride	U	~~J4~~	0.00138	0.00298	1	04/28/2020 23:10	WG1467660
Xylenes, Total	U		0.00105	0.00774	1	04/28/2020 23:10	WG1467660
(S) Toluene-d8	*111*			*75.0-131*		*04/28/2020 23:10*	WG1467660
(S) 4-Bromofluorobenzene	*105*			*67.0-138*		*04/28/2020 23:10*	WG1467660
(S) 1,2-Dichloroethane-d4	*94.3*			*70.0-130*		*04/28/2020 23:10*	WG1467660

JC 5/28/2020

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	78.0		1	05/04/2020 15:42	WG1469317

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	U		0.0468	0.0641	1	04/28/2020 23:29	WG1467660
Acrylonitrile	U		0.00463	0.0160	1	04/28/2020 23:29	WG1467660
Benzene	U		0.000599	0.00128	1	04/28/2020 23:29	WG1467660
Bromobenzene	U		0.00115	0.0160	1	04/28/2020 23:29	WG1467660
Bromodichloromethane	U		0.000929	0.00320	1	04/28/2020 23:29	WG1467660
Bromochloromethane	U		0.000723	0.00641	1	04/28/2020 23:29	WG1467660
Bromoform	U		0.00150	0.0320	1	04/28/2020 23:29	WG1467660
Bromomethane	U		0.00253	0.0160	1	04/28/2020 23:29	WG1467660
n-Butylbenzene	U		0.00673	0.0160	1	04/28/2020 23:29	WG1467660
sec-Butylbenzene	U		0.00369	0.0160	1	04/28/2020 23:29	WG1467660
tert-Butylbenzene	U		0.00250	0.00641	1	04/28/2020 23:29	WG1467660
Carbon disulfide	U		0.000897	0.0160	1	04/28/2020 23:29	WG1467660
Carbon tetrachloride	U		0.00115	0.00641	1	04/28/2020 23:29	WG1467660
Chlorobenzene	U		0.000269	0.00320	1	04/28/2020 23:29	WG1467660
Chlorodibromomethane	U		0.000784	0.00320	1	04/28/2020 23:29	WG1467660
Chloroethane	U		0.00218	0.00641	1	04/28/2020 23:29	WG1467660
Chloroform	U		0.00132	0.00320	1	04/28/2020 23:29	WG1467660
Chloromethane	U	UJ J0	0.00558	0.0160	1	04/28/2020 23:29	WG1467660
2-Chlorotoluene	U		0.00111	0.00320	1	04/28/2020 23:29	WG1467660
4-Chlorotoluene	U		0.000577	0.00641	1	04/28/2020 23:29	WG1467660
1,2-Dibromo-3-Chloropropane	U		0.00500	0.0320	1	04/28/2020 23:29	WG1467660
1,2-Dibromoethane	U		0.000831	0.00320	1	04/28/2020 23:29	WG1467660
Dibromomethane	U		0.000961	0.00641	1	04/28/2020 23:29	WG1467660
1,2-Dichlorobenzene	U		0.000545	0.00641	1	04/28/2020 23:29	WG1467660
1,3-Dichlorobenzene	U		0.000769	0.00641	1	04/28/2020 23:29	WG1467660
1,4-Dichlorobenzene	U		0.000897	0.00641	1	04/28/2020 23:29	WG1467660
Dichlorodifluoromethane	U		0.00206	0.00320	1	04/28/2020 23:29	WG1467660
1,1-Dichloroethane	U		0.000629	0.00320	1	04/28/2020 23:29	WG1467660
1,2-Dichloroethane	U		0.000832	0.00320	1	04/28/2020 23:29	WG1467660
1,1-Dichloroethene	U		0.000777	0.00320	1	04/28/2020 23:29	WG1467660
cis-1,2-Dichloroethene	U		0.000941	0.00320	1	04/28/2020 23:29	WG1467660
trans-1,2-Dichloroethene	U		0.00133	0.00641	1	04/28/2020 23:29	WG1467660
1,2-Dichloropropane	U	~~J4~~	0.00182	0.00641	1	04/28/2020 23:29	WG1467660
1,1-Dichloropropene	U		0.00104	0.00320	1	04/28/2020 23:29	WG1467660
1,3-Dichloropropane	U		0.000642	0.00641	1	04/28/2020 23:29	WG1467660
cis-1,3-Dichloropropene	U		0.000970	0.00320	1	04/28/2020 23:29	WG1467660
trans-1,3-Dichloropropene	U		0.00146	0.00641	1	04/28/2020 23:29	WG1467660
trans-1,4-Dichloro-2-butene	U		0.00238	0.00641	1	04/28/2020 23:29	WG1467660
2,2-Dichloropropane	U		0.00177	0.00320	1	04/28/2020 23:29	WG1467660
Di-isopropyl ether	U		0.000526	0.00128	1	04/28/2020 23:29	WG1467660
Ethylbenzene	U		0.000945	0.00320	1	04/28/2020 23:29	WG1467660
Hexachloro-1,3-butadiene	U	UJ J0	0.00769	0.0320	1	04/28/2020 23:29	WG1467660
2-Hexanone	U	~~J4~~	0.00431	0.0320	1	04/28/2020 23:29	WG1467660
n-Hexane	U		0.00290	0.00641	1	04/28/2020 23:29	WG1467660
Iodomethane	U		0.00297	0.0160	1	04/28/2020 23:29	WG1467660
Isopropylbenzene	U		0.000545	0.00320	1	04/28/2020 23:29	WG1467660
p-Isopropyltoluene	0.00660		0.00327	0.00641	1	04/28/2020 23:29	WG1467660
2-Butanone (MEK)	U		0.0814	0.128	1	04/28/2020 23:29	WG1467660
Methylene Chloride	U		0.00851	0.0320	1	04/28/2020 23:29	WG1467660
4-Methyl-2-pentanone (MIBK)	U	~~J4~~	0.00292	0.0320	1	04/28/2020 23:29	WG1467660

JC 5/28/2020

MW-336-14.5

Collected date/time: 04/22/20 09:40

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.000449	0.00128	1	04/28/2020 23:29	WG1467660
Naphthalene	U UJ	J0	0.00625	0.0160	1	04/28/2020 23:29	WG1467660
n-Propylbenzene	U		0.00122	0.00641	1	04/28/2020 23:29	WG1467660
Styrene	U	~~J4~~	0.000294	0.0160	1	04/28/2020 23:29	WG1467660
1,1,1,2-Tetrachloroethane	U		0.00122	0.00320	1	04/28/2020 23:29	WG1467660
1,1,2,2-Tetrachloroethane	U		0.000891	0.00320	1	04/28/2020 23:29	WG1467660
1,1,2-Trichlorotrifluoroethane	U		0.000966	0.00320	1	04/28/2020 23:29	WG1467660
Tetrachloroethene	U		0.00115	0.00320	1	04/28/2020 23:29	WG1467660
Toluene	U		0.00167	0.00641	1	04/28/2020 23:29	WG1467660
1,2,3-Trichlorobenzene	U UJ	J0	0.00940	0.0160	1	04/28/2020 23:29	WG1467660
1,2,4-Trichlorobenzene	U		0.00564	0.0160	1	04/28/2020 23:29	WG1467660
1,1,1-Trichloroethane	U		0.00118	0.00320	1	04/28/2020 23:29	WG1467660
1,1,2-Trichloroethane	U		0.000765	0.00320	1	04/28/2020 23:29	WG1467660
Trichloroethene	U		0.000749	0.00128	1	04/28/2020 23:29	WG1467660
Trichlorofluoromethane	U		0.00106	0.00320	1	04/28/2020 23:29	WG1467660
1,2,3-Trichloropropane	U		0.00208	0.0160	1	04/28/2020 23:29	WG1467660
1,2,4-Trimethylbenzene	U		0.00203	0.00641	1	04/28/2020 23:29	WG1467660
1,2,3-Trimethylbenzene	U		0.00203	0.00641	1	04/28/2020 23:29	WG1467660
1,3,5-Trimethylbenzene	U		0.00256	0.00641	1	04/28/2020 23:29	WG1467660
Vinyl acetate	U	~~J4~~	0.00326	0.0160	1	04/28/2020 23:29	WG1467660
Vinyl chloride	U	~~J4~~	0.00149	0.00320	1	04/28/2020 23:29	WG1467660
Xylenes, Total	U		0.00113	0.00833	1	04/28/2020 23:29	WG1467660
(S) Toluene-d8	*113*			*75.0-131*		*04/28/2020 23:29*	WG1467660
(S) 4-Bromofluorobenzene	*105*			*67.0-138*		*04/28/2020 23:29*	WG1467660
(S) 1,2-Dichloroethane-d4	*93.6*			*70.0-130*		*04/28/2020 23:29*	WG1467660

JC 5/28/2020

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	81.7		1	05/04/2020 15:42	WG1469317

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	U		0.0447	0.0612	1	04/28/2020 23:48	WG1467660
Acrylonitrile	U		0.00442	0.0153	1	04/28/2020 23:48	WG1467660
Benzene	U		0.000572	0.00122	1	04/28/2020 23:48	WG1467660
Bromobenzene	U		0.00110	0.0153	1	04/28/2020 23:48	WG1467660
Bromodichloromethane	U		0.000888	0.00306	1	04/28/2020 23:48	WG1467660
Bromochloromethane	U		0.000691	0.00612	1	04/28/2020 23:48	WG1467660
Bromoform	U		0.00143	0.0306	1	04/28/2020 23:48	WG1467660
Bromomethane	U		0.00241	0.0153	1	04/28/2020 23:48	WG1467660
n-Butylbenzene	U		0.00643	0.0153	1	04/28/2020 23:48	WG1467660
sec-Butylbenzene	U		0.00353	0.0153	1	04/28/2020 23:48	WG1467660
tert-Butylbenzene	U		0.00239	0.00612	1	04/28/2020 23:48	WG1467660
Carbon disulfide	U		0.000857	0.0153	1	04/28/2020 23:48	WG1467660
Carbon tetrachloride	U		0.00110	0.00612	1	04/28/2020 23:48	WG1467660
Chlorobenzene	U		0.000257	0.00306	1	04/28/2020 23:48	WG1467660
Chlorodibromomethane	U		0.000749	0.00306	1	04/28/2020 23:48	WG1467660
Chloroethane	U		0.00208	0.00612	1	04/28/2020 23:48	WG1467660
Chloroform	U		0.00126	0.00306	1	04/28/2020 23:48	WG1467660
Chloromethane	U	UJ J0	0.00533	0.0153	1	04/28/2020 23:48	WG1467660
2-Chlorotoluene	U		0.00106	0.00306	1	04/28/2020 23:48	WG1467660
4-Chlorotoluene	U		0.000551	0.00612	1	04/28/2020 23:48	WG1467660
1,2-Dibromo-3-Chloropropane	U		0.00478	0.0306	1	04/28/2020 23:48	WG1467660
1,2-Dibromoethane	U		0.000794	0.00306	1	04/28/2020 23:48	WG1467660
Dibromomethane	U		0.000918	0.00612	1	04/28/2020 23:48	WG1467660
1,2-Dichlorobenzene	U		0.000520	0.00612	1	04/28/2020 23:48	WG1467660
1,3-Dichlorobenzene	U		0.000735	0.00612	1	04/28/2020 23:48	WG1467660
1,4-Dichlorobenzene	U		0.000857	0.00612	1	04/28/2020 23:48	WG1467660
Dichlorodifluoromethane	U		0.00197	0.00306	1	04/28/2020 23:48	WG1467660
1,1-Dichloroethane	U		0.000601	0.00306	1	04/28/2020 23:48	WG1467660
1,2-Dichloroethane	U		0.000795	0.00306	1	04/28/2020 23:48	WG1467660
1,1-Dichloroethene	U		0.000742	0.00306	1	04/28/2020 23:48	WG1467660
cis-1,2-Dichloroethene	U		0.000899	0.00306	1	04/28/2020 23:48	WG1467660
trans-1,2-Dichloroethene	U		0.00127	0.00612	1	04/28/2020 23:48	WG1467660
1,2-Dichloropropane	U	~~J4~~	0.00174	0.00612	1	04/28/2020 23:48	WG1467660
1,1-Dichloropropene	U		0.000991	0.00306	1	04/28/2020 23:48	WG1467660
1,3-Dichloropropane	U		0.000613	0.00612	1	04/28/2020 23:48	WG1467660
cis-1,3-Dichloropropene	U		0.000927	0.00306	1	04/28/2020 23:48	WG1467660
trans-1,3-Dichloropropene	U		0.00140	0.00612	1	04/28/2020 23:48	WG1467660
trans-1,4-Dichloro-2-butene	U		0.00228	0.00612	1	04/28/2020 23:48	WG1467660
2,2-Dichloropropane	U		0.00169	0.00306	1	04/28/2020 23:48	WG1467660
Di-isopropyl ether	U		0.000502	0.00122	1	04/28/2020 23:48	WG1467660
Ethylbenzene	U		0.000902	0.00306	1	04/28/2020 23:48	WG1467660
Hexachloro-1,3-butadiene	U	UJ J0	0.00735	0.0306	1	04/28/2020 23:48	WG1467660
2-Hexanone	U	~~J4~~	0.00411	0.0306	1	04/28/2020 23:48	WG1467660
n-Hexane	U		0.00277	0.00612	1	04/28/2020 23:48	WG1467660
Iodomethane	U		0.00284	0.0153	1	04/28/2020 23:48	WG1467660
Isopropylbenzene	U		0.000520	0.00306	1	04/28/2020 23:48	WG1467660
p-Isopropyltoluene	U		0.00312	0.00612	1	04/28/2020 23:48	WG1467660
2-Butanone (MEK)	U		0.0778	0.122	1	04/28/2020 23:48	WG1467660
Methylene Chloride	U		0.00813	0.0306	1	04/28/2020 23:48	WG1467660
4-Methyl-2-pentanone (MIBK)	U	~~J4~~	0.00279	0.0306	1	04/28/2020 23:48	WG1467660

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Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.000429	0.00122	1	04/28/2020 23:48	WG1467660
Naphthalene	U	UJ J0	0.00598	0.0153	1	04/28/2020 23:48	WG1467660
n-Propylbenzene	U		0.00116	0.00612	1	04/28/2020 23:48	WG1467660
Styrene	U	~~J4~~	0.000280	0.0153	1	04/28/2020 23:48	WG1467660
1,1,1,2-Tetrachloroethane	U		0.00116	0.00306	1	04/28/2020 23:48	WG1467660
1,1,2,2-Tetrachloroethane	U		0.000851	0.00306	1	04/28/2020 23:48	WG1467660
1,1,2-Trichlorotrifluoroethane	U		0.000923	0.00306	1	04/28/2020 23:48	WG1467660
Tetrachloroethene	U		0.00110	0.00306	1	04/28/2020 23:48	WG1467660
Toluene	U		0.00159	0.00612	1	04/28/2020 23:48	WG1467660
1,2,3-Trichlorobenzene	U	UJ J0	0.00898	0.0153	1	04/28/2020 23:48	WG1467660
1,2,4-Trichlorobenzene	U		0.00539	0.0153	1	04/28/2020 23:48	WG1467660
1,1,1-Trichloroethane	U		0.00113	0.00306	1	04/28/2020 23:48	WG1467660
1,1,2-Trichloroethane	U		0.000731	0.00306	1	04/28/2020 23:48	WG1467660
Trichloroethene	U		0.000715	0.00122	1	04/28/2020 23:48	WG1467660
Trichlorofluoromethane	U		0.00101	0.00306	1	04/28/2020 23:48	WG1467660
1,2,3-Trichloropropane	U		0.00198	0.0153	1	04/28/2020 23:48	WG1467660
1,2,4-Trimethylbenzene	U		0.00193	0.00612	1	04/28/2020 23:48	WG1467660
1,2,3-Trimethylbenzene	U		0.00193	0.00612	1	04/28/2020 23:48	WG1467660
1,3,5-Trimethylbenzene	U		0.00245	0.00612	1	04/28/2020 23:48	WG1467660
Vinyl acetate	U	~~J4~~	0.00311	0.0153	1	04/28/2020 23:48	WG1467660
Vinyl chloride	U	~~J4~~	0.00142	0.00306	1	04/28/2020 23:48	WG1467660
Xylenes, Total	U		0.00108	0.00796	1	04/28/2020 23:48	WG1467660
(S) Toluene-d8	*112*			*75.0-131*		*04/28/2020 23:48*	WG1467660
(S) 4-Bromofluorobenzene	*103*			*67.0-138*		*04/28/2020 23:48*	WG1467660
(S) 1,2-Dichloroethane-d4	*93.9*			*70.0-130*		*04/28/2020 23:48*	WG1467660

JC 5/28/2020

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	60.8		1	05/04/2020 15:33	WG1469318

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg		Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	0.105	J	J0	0.0601	0.0823	1	04/29/2020 00:07	WG1467660
Acrylonitrile	U			0.00594	0.0206	1	04/29/2020 00:07	WG1467660
Benzene	U			0.000769	0.00165	1	04/29/2020 00:07	WG1467660
Bromobenzene	U			0.00148	0.0206	1	04/29/2020 00:07	WG1467660
Bromodichloromethane	U			0.00119	0.00411	1	04/29/2020 00:07	WG1467660
Bromochloromethane	U			0.000928	0.00823	1	04/29/2020 00:07	WG1467660
Bromoform	U			0.00193	0.0411	1	04/29/2020 00:07	WG1467660
Bromomethane	U			0.00324	0.0206	1	04/29/2020 00:07	WG1467660
n-Butylbenzene	U			0.00864	0.0206	1	04/29/2020 00:07	WG1467660
sec-Butylbenzene	U			0.00474	0.0206	1	04/29/2020 00:07	WG1467660
tert-Butylbenzene	U			0.00321	0.00823	1	04/29/2020 00:07	WG1467660
Carbon disulfide	U			0.00115	0.0206	1	04/29/2020 00:07	WG1467660
Carbon tetrachloride	U			0.00148	0.00823	1	04/29/2020 00:07	WG1467660
Chlorobenzene	U			0.000346	0.00411	1	04/29/2020 00:07	WG1467660
Chlorodibromomethane	U			0.00101	0.00411	1	04/29/2020 00:07	WG1467660
Chloroethane	U			0.00280	0.00823	1	04/29/2020 00:07	WG1467660
Chloroform	U			0.00170	0.00411	1	04/29/2020 00:07	WG1467660
Chloromethane	U	UJ	J0	0.00716	0.0206	1	04/29/2020 00:07	WG1467660
2-Chlorotoluene	U			0.00142	0.00411	1	04/29/2020 00:07	WG1467660
4-Chlorotoluene	U			0.000741	0.00823	1	04/29/2020 00:07	WG1467660
1,2-Dibromo-3-Chloropropane	U			0.00642	0.0411	1	04/29/2020 00:07	WG1467660
1,2-Dibromoethane	U			0.00107	0.00411	1	04/29/2020 00:07	WG1467660
Dibromomethane	U			0.00123	0.00823	1	04/29/2020 00:07	WG1467660
1,2-Dichlorobenzene	U			0.000700	0.00823	1	04/29/2020 00:07	WG1467660
1,3-Dichlorobenzene	U			0.000988	0.00823	1	04/29/2020 00:07	WG1467660
1,4-Dichlorobenzene	U			0.00115	0.00823	1	04/29/2020 00:07	WG1467660
Dichlorodifluoromethane	U			0.00265	0.00411	1	04/29/2020 00:07	WG1467660
1,1-Dichloroethane	U			0.000808	0.00411	1	04/29/2020 00:07	WG1467660
1,2-Dichloroethane	U			0.00107	0.00411	1	04/29/2020 00:07	WG1467660
1,1-Dichloroethene	U			0.000997	0.00411	1	04/29/2020 00:07	WG1467660
cis-1,2-Dichloroethene	U			0.00121	0.00411	1	04/29/2020 00:07	WG1467660
trans-1,2-Dichloroethene	U			0.00171	0.00823	1	04/29/2020 00:07	WG1467660
1,2-Dichloropropane	U		~~J4~~	0.00234	0.00823	1	04/29/2020 00:07	WG1467660
1,1-Dichloropropene	U			0.00133	0.00411	1	04/29/2020 00:07	WG1467660
1,3-Dichloropropane	U			0.000825	0.00823	1	04/29/2020 00:07	WG1467660
cis-1,3-Dichloropropene	U			0.00125	0.00411	1	04/29/2020 00:07	WG1467660
trans-1,3-Dichloropropene	U			0.00188	0.00823	1	04/29/2020 00:07	WG1467660
trans-1,4-Dichloro-2-butene	U			0.00306	0.00823	1	04/29/2020 00:07	WG1467660
2,2-Dichloropropane	U			0.00227	0.00411	1	04/29/2020 00:07	WG1467660
Di-isopropyl ether	U			0.000675	0.00165	1	04/29/2020 00:07	WG1467660
Ethylbenzene	U			0.00121	0.00411	1	04/29/2020 00:07	WG1467660
Hexachloro-1,3-butadiene	U	UJ	J0	0.00988	0.0411	1	04/29/2020 00:07	WG1467660
2-Hexanone	U		~~J4~~	0.00553	0.0411	1	04/29/2020 00:07	WG1467660
n-Hexane	U			0.00372	0.00823	1	04/29/2020 00:07	WG1467660
Iodomethane	U			0.00382	0.0206	1	04/29/2020 00:07	WG1467660
Isopropylbenzene	U			0.000700	0.00411	1	04/29/2020 00:07	WG1467660
p-Isopropyltoluene	U			0.00420	0.00823	1	04/29/2020 00:07	WG1467660
2-Butanone (MEK)	0.131	J	J J0	0.105	0.165	1	04/29/2020 00:07	WG1467660
Methylene Chloride	U			0.0109	0.0411	1	04/29/2020 00:07	WG1467660
4-Methyl-2-pentanone (MIBK)	U		~~J4~~	0.00375	0.0411	1	04/29/2020 00:07	WG1467660

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MW-336-25
Collected date/time: 04/22/20 10:55

SAMPLE RESULTS - 18

L1212082

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.000576	0.00165	1	04/29/2020 00:07	WG1467660
Naphthalene	U	UJ J0	0.00803	0.0206	1	04/29/2020 00:07	WG1467660
n-Propylbenzene	U		0.00156	0.00823	1	04/29/2020 00:07	WG1467660
Styrene	U	J4	0.000377	0.0206	1	04/29/2020 00:07	WG1467660
1,1,1,2-Tetrachloroethane	U		0.00156	0.00411	1	04/29/2020 00:07	WG1467660
1,1,2,2-Tetrachloroethane	U		0.00114	0.00411	1	04/29/2020 00:07	WG1467660
1,1,2-Trichlorotrifluoroethane	U		0.00124	0.00411	1	04/29/2020 00:07	WG1467660
Tetrachloroethene	U		0.00147	0.00411	1	04/29/2020 00:07	WG1467660
Toluene	U		0.00214	0.00823	1	04/29/2020 00:07	WG1467660
1,2,3-Trichlorobenzene	U	UJ J0	0.0121	0.0206	1	04/29/2020 00:07	WG1467660
1,2,4-Trichlorobenzene	U		0.00724	0.0206	1	04/29/2020 00:07	WG1467660
1,1,1-Trichloroethane	U		0.00152	0.00411	1	04/29/2020 00:07	WG1467660
1,1,2-Trichloroethane	U		0.000983	0.00411	1	04/29/2020 00:07	WG1467660
Trichloroethene	U		0.000961	0.00165	1	04/29/2020 00:07	WG1467660
Trichlorofluoromethane	U		0.00136	0.00411	1	04/29/2020 00:07	WG1467660
1,2,3-Trichloropropane	U		0.00267	0.0206	1	04/29/2020 00:07	WG1467660
1,2,4-Trimethylbenzene	U		0.00260	0.00823	1	04/29/2020 00:07	WG1467660
1,2,3-Trimethylbenzene	U		0.00260	0.00823	1	04/29/2020 00:07	WG1467660
1,3,5-Trimethylbenzene	U		0.00329	0.00823	1	04/29/2020 00:07	WG1467660
Vinyl acetate	U	J4	0.00418	0.0206	1	04/29/2020 00:07	WG1467660
Vinyl chloride	U	J4	0.00191	0.00411	1	04/29/2020 00:07	WG1467660
Xylenes, Total	U		0.00145	0.0107	1	04/29/2020 00:07	WG1467660
(S) Toluene-d8	*112*			*75.0-131*		*04/29/2020 00:07*	WG1467660
(S) 4-Bromofluorobenzene	*100*			*67.0-138*		*04/29/2020 00:07*	WG1467660
(S) 1,2-Dichloroethane-d4	*92.3*			*70.0-130*		*04/29/2020 00:07*	WG1467660

JC 5/28/2020

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	65.7		1	05/04/2020 15:33	WG1469318

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	U		0.0556	0.0761	1	04/29/2020 00:26	WG1467660
Acrylonitrile	U		0.00550	0.0190	1	04/29/2020 00:26	WG1467660
Benzene	U		0.000711	0.00152	1	04/29/2020 00:26	WG1467660
Bromobenzene	U		0.00137	0.0190	1	04/29/2020 00:26	WG1467660
Bromodichloromethane	U		0.00110	0.00381	1	04/29/2020 00:26	WG1467660
Bromochloromethane	U		0.000859	0.00761	1	04/29/2020 00:26	WG1467660
Bromoform	U		0.00178	0.0381	1	04/29/2020 00:26	WG1467660
Bromomethane	U		0.00300	0.0190	1	04/29/2020 00:26	WG1467660
n-Butylbenzene	U		0.00799	0.0190	1	04/29/2020 00:26	WG1467660
sec-Butylbenzene	U		0.00439	0.0190	1	04/29/2020 00:26	WG1467660
tert-Butylbenzene	U		0.00297	0.00761	1	04/29/2020 00:26	WG1467660
Carbon disulfide	U		0.00107	0.0190	1	04/29/2020 00:26	WG1467660
Carbon tetrachloride	U		0.00137	0.00761	1	04/29/2020 00:26	WG1467660
Chlorobenzene	U		0.000320	0.00381	1	04/29/2020 00:26	WG1467660
Chlorodibromomethane	U		0.000932	0.00381	1	04/29/2020 00:26	WG1467660
Chloroethane	U		0.00259	0.00761	1	04/29/2020 00:26	WG1467660
Chloroform	U		0.00157	0.00381	1	04/29/2020 00:26	WG1467660
Chloromethane	U UJ	J0	0.00662	0.0190	1	04/29/2020 00:26	WG1467660
2-Chlorotoluene	U		0.00132	0.00381	1	04/29/2020 00:26	WG1467660
4-Chlorotoluene	U		0.000685	0.00761	1	04/29/2020 00:26	WG1467660
1,2-Dibromo-3-Chloropropane	U		0.00594	0.0381	1	04/29/2020 00:26	WG1467660
1,2-Dibromoethane	U		0.000987	0.00381	1	04/29/2020 00:26	WG1467660
Dibromomethane	U		0.00114	0.00761	1	04/29/2020 00:26	WG1467660
1,2-Dichlorobenzene	U		0.000647	0.00761	1	04/29/2020 00:26	WG1467660
1,3-Dichlorobenzene	U		0.000914	0.00761	1	04/29/2020 00:26	WG1467660
1,4-Dichlorobenzene	U		0.00107	0.00761	1	04/29/2020 00:26	WG1467660
Dichlorodifluoromethane	U		0.00245	0.00381	1	04/29/2020 00:26	WG1467660
1,1-Dichloroethane	U		0.000748	0.00381	1	04/29/2020 00:26	WG1467660
1,2-Dichloroethane	U		0.000988	0.00381	1	04/29/2020 00:26	WG1467660
1,1-Dichloroethene	U		0.000923	0.00381	1	04/29/2020 00:26	WG1467660
cis-1,2-Dichloroethene	U		0.00112	0.00381	1	04/29/2020 00:26	WG1467660
trans-1,2-Dichloroethene	U		0.00158	0.00761	1	04/29/2020 00:26	WG1467660
1,2-Dichloropropane	U	J4	0.00216	0.00761	1	04/29/2020 00:26	WG1467660
1,1-Dichloropropene	U		0.00123	0.00381	1	04/29/2020 00:26	WG1467660
1,3-Dichloropropane	U		0.000763	0.00761	1	04/29/2020 00:26	WG1467660
cis-1,3-Dichloropropene	U		0.00115	0.00381	1	04/29/2020 00:26	WG1467660
trans-1,3-Dichloropropene	U		0.00174	0.00761	1	04/29/2020 00:26	WG1467660
trans-1,4-Dichloro-2-butene	U		0.00283	0.00761	1	04/29/2020 00:26	WG1467660
2,2-Dichloropropane	U		0.00210	0.00381	1	04/29/2020 00:26	WG1467660
Di-isopropyl ether	U		0.000624	0.00152	1	04/29/2020 00:26	WG1467660
Ethylbenzene	U		0.00112	0.00381	1	04/29/2020 00:26	WG1467660
Hexachloro-1,3-butadiene	U UJ	J0	0.00914	0.0381	1	04/29/2020 00:26	WG1467660
2-Hexanone	U	J4	0.00512	0.0381	1	04/29/2020 00:26	WG1467660
n-Hexane	U		0.00344	0.00761	1	04/29/2020 00:26	WG1467660
Iodomethane	U		0.00353	0.0190	1	04/29/2020 00:26	WG1467660
Isopropylbenzene	U		0.000647	0.00381	1	04/29/2020 00:26	WG1467660
p-Isopropyltoluene	U		0.00388	0.00761	1	04/29/2020 00:26	WG1467660
2-Butanone (MEK)	U		0.0967	0.152	1	04/29/2020 00:26	WG1467660
Methylene Chloride	U		0.0101	0.0381	1	04/29/2020 00:26	WG1467660
4-Methyl-2-pentanone (MIBK)	U	J4	0.00347	0.0381	1	04/29/2020 00:26	WG1467660

JC 5/28/2020

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.000533	0.00152	1	04/29/2020 00:26	WG1467660
Naphthalene	U UJ	J0	0.00743	0.0190	1	04/29/2020 00:26	WG1467660
n-Propylbenzene	U		0.00145	0.00761	1	04/29/2020 00:26	WG1467660
Styrene	U	J4	0.000349	0.0190	1	04/29/2020 00:26	WG1467660
1,1,1,2-Tetrachloroethane	U		0.00144	0.00381	1	04/29/2020 00:26	WG1467660
1,1,2,2-Tetrachloroethane	U		0.00106	0.00381	1	04/29/2020 00:26	WG1467660
1,1,2-Trichlorotrifluoroethane	U		0.00115	0.00381	1	04/29/2020 00:26	WG1467660
Tetrachloroethene	0.00262	J	0.00136	0.00381	1	04/29/2020 00:26	WG1467660
Toluene	U		0.00198	0.00761	1	04/29/2020 00:26	WG1467660
1,2,3-Trichlorobenzene	U UJ	J0	0.0112	0.0190	1	04/29/2020 00:26	WG1467660
1,2,4-Trichlorobenzene	U		0.00670	0.0190	1	04/29/2020 00:26	WG1467660
1,1,1-Trichloroethane	U		0.00141	0.00381	1	04/29/2020 00:26	WG1467660
1,1,2-Trichloroethane	U		0.000909	0.00381	1	04/29/2020 00:26	WG1467660
Trichloroethene	U		0.000889	0.00152	1	04/29/2020 00:26	WG1467660
Trichlorofluoromethane	U		0.00126	0.00381	1	04/29/2020 00:26	WG1467660
1,2,3-Trichloropropane	U		0.00247	0.0190	1	04/29/2020 00:26	WG1467660
1,2,4-Trimethylbenzene	U		0.00241	0.00761	1	04/29/2020 00:26	WG1467660
1,2,3-Trimethylbenzene	U		0.00241	0.00761	1	04/29/2020 00:26	WG1467660
1,3,5-Trimethylbenzene	U		0.00305	0.00761	1	04/29/2020 00:26	WG1467660
Vinyl acetate	U	J4	0.00387	0.0190	1	04/29/2020 00:26	WG1467660
Vinyl chloride	U	J4	0.00177	0.00381	1	04/29/2020 00:26	WG1467660
Xylenes, Total	U		0.00134	0.00990	1	04/29/2020 00:26	WG1467660
(S) Toluene-d8	*111*			*75.0-131*		*04/29/2020 00:26*	WG1467660
(S) 4-Bromofluorobenzene	*104*			*67.0-138*		*04/29/2020 00:26*	WG1467660
(S) 1,2-Dichloroethane-d4	*92.7*			*70.0-130*		*04/29/2020 00:26*	WG1467660

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

JC 5/28/2020

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	81.5		1	05/04/2020 15:33	WG1469318

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	U		0.0448	0.0613	1	04/29/2020 00:45	WG1467660
Acrylonitrile	U		0.00443	0.0153	1	04/29/2020 00:45	WG1467660
Benzene	U		0.000573	0.00123	1	04/29/2020 00:45	WG1467660
Bromobenzene	U		0.00110	0.0153	1	04/29/2020 00:45	WG1467660
Bromodichloromethane	U		0.000890	0.00307	1	04/29/2020 00:45	WG1467660
Bromochloromethane	U		0.000692	0.00613	1	04/29/2020 00:45	WG1467660
Bromoform	U		0.00144	0.0307	1	04/29/2020 00:45	WG1467660
Bromomethane	U		0.00242	0.0153	1	04/29/2020 00:45	WG1467660
n-Butylbenzene	U		0.00644	0.0153	1	04/29/2020 00:45	WG1467660
sec-Butylbenzene	U		0.00353	0.0153	1	04/29/2020 00:45	WG1467660
tert-Butylbenzene	U		0.00239	0.00613	1	04/29/2020 00:45	WG1467660
Carbon disulfide	U		0.000859	0.0153	1	04/29/2020 00:45	WG1467660
Carbon tetrachloride	U		0.00110	0.00613	1	04/29/2020 00:45	WG1467660
Chlorobenzene	U		0.000258	0.00307	1	04/29/2020 00:45	WG1467660
Chlorodibromomethane	U		0.000751	0.00307	1	04/29/2020 00:45	WG1467660
Chloroethane	U		0.00209	0.00613	1	04/29/2020 00:45	WG1467660
Chloroform	U		0.00126	0.00307	1	04/29/2020 00:45	WG1467660
Chloromethane	U UJ	J0	0.00534	0.0153	1	04/29/2020 00:45	WG1467660
2-Chlorotoluene	U		0.00106	0.00307	1	04/29/2020 00:45	WG1467660
4-Chlorotoluene	U		0.000552	0.00613	1	04/29/2020 00:45	WG1467660
1,2-Dibromo-3-Chloropropane	U		0.00479	0.0307	1	04/29/2020 00:45	WG1467660
1,2-Dibromoethane	U		0.000795	0.00307	1	04/29/2020 00:45	WG1467660
Dibromomethane	U		0.000920	0.00613	1	04/29/2020 00:45	WG1467660
1,2-Dichlorobenzene	U		0.000521	0.00613	1	04/29/2020 00:45	WG1467660
1,3-Dichlorobenzene	U		0.000736	0.00613	1	04/29/2020 00:45	WG1467660
1,4-Dichlorobenzene	U		0.000859	0.00613	1	04/29/2020 00:45	WG1467660
Dichlorodifluoromethane	U		0.00198	0.00307	1	04/29/2020 00:45	WG1467660
1,1-Dichloroethane	U		0.000602	0.00307	1	04/29/2020 00:45	WG1467660
1,2-Dichloroethane	U		0.000796	0.00307	1	04/29/2020 00:45	WG1467660
1,1-Dichloroethene	U		0.000744	0.00307	1	04/29/2020 00:45	WG1467660
cis-1,2-Dichloroethene	0.00302	J	0.000901	0.00307	1	04/29/2020 00:45	WG1467660
trans-1,2-Dichloroethene	U		0.00128	0.00613	1	04/29/2020 00:45	WG1467660
1,2-Dichloropropane	U	J4	0.00174	0.00613	1	04/29/2020 00:45	WG1467660
1,1-Dichloropropene	U		0.000993	0.00307	1	04/29/2020 00:45	WG1467660
1,3-Dichloropropane	U		0.000615	0.00613	1	04/29/2020 00:45	WG1467660
cis-1,3-Dichloropropene	U		0.000929	0.00307	1	04/29/2020 00:45	WG1467660
trans-1,3-Dichloropropene	U		0.00140	0.00613	1	04/29/2020 00:45	WG1467660
trans-1,4-Dichloro-2-butene	U		0.00228	0.00613	1	04/29/2020 00:45	WG1467660
2,2-Dichloropropane	U		0.00169	0.00307	1	04/29/2020 00:45	WG1467660
Di-isopropyl ether	U		0.000503	0.00123	1	04/29/2020 00:45	WG1467660
Ethylbenzene	U		0.000904	0.00307	1	04/29/2020 00:45	WG1467660
Hexachloro-1,3-butadiene	U UJ	J0	0.00736	0.0307	1	04/29/2020 00:45	WG1467660
2-Hexanone	U	J4	0.00412	0.0307	1	04/29/2020 00:45	WG1467660
n-Hexane	U		0.00277	0.00613	1	04/29/2020 00:45	WG1467660
Iodomethane	U		0.00285	0.0153	1	04/29/2020 00:45	WG1467660
Isopropylbenzene	U		0.000521	0.00307	1	04/29/2020 00:45	WG1467660
p-Isopropyltoluene	U		0.00313	0.00613	1	04/29/2020 00:45	WG1467660
2-Butanone (MEK)	U		0.0779	0.123	1	04/29/2020 00:45	WG1467660
Methylene Chloride	U		0.00815	0.0307	1	04/29/2020 00:45	WG1467660
4-Methyl-2-pentanone (MIBK)	U	J4	0.00280	0.0307	1	04/29/2020 00:45	WG1467660

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Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.000429	0.00123	1	04/29/2020 00:45	WG1467660
Naphthalene	U UJ	J0	0.00599	0.0153	1	04/29/2020 00:45	WG1467660
n-Propylbenzene	U		0.00117	0.00613	1	04/29/2020 00:45	WG1467660
Styrene	U	J4	0.000281	0.0153	1	04/29/2020 00:45	WG1467660
1,1,1,2-Tetrachloroethane	U		0.00116	0.00307	1	04/29/2020 00:45	WG1467660
1,1,2,2-Tetrachloroethane	U		0.000853	0.00307	1	04/29/2020 00:45	WG1467660
1,1,2-Trichlorotrifluoroethane	U		0.000925	0.00307	1	04/29/2020 00:45	WG1467660
Tetrachloroethene	U		0.00110	0.00307	1	04/29/2020 00:45	WG1467660
Toluene	0.00193	J	0.00160	0.00613	1	04/29/2020 00:45	WG1467660
1,2,3-Trichlorobenzene	U UJ	J0	0.00899	0.0153	1	04/29/2020 00:45	WG1467660
1,2,4-Trichlorobenzene	U		0.00540	0.0153	1	04/29/2020 00:45	WG1467660
1,1,1-Trichloroethane	U		0.00113	0.00307	1	04/29/2020 00:45	WG1467660
1,1,2-Trichloroethane	U		0.000733	0.00307	1	04/29/2020 00:45	WG1467660
Trichloroethene	U		0.000717	0.00123	1	04/29/2020 00:45	WG1467660
Trichlorofluoromethane	U		0.00101	0.00307	1	04/29/2020 00:45	WG1467660
1,2,3-Trichloropropane	U		0.00199	0.0153	1	04/29/2020 00:45	WG1467660
1,2,4-Trimethylbenzene	U		0.00194	0.00613	1	04/29/2020 00:45	WG1467660
1,2,3-Trimethylbenzene	U		0.00194	0.00613	1	04/29/2020 00:45	WG1467660
1,3,5-Trimethylbenzene	U		0.00245	0.00613	1	04/29/2020 00:45	WG1467660
Vinyl acetate	U	J4	0.00312	0.0153	1	04/29/2020 00:45	WG1467660
Vinyl chloride	U	J4	0.00142	0.00307	1	04/29/2020 00:45	WG1467660
Xylenes, Total	U		0.00108	0.00798	1	04/29/2020 00:45	WG1467660
(S) Toluene-d8	*112*			*75.0-131*		*04/29/2020 00:45*	WG1467660
(S) 4-Bromofluorobenzene	*102*			*67.0-138*		*04/29/2020 00:45*	WG1467660
(S) 1,2-Dichloroethane-d4	*92.8*			*70.0-130*		*04/29/2020 00:45*	WG1467660

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MW-336-40

Collected date/time: 04/22/20 11:10

SAMPLE RESULTS - 21

L1212082

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	82.9		1	05/04/2020 15:33	WG1469318

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	U		0.0440	0.0603	1	04/29/2020 12:51	WG1467916
Acrylonitrile	U		0.00435	0.0151	1	04/29/2020 12:51	WG1467916
Benzene	U		0.000563	0.00121	1	04/29/2020 12:51	WG1467916
Bromobenzene	U		0.00109	0.0151	1	04/29/2020 12:51	WG1467916
Bromodichloromethane	U		0.000874	0.00301	1	04/29/2020 12:51	WG1467916
Bromochloromethane	U		0.000680	0.00603	1	04/29/2020 12:51	WG1467916
Bromoform	U	UJ J0	0.00141	0.0301	1	04/29/2020 12:51	WG1467916
Bromomethane	U		0.00238	0.0151	1	04/29/2020 12:51	WG1467916
n-Butylbenzene	U		0.00633	0.0151	1	04/29/2020 12:51	WG1467916
sec-Butylbenzene	U		0.00347	0.0151	1	04/29/2020 12:51	WG1467916
tert-Butylbenzene	U		0.00235	0.00603	1	04/29/2020 12:51	WG1467916
Carbon disulfide	U		0.000844	0.0151	1	04/29/2020 12:51	WG1467916
Carbon tetrachloride	U		0.00108	0.00603	1	04/29/2020 12:51	WG1467916
Chlorobenzene	U		0.000253	0.00301	1	04/29/2020 12:51	WG1467916
Chlorodibromomethane	U		0.000738	0.00301	1	04/29/2020 12:51	WG1467916
Chloroethane	U		0.00205	0.00603	1	04/29/2020 12:51	WG1467916
Chloroform	U		0.00124	0.00301	1	04/29/2020 12:51	WG1467916
Chloromethane	U	J4	0.00524	0.0151	1	04/29/2020 12:51	WG1467916
2-Chlorotoluene	U		0.00104	0.00301	1	04/29/2020 12:51	WG1467916
4-Chlorotoluene	U		0.000543	0.00603	1	04/29/2020 12:51	WG1467916
1,2-Dibromo-3-Chloropropane	U		0.00470	0.0301	1	04/29/2020 12:51	WG1467916
1,2-Dibromoethane	U		0.000781	0.00301	1	04/29/2020 12:51	WG1467916
Dibromomethane	U		0.000904	0.00603	1	04/29/2020 12:51	WG1467916
1,2-Dichlorobenzene	U		0.000512	0.00603	1	04/29/2020 12:51	WG1467916
1,3-Dichlorobenzene	U		0.000723	0.00603	1	04/29/2020 12:51	WG1467916
1,4-Dichlorobenzene	U		0.000844	0.00603	1	04/29/2020 12:51	WG1467916
Dichlorodifluoromethane	U		0.00194	0.00301	1	04/29/2020 12:51	WG1467916
1,1-Dichloroethane	U		0.000592	0.00301	1	04/29/2020 12:51	WG1467916
1,2-Dichloroethane	U		0.000782	0.00301	1	04/29/2020 12:51	WG1467916
1,1-Dichloroethene	U		0.000731	0.00301	1	04/29/2020 12:51	WG1467916
cis-1,2-Dichloroethene	U		0.000885	0.00301	1	04/29/2020 12:51	WG1467916
trans-1,2-Dichloroethene	U		0.00125	0.00603	1	04/29/2020 12:51	WG1467916
1,2-Dichloropropane	U		0.00171	0.00603	1	04/29/2020 12:51	WG1467916
1,1-Dichloropropene	U		0.000975	0.00301	1	04/29/2020 12:51	WG1467916
1,3-Dichloropropane	U		0.000604	0.00603	1	04/29/2020 12:51	WG1467916
cis-1,3-Dichloropropene	U		0.000913	0.00301	1	04/29/2020 12:51	WG1467916
trans-1,3-Dichloropropene	U		0.00137	0.00603	1	04/29/2020 12:51	WG1467916
trans-1,4-Dichloro-2-butene	U	J4	0.00224	0.00603	1	04/29/2020 12:51	WG1467916
2,2-Dichloropropane	U		0.00166	0.00301	1	04/29/2020 12:51	WG1467916
Di-isopropyl ether	U	J4	0.000494	0.00121	1	04/29/2020 12:51	WG1467916
Ethylbenzene	U		0.000889	0.00301	1	04/29/2020 12:51	WG1467916
Hexachloro-1,3-butadiene	U	UJ J0	0.00723	0.0301	1	04/29/2020 12:51	WG1467916
2-Hexanone	U		0.00405	0.0301	1	04/29/2020 12:51	WG1467916
n-Hexane	U		0.00272	0.00603	1	04/29/2020 12:51	WG1467916
Iodomethane	U		0.00280	0.0151	1	04/29/2020 12:51	WG1467916
Isopropylbenzene	U		0.000512	0.00301	1	04/29/2020 12:51	WG1467916
p-Isopropyltoluene	U		0.00307	0.00603	1	04/29/2020 12:51	WG1467916
2-Butanone (MEK)	U		0.0766	0.121	1	04/29/2020 12:51	WG1467916
Methylene Chloride	U		0.00801	0.0301	1	04/29/2020 12:51	WG1467916
4-Methyl-2-pentanone (MIBK)	U		0.00275	0.0301	1	04/29/2020 12:51	WG1467916

JC 5/28/2020

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.000422	0.00121	1	04/29/2020 12:51	WG1467916
Naphthalene	U		0.00588	0.0151	1	04/29/2020 12:51	WG1467916
n-Propylbenzene	U		0.00115	0.00603	1	04/29/2020 12:51	WG1467916
Styrene	U		0.000276	0.0151	1	04/29/2020 12:51	WG1467916
1,1,1,2-Tetrachloroethane	U		0.00114	0.00301	1	04/29/2020 12:51	WG1467916
1,1,2,2-Tetrachloroethane	U		0.000838	0.00301	1	04/29/2020 12:51	WG1467916
1,1,2-Trichlorotrifluoroethane	U		0.000909	0.00301	1	04/29/2020 12:51	WG1467916
Tetrachloroethene	U		0.00108	0.00301	1	04/29/2020 12:51	WG1467916
Toluene	0.00174	J	0.00157	0.00603	1	04/29/2020 12:51	WG1467916
1,2,3-Trichlorobenzene	U		0.00884	0.0151	1	04/29/2020 12:51	WG1467916
1,2,4-Trichlorobenzene	U UJ	J0	0.00530	0.0151	1	04/29/2020 12:51	WG1467916
1,1,1-Trichloroethane	U		0.00111	0.00301	1	04/29/2020 12:51	WG1467916
1,1,2-Trichloroethane	U		0.000720	0.00301	1	04/29/2020 12:51	WG1467916
Trichloroethene	U		0.000704	0.00121	1	04/29/2020 12:51	WG1467916
Trichlorofluoromethane	U		0.000997	0.00301	1	04/29/2020 12:51	WG1467916
1,2,3-Trichloropropane	U		0.00195	0.0151	1	04/29/2020 12:51	WG1467916
1,2,4-Trimethylbenzene	U		0.00190	0.00603	1	04/29/2020 12:51	WG1467916
1,2,3-Trimethylbenzene	U		0.00190	0.00603	1	04/29/2020 12:51	WG1467916
1,3,5-Trimethylbenzene	U		0.00241	0.00603	1	04/29/2020 12:51	WG1467916
Vinyl acetate	U		0.00306	0.0151	1	04/29/2020 12:51	WG1467916
Vinyl chloride	U	J4	0.00140	0.00301	1	04/29/2020 12:51	WG1467916
Xylenes, Total	U		0.00106	0.00784	1	04/29/2020 12:51	WG1467916
(S) Toluene-d8	*109*			*75.0-131*		*04/29/2020 12:51*	WG1467916
(S) 4-Bromofluorobenzene	*89.1*			*67.0-138*		*04/29/2020 12:51*	WG1467916
(S) 1,2-Dichloroethane-d4	*92.6*			*70.0-130*		*04/29/2020 12:51*	WG1467916

JC 5/28/2020

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	75.3		1	05/04/2020 15:33	WG1469318

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	U		0.0485	0.0664	1	04/29/2020 13:10	WG1467916
Acrylonitrile	U		0.00479	0.0166	1	04/29/2020 13:10	WG1467916
Benzene	U		0.000620	0.00133	1	04/29/2020 13:10	WG1467916
Bromobenzene	U		0.00120	0.0166	1	04/29/2020 13:10	WG1467916
Bromodichloromethane	U		0.000963	0.00332	1	04/29/2020 13:10	WG1467916
Bromochloromethane	U		0.000749	0.00664	1	04/29/2020 13:10	WG1467916
Bromoform	U	UJ J0	0.00155	0.0332	1	04/29/2020 13:10	WG1467916
Bromomethane	U		0.00262	0.0166	1	04/29/2020 13:10	WG1467916
n-Butylbenzene	U		0.00697	0.0166	1	04/29/2020 13:10	WG1467916
sec-Butylbenzene	U		0.00382	0.0166	1	04/29/2020 13:10	WG1467916
tert-Butylbenzene	U		0.00259	0.00664	1	04/29/2020 13:10	WG1467916
Carbon disulfide	U		0.000930	0.0166	1	04/29/2020 13:10	WG1467916
Carbon tetrachloride	U		0.00119	0.00664	1	04/29/2020 13:10	WG1467916
Chlorobenzene	U		0.000279	0.00332	1	04/29/2020 13:10	WG1467916
Chlorodibromomethane	U		0.000813	0.00332	1	04/29/2020 13:10	WG1467916
Chloroethane	U		0.00226	0.00664	1	04/29/2020 13:10	WG1467916
Chloroform	U		0.00137	0.00332	1	04/29/2020 13:10	WG1467916
Chloromethane	U	J4	0.00578	0.0166	1	04/29/2020 13:10	WG1467916
2-Chlorotoluene	U		0.00115	0.00332	1	04/29/2020 13:10	WG1467916
4-Chlorotoluene	U		0.000598	0.00664	1	04/29/2020 13:10	WG1467916
1,2-Dibromo-3-Chloropropane	U		0.00518	0.0332	1	04/29/2020 13:10	WG1467916
1,2-Dibromoethane	U		0.000861	0.00332	1	04/29/2020 13:10	WG1467916
Dibromomethane	U		0.000996	0.00664	1	04/29/2020 13:10	WG1467916
1,2-Dichlorobenzene	U		0.000564	0.00664	1	04/29/2020 13:10	WG1467916
1,3-Dichlorobenzene	U		0.000797	0.00664	1	04/29/2020 13:10	WG1467916
1,4-Dichlorobenzene	U		0.000930	0.00664	1	04/29/2020 13:10	WG1467916
Dichlorodifluoromethane	U		0.00214	0.00332	1	04/29/2020 13:10	WG1467916
1,1-Dichloroethane	U		0.000652	0.00332	1	04/29/2020 13:10	WG1467916
1,2-Dichloroethane	U		0.000862	0.00332	1	04/29/2020 13:10	WG1467916
1,1-Dichloroethene	U		0.000805	0.00332	1	04/29/2020 13:10	WG1467916
cis-1,2-Dichloroethene	0.0159		0.000975	0.00332	1	04/29/2020 13:10	WG1467916
trans-1,2-Dichloroethene	U		0.00138	0.00664	1	04/29/2020 13:10	WG1467916
1,2-Dichloropropane	U		0.00189	0.00664	1	04/29/2020 13:10	WG1467916
1,1-Dichloropropene	U		0.00107	0.00332	1	04/29/2020 13:10	WG1467916
1,3-Dichloropropane	U		0.000665	0.00664	1	04/29/2020 13:10	WG1467916
cis-1,3-Dichloropropene	U		0.00101	0.00332	1	04/29/2020 13:10	WG1467916
trans-1,3-Dichloropropene	U		0.00151	0.00664	1	04/29/2020 13:10	WG1467916
trans-1,4-Dichloro-2-butene	U	J4	0.00247	0.00664	1	04/29/2020 13:10	WG1467916
2,2-Dichloropropane	U		0.00183	0.00332	1	04/29/2020 13:10	WG1467916
Di-isopropyl ether	U	J4	0.000545	0.00133	1	04/29/2020 13:10	WG1467916
Ethylbenzene	U		0.000979	0.00332	1	04/29/2020 13:10	WG1467916
Hexachloro-1,3-butadiene	U	UJ J0	0.00797	0.0332	1	04/29/2020 13:10	WG1467916
2-Hexanone	U		0.00446	0.0332	1	04/29/2020 13:10	WG1467916
n-Hexane	U		0.00300	0.00664	1	04/29/2020 13:10	WG1467916
Iodomethane	U		0.00308	0.0166	1	04/29/2020 13:10	WG1467916
Isopropylbenzene	U		0.000564	0.00332	1	04/29/2020 13:10	WG1467916
p-Isopropyltoluene	U		0.00339	0.00664	1	04/29/2020 13:10	WG1467916
2-Butanone (MEK)	U		0.0843	0.133	1	04/29/2020 13:10	WG1467916
Methylene Chloride	U		0.00882	0.0332	1	04/29/2020 13:10	WG1467916
4-Methyl-2-pentanone (MIBK)	U		0.00303	0.0332	1	04/29/2020 13:10	WG1467916

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Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.000465	0.00133	1	04/29/2020 13:10	WG1467916
Naphthalene	U		0.00648	0.0166	1	04/29/2020 13:10	WG1467916
n-Propylbenzene	U		0.00126	0.00664	1	04/29/2020 13:10	WG1467916
Styrene	U		0.000304	0.0166	1	04/29/2020 13:10	WG1467916
1,1,1,2-Tetrachloroethane	U		0.00126	0.00332	1	04/29/2020 13:10	WG1467916
1,1,2,2-Tetrachloroethane	U		0.000923	0.00332	1	04/29/2020 13:10	WG1467916
1,1,2-Trichlorotrifluoroethane	U		0.00100	0.00332	1	04/29/2020 13:10	WG1467916
Tetrachloroethene	U		0.00119	0.00332	1	04/29/2020 13:10	WG1467916
Toluene	U		0.00173	0.00664	1	04/29/2020 13:10	WG1467916
1,2,3-Trichlorobenzene	U		0.00973	0.0166	1	04/29/2020 13:10	WG1467916
1,2,4-Trichlorobenzene	U	UJ J0	0.00584	0.0166	1	04/29/2020 13:10	WG1467916
1,1,1-Trichloroethane	U		0.00123	0.00332	1	04/29/2020 13:10	WG1467916
1,1,2-Trichloroethane	U		0.000793	0.00332	1	04/29/2020 13:10	WG1467916
Trichloroethene	0.00301		0.000776	0.00133	1	04/29/2020 13:10	WG1467916
Trichlorofluoromethane	U		0.00110	0.00332	1	04/29/2020 13:10	WG1467916
1,2,3-Trichloropropane	U		0.00215	0.0166	1	04/29/2020 13:10	WG1467916
1,2,4-Trimethylbenzene	U		0.00210	0.00664	1	04/29/2020 13:10	WG1467916
1,2,3-Trimethylbenzene	U		0.00210	0.00664	1	04/29/2020 13:10	WG1467916
1,3,5-Trimethylbenzene	U		0.00266	0.00664	1	04/29/2020 13:10	WG1467916
Vinyl acetate	U		0.00337	0.0166	1	04/29/2020 13:10	WG1467916
Vinyl chloride	U	J4	0.00154	0.00332	1	04/29/2020 13:10	WG1467916
Xylenes, Total	U		0.00117	0.00863	1	04/29/2020 13:10	WG1467916
(S) Toluene-d8	*108*			*75.0-131*		*04/29/2020 13:10*	WG1467916
(S) 4-Bromofluorobenzene	*87.3*			*67.0-138*		*04/29/2020 13:10*	WG1467916
(S) 1,2-Dichloroethane-d4	*94.9*			*70.0-130*		*04/29/2020 13:10*	WG1467916

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Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	86.9		1	05/04/2020 15:33	WG1469318

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg		Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	U			0.0420	0.0576	1	04/29/2020 13:29	WG1467916
Acrylonitrile	U			0.00416	0.0144	1	04/29/2020 13:29	WG1467916
Benzene	0.00149			0.000538	0.00115	1	04/29/2020 13:29	WG1467916
Bromobenzene	U			0.00104	0.0144	1	04/29/2020 13:29	WG1467916
Bromodichloromethane	U			0.000835	0.00288	1	04/29/2020 13:29	WG1467916
Bromochloromethane	U			0.000649	0.00576	1	04/29/2020 13:29	WG1467916
Bromoform	U	UJ	J0	0.00135	0.0288	1	04/29/2020 13:29	WG1467916
Bromomethane	U			0.00227	0.0144	1	04/29/2020 13:29	WG1467916
n-Butylbenzene	U			0.00604	0.0144	1	04/29/2020 13:29	WG1467916
sec-Butylbenzene	U			0.00332	0.0144	1	04/29/2020 13:29	WG1467916
tert-Butylbenzene	U			0.00225	0.00576	1	04/29/2020 13:29	WG1467916
Carbon disulfide	U			0.000806	0.0144	1	04/29/2020 13:29	WG1467916
Carbon tetrachloride	U			0.00103	0.00576	1	04/29/2020 13:29	WG1467916
Chlorobenzene	U			0.000242	0.00288	1	04/29/2020 13:29	WG1467916
Chlorodibromomethane	U			0.000705	0.00288	1	04/29/2020 13:29	WG1467916
Chloroethane	U			0.00196	0.00576	1	04/29/2020 13:29	WG1467916
Chloroform	U			0.00119	0.00288	1	04/29/2020 13:29	WG1467916
Chloromethane	U		J4	0.00501	0.0144	1	04/29/2020 13:29	WG1467916
2-Chlorotoluene	U			0.000996	0.00288	1	04/29/2020 13:29	WG1467916
4-Chlorotoluene	U			0.000518	0.00576	1	04/29/2020 13:29	WG1467916
1,2-Dibromo-3-Chloropropane	U			0.00449	0.0288	1	04/29/2020 13:29	WG1467916
1,2-Dibromoethane	U			0.000746	0.00288	1	04/29/2020 13:29	WG1467916
Dibromomethane	U			0.000863	0.00576	1	04/29/2020 13:29	WG1467916
1,2-Dichlorobenzene	U			0.000489	0.00576	1	04/29/2020 13:29	WG1467916
1,3-Dichlorobenzene	U			0.000691	0.00576	1	04/29/2020 13:29	WG1467916
1,4-Dichlorobenzene	U			0.000806	0.00576	1	04/29/2020 13:29	WG1467916
Dichlorodifluoromethane	U			0.00185	0.00288	1	04/29/2020 13:29	WG1467916
1,1-Dichloroethane	U			0.000565	0.00288	1	04/29/2020 13:29	WG1467916
1,2-Dichloroethane	U			0.000747	0.00288	1	04/29/2020 13:29	WG1467916
1,1-Dichloroethene	U			0.000698	0.00288	1	04/29/2020 13:29	WG1467916
cis-1,2-Dichloroethene	0.00694			0.000845	0.00288	1	04/29/2020 13:29	WG1467916
trans-1,2-Dichloroethene	U			0.00120	0.00576	1	04/29/2020 13:29	WG1467916
1,2-Dichloropropane	U			0.00163	0.00576	1	04/29/2020 13:29	WG1467916
1,1-Dichloropropene	U			0.000931	0.00288	1	04/29/2020 13:29	WG1467916
1,3-Dichloropropane	U			0.000577	0.00576	1	04/29/2020 13:29	WG1467916
cis-1,3-Dichloropropene	U			0.000872	0.00288	1	04/29/2020 13:29	WG1467916
trans-1,3-Dichloropropene	U			0.00131	0.00576	1	04/29/2020 13:29	WG1467916
trans-1,4-Dichloro-2-butene	U		J4	0.00214	0.00576	1	04/29/2020 13:29	WG1467916
2,2-Dichloropropane	U			0.00159	0.00288	1	04/29/2020 13:29	WG1467916
Di-isopropyl ether	U		J4	0.000472	0.00115	1	04/29/2020 13:29	WG1467916
Ethylbenzene	U			0.000848	0.00288	1	04/29/2020 13:29	WG1467916
Hexachloro-1,3-butadiene	U	UJ	J0	0.00691	0.0288	1	04/29/2020 13:29	WG1467916
2-Hexanone	U			0.00387	0.0288	1	04/29/2020 13:29	WG1467916
n-Hexane	U			0.00260	0.00576	1	04/29/2020 13:29	WG1467916
Iodomethane	U			0.00267	0.0144	1	04/29/2020 13:29	WG1467916
Isopropylbenzene	U			0.000489	0.00288	1	04/29/2020 13:29	WG1467916
p-Isopropyltoluene	U			0.00294	0.00576	1	04/29/2020 13:29	WG1467916
2-Butanone (MEK)	U			0.0731	0.115	1	04/29/2020 13:29	WG1467916
Methylene Chloride	U			0.00764	0.0288	1	04/29/2020 13:29	WG1467916
4-Methyl-2-pentanone (MIBK)	U			0.00262	0.0288	1	04/29/2020 13:29	WG1467916

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MW-336-51

Collected date/time: 04/22/20 12:42

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.000403	0.00115	1	04/29/2020 13:29	WG1467916
Naphthalene	U		0.00562	0.0144	1	04/29/2020 13:29	WG1467916
n-Propylbenzene	U		0.00109	0.00576	1	04/29/2020 13:29	WG1467916
Styrene	U		0.000264	0.0144	1	04/29/2020 13:29	WG1467916
1,1,1,2-Tetrachloroethane	U		0.00109	0.00288	1	04/29/2020 13:29	WG1467916
1,1,2,2-Tetrachloroethane	U		0.000800	0.00288	1	04/29/2020 13:29	WG1467916
1,1,2-Trichlorotrifluoroethane	U		0.000868	0.00288	1	04/29/2020 13:29	WG1467916
Tetrachloroethene	U		0.00103	0.00288	1	04/29/2020 13:29	WG1467916
Toluene	U		0.00150	0.00576	1	04/29/2020 13:29	WG1467916
1,2,3-Trichlorobenzene	U		0.00844	0.0144	1	04/29/2020 13:29	WG1467916
1,2,4-Trichlorobenzene	U	UJ J0	0.00507	0.0144	1	04/29/2020 13:29	WG1467916
1,1,1-Trichloroethane	U		0.00106	0.00288	1	04/29/2020 13:29	WG1467916
1,1,2-Trichloroethane	U		0.000687	0.00288	1	04/29/2020 13:29	WG1467916
Trichloroethene	0.00297		0.000672	0.00115	1	04/29/2020 13:29	WG1467916
Trichlorofluoromethane	U		0.000952	0.00288	1	04/29/2020 13:29	WG1467916
1,2,3-Trichloropropane	U		0.00187	0.0144	1	04/29/2020 13:29	WG1467916
1,2,4-Trimethylbenzene	U		0.00182	0.00576	1	04/29/2020 13:29	WG1467916
1,2,3-Trimethylbenzene	U		0.00182	0.00576	1	04/29/2020 13:29	WG1467916
1,3,5-Trimethylbenzene	U		0.00230	0.00576	1	04/29/2020 13:29	WG1467916
Vinyl acetate	U		0.00292	0.0144	1	04/29/2020 13:29	WG1467916
Vinyl chloride	U	J4	0.00134	0.00288	1	04/29/2020 13:29	WG1467916
Xylenes, Total	U		0.00101	0.00748	1	04/29/2020 13:29	WG1467916
(S) Toluene-d8	*107*			*75.0-131*		*04/29/2020 13:29*	WG1467916
(S) 4-Bromofluorobenzene	*90.6*			*67.0-138*		*04/29/2020 13:29*	WG1467916
(S) 1,2-Dichloroethane-d4	*94.6*			*70.0-130*		*04/29/2020 13:29*	WG1467916

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

JC 5/28/2020

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	87.5		1	05/04/2020 15:33	WG1469318

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	U		0.0417	0.0571	1	04/29/2020 13:48	WG1467916
Acrylonitrile	U		0.00412	0.0143	1	04/29/2020 13:48	WG1467916
Benzene	0.00153		0.000533	0.00114	1	04/29/2020 13:48	WG1467916
Bromobenzene	U		0.00103	0.0143	1	04/29/2020 13:48	WG1467916
Bromodichloromethane	U		0.000828	0.00286	1	04/29/2020 13:48	WG1467916
Bromochloromethane	U		0.000644	0.00571	1	04/29/2020 13:48	WG1467916
Bromoform	U	UJ J0	0.00134	0.0286	1	04/29/2020 13:48	WG1467916
Bromomethane	U		0.00225	0.0143	1	04/29/2020 13:48	WG1467916
n-Butylbenzene	U		0.00600	0.0143	1	04/29/2020 13:48	WG1467916
sec-Butylbenzene	U		0.00329	0.0143	1	04/29/2020 13:48	WG1467916
tert-Butylbenzene	U		0.00223	0.00571	1	04/29/2020 13:48	WG1467916
Carbon disulfide	U		0.000800	0.0143	1	04/29/2020 13:48	WG1467916
Carbon tetrachloride	U		0.00103	0.00571	1	04/29/2020 13:48	WG1467916
Chlorobenzene	U		0.000240	0.00286	1	04/29/2020 13:48	WG1467916
Chlorodibromomethane	U		0.000699	0.00286	1	04/29/2020 13:48	WG1467916
Chloroethane	U		0.00194	0.00571	1	04/29/2020 13:48	WG1467916
Chloroform	U		0.00118	0.00286	1	04/29/2020 13:48	WG1467916
Chloromethane	U	J4	0.00497	0.0143	1	04/29/2020 13:48	WG1467916
2-Chlorotoluene	U		0.000988	0.00286	1	04/29/2020 13:48	WG1467916
4-Chlorotoluene	U		0.000514	0.00571	1	04/29/2020 13:48	WG1467916
1,2-Dibromo-3-Chloropropane	U		0.00446	0.0286	1	04/29/2020 13:48	WG1467916
1,2-Dibromoethane	U		0.000740	0.00286	1	04/29/2020 13:48	WG1467916
Dibromomethane	U		0.000857	0.00571	1	04/29/2020 13:48	WG1467916
1,2-Dichlorobenzene	U		0.000485	0.00571	1	04/29/2020 13:48	WG1467916
1,3-Dichlorobenzene	U		0.000685	0.00571	1	04/29/2020 13:48	WG1467916
1,4-Dichlorobenzene	U		0.000800	0.00571	1	04/29/2020 13:48	WG1467916
Dichlorodifluoromethane	U		0.00184	0.00286	1	04/29/2020 13:48	WG1467916
1,1-Dichloroethane	U		0.000561	0.00286	1	04/29/2020 13:48	WG1467916
1,2-Dichloroethane	U		0.000741	0.00286	1	04/29/2020 13:48	WG1467916
1,1-Dichloroethene	U		0.000692	0.00286	1	04/29/2020 13:48	WG1467916
cis-1,2-Dichloroethene	0.0138		0.000838	0.00286	1	04/29/2020 13:48	WG1467916
trans-1,2-Dichloroethene	U		0.00119	0.00571	1	04/29/2020 13:48	WG1467916
1,2-Dichloropropane	U		0.00162	0.00571	1	04/29/2020 13:48	WG1467916
1,1-Dichloropropene	U		0.000924	0.00286	1	04/29/2020 13:48	WG1467916
1,3-Dichloropropane	U		0.000572	0.00571	1	04/29/2020 13:48	WG1467916
cis-1,3-Dichloropropene	U		0.000865	0.00286	1	04/29/2020 13:48	WG1467916
trans-1,3-Dichloropropene	U		0.00130	0.00571	1	04/29/2020 13:48	WG1467916
trans-1,4-Dichloro-2-butene	U	J4	0.00212	0.00571	1	04/29/2020 13:48	WG1467916
2,2-Dichloropropane	U		0.00158	0.00286	1	04/29/2020 13:48	WG1467916
Di-isopropyl ether	U	J4	0.000468	0.00114	1	04/29/2020 13:48	WG1467916
Ethylbenzene	U		0.000842	0.00286	1	04/29/2020 13:48	WG1467916
Hexachloro-1,3-butadiene	U	UJ J0	0.00685	0.0286	1	04/29/2020 13:48	WG1467916
2-Hexanone	U		0.00384	0.0286	1	04/29/2020 13:48	WG1467916
n-Hexane	U		0.00258	0.00571	1	04/29/2020 13:48	WG1467916
Iodomethane	U		0.00265	0.0143	1	04/29/2020 13:48	WG1467916
Isopropylbenzene	U		0.000485	0.00286	1	04/29/2020 13:48	WG1467916
p-Isopropyltoluene	U		0.00291	0.00571	1	04/29/2020 13:48	WG1467916
2-Butanone (MEK)	U		0.0725	0.114	1	04/29/2020 13:48	WG1467916
Methylene Chloride	U		0.00758	0.0286	1	04/29/2020 13:48	WG1467916
4-Methyl-2-pentanone (MIBK)	U		0.00260	0.0286	1	04/29/2020 13:48	WG1467916

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Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.000400	0.00114	1	04/29/2020 13:48	WG1467916
Naphthalene	U		0.00557	0.0143	1	04/29/2020 13:48	WG1467916
n-Propylbenzene	U		0.00109	0.00571	1	04/29/2020 13:48	WG1467916
Styrene	U		0.000262	0.0143	1	04/29/2020 13:48	WG1467916
1,1,1,2-Tetrachloroethane	U		0.00108	0.00286	1	04/29/2020 13:48	WG1467916
1,1,2,2-Tetrachloroethane	U		0.000794	0.00286	1	04/29/2020 13:48	WG1467916
1,1,2-Trichlorotrifluoroethane	U		0.000861	0.00286	1	04/29/2020 13:48	WG1467916
Tetrachloroethene	0.00129	J	0.00102	0.00286	1	04/29/2020 13:48	WG1467916
Toluene	0.00151	J	0.00149	0.00571	1	04/29/2020 13:48	WG1467916
1,2,3-Trichlorobenzene	U		0.00837	0.0143	1	04/29/2020 13:48	WG1467916
1,2,4-Trichlorobenzene	U UJ	J0	0.00503	0.0143	1	04/29/2020 13:48	WG1467916
1,1,1-Trichloroethane	U		0.00105	0.00286	1	04/29/2020 13:48	WG1467916
1,1,2-Trichloroethane	U		0.000682	0.00286	1	04/29/2020 13:48	WG1467916
Trichloroethene	0.00609		0.000667	0.00114	1	04/29/2020 13:48	WG1467916
Trichlorofluoromethane	U		0.000945	0.00286	1	04/29/2020 13:48	WG1467916
1,2,3-Trichloropropane	U		0.00185	0.0143	1	04/29/2020 13:48	WG1467916
1,2,4-Trimethylbenzene	U		0.00180	0.00571	1	04/29/2020 13:48	WG1467916
1,2,3-Trimethylbenzene	U		0.00180	0.00571	1	04/29/2020 13:48	WG1467916
1,3,5-Trimethylbenzene	U		0.00228	0.00571	1	04/29/2020 13:48	WG1467916
Vinyl acetate	U		0.00290	0.0143	1	04/29/2020 13:48	WG1467916
Vinyl chloride	U	J4	0.00133	0.00286	1	04/29/2020 13:48	WG1467916
Xylenes, Total	U		0.00101	0.00743	1	04/29/2020 13:48	WG1467916
(S) Toluene-d8	*108*			*75.0-131*		*04/29/2020 13:48*	WG1467916
(S) 4-Bromofluorobenzene	*87.7*			*67.0-138*		*04/29/2020 13:48*	WG1467916
(S) 1,2-Dichloroethane-d4	*91.1*			*70.0-130*		*04/29/2020 13:48*	WG1467916

JC 5/28/2020

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	85.2		1	05/04/2020 15:33	WG1469318

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	U		0.0428	0.0587	1	04/29/2020 14:07	WG1467916
Acrylonitrile	U		0.00424	0.0147	1	04/29/2020 14:07	WG1467916
Benzene	U		0.000548	0.00117	1	04/29/2020 14:07	WG1467916
Bromobenzene	U		0.00106	0.0147	1	04/29/2020 14:07	WG1467916
Bromodichloromethane	U		0.000851	0.00293	1	04/29/2020 14:07	WG1467916
Bromochloromethane	U		0.000662	0.00587	1	04/29/2020 14:07	WG1467916
Bromoform	U UJ	J0	0.00137	0.0293	1	04/29/2020 14:07	WG1467916
Bromomethane	U		0.00231	0.0147	1	04/29/2020 14:07	WG1467916
n-Butylbenzene	U		0.00616	0.0147	1	04/29/2020 14:07	WG1467916
sec-Butylbenzene	U		0.00338	0.0147	1	04/29/2020 14:07	WG1467916
tert-Butylbenzene	U		0.00229	0.00587	1	04/29/2020 14:07	WG1467916
Carbon disulfide	U		0.000822	0.0147	1	04/29/2020 14:07	WG1467916
Carbon tetrachloride	U		0.00105	0.00587	1	04/29/2020 14:07	WG1467916
Chlorobenzene	U		0.000246	0.00293	1	04/29/2020 14:07	WG1467916
Chlorodibromomethane	U		0.000718	0.00293	1	04/29/2020 14:07	WG1467916
Chloroethane	U		0.00200	0.00587	1	04/29/2020 14:07	WG1467916
Chloroform	U		0.00121	0.00293	1	04/29/2020 14:07	WG1467916
Chloromethane	U	J4	0.00511	0.0147	1	04/29/2020 14:07	WG1467916
2-Chlorotoluene	U		0.00102	0.00293	1	04/29/2020 14:07	WG1467916
4-Chlorotoluene	U		0.000528	0.00587	1	04/29/2020 14:07	WG1467916
1,2-Dibromo-3-Chloropropane	U		0.00458	0.0293	1	04/29/2020 14:07	WG1467916
1,2-Dibromoethane	U		0.000761	0.00293	1	04/29/2020 14:07	WG1467916
Dibromomethane	U		0.000880	0.00587	1	04/29/2020 14:07	WG1467916
1,2-Dichlorobenzene	U		0.000499	0.00587	1	04/29/2020 14:07	WG1467916
1,3-Dichlorobenzene	U		0.000704	0.00587	1	04/29/2020 14:07	WG1467916
1,4-Dichlorobenzene	U		0.000822	0.00587	1	04/29/2020 14:07	WG1467916
Dichlorodifluoromethane	U		0.00189	0.00293	1	04/29/2020 14:07	WG1467916
1,1-Dichloroethane	U		0.000576	0.00293	1	04/29/2020 14:07	WG1467916
1,2-Dichloroethane	U		0.000762	0.00293	1	04/29/2020 14:07	WG1467916
1,1-Dichloroethene	U		0.000711	0.00293	1	04/29/2020 14:07	WG1467916
cis-1,2-Dichloroethene	0.0379		0.000861	0.00293	1	04/29/2020 14:07	WG1467916
trans-1,2-Dichloroethene	U		0.00122	0.00587	1	04/29/2020 14:07	WG1467916
1,2-Dichloropropane	U		0.00167	0.00587	1	04/29/2020 14:07	WG1467916
1,1-Dichloropropene	U		0.000949	0.00293	1	04/29/2020 14:07	WG1467916
1,3-Dichloropropane	U		0.000588	0.00587	1	04/29/2020 14:07	WG1467916
cis-1,3-Dichloropropene	U		0.000888	0.00293	1	04/29/2020 14:07	WG1467916
trans-1,3-Dichloropropene	U		0.00134	0.00587	1	04/29/2020 14:07	WG1467916
trans-1,4-Dichloro-2-butene	U	J4	0.00218	0.00587	1	04/29/2020 14:07	WG1467916
2,2-Dichloropropane	U		0.00162	0.00293	1	04/29/2020 14:07	WG1467916
Di-isopropyl ether	U	J4	0.000481	0.00117	1	04/29/2020 14:07	WG1467916
Ethylbenzene	U		0.000865	0.00293	1	04/29/2020 14:07	WG1467916
Hexachloro-1,3-butadiene	U UJ	J0	0.00704	0.0293	1	04/29/2020 14:07	WG1467916
2-Hexanone	U		0.00394	0.0293	1	04/29/2020 14:07	WG1467916
n-Hexane	U		0.00265	0.00587	1	04/29/2020 14:07	WG1467916
Iodomethane	U		0.00272	0.0147	1	04/29/2020 14:07	WG1467916
Isopropylbenzene	U		0.000499	0.00293	1	04/29/2020 14:07	WG1467916
p-Isopropyltoluene	U		0.00299	0.00587	1	04/29/2020 14:07	WG1467916
2-Butanone (MEK)	0.0813	J	0.0745	0.117	1	04/29/2020 14:07	WG1467916
Methylene Chloride	U		0.00779	0.0293	1	04/29/2020 14:07	WG1467916
4-Methyl-2-pentanone (MIBK)	U		0.00268	0.0293	1	04/29/2020 14:07	WG1467916

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MW-336-60

Collected date/time: 04/22/20 12:47

SAMPLE RESULTS - 25

L1212082

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.000411	0.00117	1	04/29/2020 14:07	WG1467916
Naphthalene	U		0.00573	0.0147	1	04/29/2020 14:07	WG1467916
n-Propylbenzene	U		0.00111	0.00587	1	04/29/2020 14:07	WG1467916
Styrene	U		0.000269	0.0147	1	04/29/2020 14:07	WG1467916
1,1,1,2-Tetrachloroethane	U		0.00111	0.00293	1	04/29/2020 14:07	WG1467916
1,1,2,2-Tetrachloroethane	U		0.000816	0.00293	1	04/29/2020 14:07	WG1467916
1,1,2-Trichlorotrifluoroethane	U		0.000885	0.00293	1	04/29/2020 14:07	WG1467916
Tetrachloroethene	0.0527		0.00105	0.00293	1	04/29/2020 14:07	WG1467916
Toluene	U		0.00153	0.00587	1	04/29/2020 14:07	WG1467916
1,2,3-Trichlorobenzene	U		0.00860	0.0147	1	04/29/2020 14:07	WG1467916
1,2,4-Trichlorobenzene	U UJ	J0	0.00516	0.0147	1	04/29/2020 14:07	WG1467916
1,1,1-Trichloroethane	U		0.00108	0.00293	1	04/29/2020 14:07	WG1467916
1,1,2-Trichloroethane	U		0.000701	0.00293	1	04/29/2020 14:07	WG1467916
Trichloroethene	0.0750		0.000685	0.00117	1	04/29/2020 14:07	WG1467916
Trichlorofluoromethane	U		0.000971	0.00293	1	04/29/2020 14:07	WG1467916
1,2,3-Trichloropropane	U		0.00190	0.0147	1	04/29/2020 14:07	WG1467916
1,2,4-Trimethylbenzene	U		0.00185	0.00587	1	04/29/2020 14:07	WG1467916
1,2,3-Trimethylbenzene	U		0.00185	0.00587	1	04/29/2020 14:07	WG1467916
1,3,5-Trimethylbenzene	U		0.00235	0.00587	1	04/29/2020 14:07	WG1467916
Vinyl acetate	U		0.00298	0.0147	1	04/29/2020 14:07	WG1467916
Vinyl chloride	U	J4	0.00136	0.00293	1	04/29/2020 14:07	WG1467916
Xylenes, Total	U		0.00103	0.00763	1	04/29/2020 14:07	WG1467916
(S) Toluene-d8	*106*			*75.0-131*		*04/29/2020 14:07*	WG1467916
(S) 4-Bromofluorobenzene	*91.6*			*67.0-138*		*04/29/2020 14:07*	WG1467916
(S) 1,2-Dichloroethane-d4	*99.9*			*70.0-130*		*04/29/2020 14:07*	WG1467916

JC 5/28/2020

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	85.7		1	05/04/2020 15:33	WG1469318

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	U		0.0426	0.0583	1	04/29/2020 14:26	WG1467916
Acrylonitrile	U		0.00421	0.0146	1	04/29/2020 14:26	WG1467916
Benzene	U		0.000545	0.00117	1	04/29/2020 14:26	WG1467916
Bromobenzene	U		0.00105	0.0146	1	04/29/2020 14:26	WG1467916
Bromodichloromethane	U		0.000846	0.00292	1	04/29/2020 14:26	WG1467916
Bromochloromethane	U		0.000658	0.00583	1	04/29/2020 14:26	WG1467916
Bromoform	U	UJ J0	0.00136	0.0292	1	04/29/2020 14:26	WG1467916
Bromomethane	U		0.00230	0.0146	1	04/29/2020 14:26	WG1467916
n-Butylbenzene	U		0.00612	0.0146	1	04/29/2020 14:26	WG1467916
sec-Butylbenzene	U		0.00336	0.0146	1	04/29/2020 14:26	WG1467916
tert-Butylbenzene	U		0.00227	0.00583	1	04/29/2020 14:26	WG1467916
Carbon disulfide	U		0.000817	0.0146	1	04/29/2020 14:26	WG1467916
Carbon tetrachloride	U		0.00105	0.00583	1	04/29/2020 14:26	WG1467916
Chlorobenzene	U		0.000245	0.00292	1	04/29/2020 14:26	WG1467916
Chlorodibromomethane	U		0.000714	0.00292	1	04/29/2020 14:26	WG1467916
Chloroethane	U		0.00198	0.00583	1	04/29/2020 14:26	WG1467916
Chloroform	U		0.00120	0.00292	1	04/29/2020 14:26	WG1467916
Chloromethane	U	J4	0.00507	0.0146	1	04/29/2020 14:26	WG1467916
2-Chlorotoluene	U		0.00101	0.00292	1	04/29/2020 14:26	WG1467916
4-Chlorotoluene	U		0.000525	0.00583	1	04/29/2020 14:26	WG1467916
1,2-Dibromo-3-Chloropropane	U		0.00455	0.0292	1	04/29/2020 14:26	WG1467916
1,2-Dibromoethane	U		0.000756	0.00292	1	04/29/2020 14:26	WG1467916
Dibromomethane	U		0.000875	0.00583	1	04/29/2020 14:26	WG1467916
1,2-Dichlorobenzene	U		0.000496	0.00583	1	04/29/2020 14:26	WG1467916
1,3-Dichlorobenzene	U		0.000700	0.00583	1	04/29/2020 14:26	WG1467916
1,4-Dichlorobenzene	U		0.000817	0.00583	1	04/29/2020 14:26	WG1467916
Dichlorodifluoromethane	U		0.00188	0.00292	1	04/29/2020 14:26	WG1467916
1,1-Dichloroethane	U		0.000573	0.00292	1	04/29/2020 14:26	WG1467916
1,2-Dichloroethane	U		0.000757	0.00292	1	04/29/2020 14:26	WG1467916
1,1-Dichloroethene	U		0.000707	0.00292	1	04/29/2020 14:26	WG1467916
cis-1,2-Dichloroethene	0.0419		0.000856	0.00292	1	04/29/2020 14:26	WG1467916
trans-1,2-Dichloroethene	U		0.00121	0.00583	1	04/29/2020 14:26	WG1467916
1,2-Dichloropropane	U		0.00166	0.00583	1	04/29/2020 14:26	WG1467916
1,1-Dichloropropene	U		0.000944	0.00292	1	04/29/2020 14:26	WG1467916
1,3-Dichloropropane	U		0.000584	0.00583	1	04/29/2020 14:26	WG1467916
cis-1,3-Dichloropropene	U		0.000883	0.00292	1	04/29/2020 14:26	WG1467916
trans-1,3-Dichloropropene	U		0.00133	0.00583	1	04/29/2020 14:26	WG1467916
trans-1,4-Dichloro-2-butene	U	J4	0.00217	0.00583	1	04/29/2020 14:26	WG1467916
2,2-Dichloropropane	U		0.00161	0.00292	1	04/29/2020 14:26	WG1467916
Di-isopropyl ether	U	J4	0.000478	0.00117	1	04/29/2020 14:26	WG1467916
Ethylbenzene	U		0.000860	0.00292	1	04/29/2020 14:26	WG1467916
Hexachloro-1,3-butadiene	U	UJ J0	0.00700	0.0292	1	04/29/2020 14:26	WG1467916
2-Hexanone	U		0.00392	0.0292	1	04/29/2020 14:26	WG1467916
n-Hexane	U		0.00264	0.00583	1	04/29/2020 14:26	WG1467916
Iodomethane	U		0.00271	0.0146	1	04/29/2020 14:26	WG1467916
Isopropylbenzene	U		0.000496	0.00292	1	04/29/2020 14:26	WG1467916
p-Isopropyltoluene	U		0.00297	0.00583	1	04/29/2020 14:26	WG1467916
2-Butanone (MEK)	U		0.0741	0.117	1	04/29/2020 14:26	WG1467916
Methylene Chloride	U		0.00775	0.0292	1	04/29/2020 14:26	WG1467916
4-Methyl-2-pentanone (MIBK)	U		0.00266	0.0292	1	04/29/2020 14:26	WG1467916

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MW-336-65

SAMPLE RESULTS - 26

Collected date/time: 04/22/20 13:10

L1212082

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.000408	0.00117	1	04/29/2020 14:26	WG1467916
Naphthalene	U		0.00569	0.0146	1	04/29/2020 14:26	WG1467916
n-Propylbenzene	U		0.00111	0.00583	1	04/29/2020 14:26	WG1467916
Styrene	U		0.000267	0.0146	1	04/29/2020 14:26	WG1467916
1,1,1,2-Tetrachloroethane	U		0.00111	0.00292	1	04/29/2020 14:26	WG1467916
1,1,2,2-Tetrachloroethane	U		0.000811	0.00292	1	04/29/2020 14:26	WG1467916
1,1,2-Trichlorotrifluoroethane	U		0.000880	0.00292	1	04/29/2020 14:26	WG1467916
Tetrachloroethene	0.148		0.00105	0.00292	1	04/29/2020 14:26	WG1467916
Toluene	U		0.00152	0.00583	1	04/29/2020 14:26	WG1467916
1,2,3-Trichlorobenzene	U		0.00855	0.0146	1	04/29/2020 14:26	WG1467916
1,2,4-Trichlorobenzene	U UJ	J0	0.00513	0.0146	1	04/29/2020 14:26	WG1467916
1,1,1-Trichloroethane	U		0.00108	0.00292	1	04/29/2020 14:26	WG1467916
1,1,2-Trichloroethane	U		0.000696	0.00292	1	04/29/2020 14:26	WG1467916
Trichloroethene	0.125		0.000681	0.00117	1	04/29/2020 14:26	WG1467916
Trichlorofluoromethane	U		0.000965	0.00292	1	04/29/2020 14:26	WG1467916
1,2,3-Trichloropropane	U		0.00189	0.0146	1	04/29/2020 14:26	WG1467916
1,2,4-Trimethylbenzene	U		0.00184	0.00583	1	04/29/2020 14:26	WG1467916
1,2,3-Trimethylbenzene	U		0.00184	0.00583	1	04/29/2020 14:26	WG1467916
1,3,5-Trimethylbenzene	U		0.00233	0.00583	1	04/29/2020 14:26	WG1467916
Vinyl acetate	U		0.00296	0.0146	1	04/29/2020 14:26	WG1467916
Vinyl chloride	U	J4	0.00135	0.00292	1	04/29/2020 14:26	WG1467916
Xylenes, Total	U		0.00103	0.00758	1	04/29/2020 14:26	WG1467916
(S) Toluene-d8	*109*			*75.0-131*		*04/29/2020 14:26*	WG1467916
(S) 4-Bromofluorobenzene	*87.1*			*67.0-138*		*04/29/2020 14:26*	WG1467916
(S) 1,2-Dichloroethane-d4	*91.8*			*70.0-130*		*04/29/2020 14:26*	WG1467916

JC 5/28/2020

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	80.4		1	05/04/2020 15:33	WG1469318

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	U		0.0454	0.0622	1	04/29/2020 14:44	WG1467916
Acrylonitrile	U		0.00449	0.0155	1	04/29/2020 14:44	WG1467916
Benzene	U		0.000580	0.00124	1	04/29/2020 14:44	WG1467916
Bromobenzene	U		0.00112	0.0155	1	04/29/2020 14:44	WG1467916
Bromodichloromethane	U		0.000901	0.00311	1	04/29/2020 14:44	WG1467916
Bromochloromethane	U		0.000701	0.00622	1	04/29/2020 14:44	WG1467916
Bromoform	U UJ	J0	0.00145	0.0311	1	04/29/2020 14:44	WG1467916
Bromomethane	U		0.00245	0.0155	1	04/29/2020 14:44	WG1467916
n-Butylbenzene	U		0.00653	0.0155	1	04/29/2020 14:44	WG1467916
sec-Butylbenzene	U		0.00358	0.0155	1	04/29/2020 14:44	WG1467916
tert-Butylbenzene	U		0.00242	0.00622	1	04/29/2020 14:44	WG1467916
Carbon disulfide	U		0.000870	0.0155	1	04/29/2020 14:44	WG1467916
Carbon tetrachloride	U		0.00112	0.00622	1	04/29/2020 14:44	WG1467916
Chlorobenzene	U		0.000261	0.00311	1	04/29/2020 14:44	WG1467916
Chlorodibromomethane	U		0.000761	0.00311	1	04/29/2020 14:44	WG1467916
Chloroethane	U		0.00211	0.00622	1	04/29/2020 14:44	WG1467916
Chloroform	U		0.00128	0.00311	1	04/29/2020 14:44	WG1467916
Chloromethane	U	J4	0.00541	0.0155	1	04/29/2020 14:44	WG1467916
2-Chlorotoluene	U		0.00108	0.00311	1	04/29/2020 14:44	WG1467916
4-Chlorotoluene	U		0.000559	0.00622	1	04/29/2020 14:44	WG1467916
1,2-Dibromo-3-Chloropropane	U		0.00485	0.0311	1	04/29/2020 14:44	WG1467916
1,2-Dibromoethane	U		0.000805	0.00311	1	04/29/2020 14:44	WG1467916
Dibromomethane	U		0.000932	0.00622	1	04/29/2020 14:44	WG1467916
1,2-Dichlorobenzene	U		0.000528	0.00622	1	04/29/2020 14:44	WG1467916
1,3-Dichlorobenzene	U		0.000746	0.00622	1	04/29/2020 14:44	WG1467916
1,4-Dichlorobenzene	U		0.000870	0.00622	1	04/29/2020 14:44	WG1467916
Dichlorodifluoromethane	U		0.00200	0.00311	1	04/29/2020 14:44	WG1467916
1,1-Dichloroethane	U		0.000610	0.00311	1	04/29/2020 14:44	WG1467916
1,2-Dichloroethane	U		0.000807	0.00311	1	04/29/2020 14:44	WG1467916
1,1-Dichloroethene	U		0.000753	0.00311	1	04/29/2020 14:44	WG1467916
cis-1,2-Dichloroethene	0.0743		0.000912	0.00311	1	04/29/2020 14:44	WG1467916
trans-1,2-Dichloroethene	U		0.00129	0.00622	1	04/29/2020 14:44	WG1467916
1,2-Dichloropropane	U		0.00177	0.00622	1	04/29/2020 14:44	WG1467916
1,1-Dichloropropene	U		0.00101	0.00311	1	04/29/2020 14:44	WG1467916
1,3-Dichloropropane	U		0.000623	0.00622	1	04/29/2020 14:44	WG1467916
cis-1,3-Dichloropropene	U		0.000941	0.00311	1	04/29/2020 14:44	WG1467916
trans-1,3-Dichloropropene	U		0.00142	0.00622	1	04/29/2020 14:44	WG1467916
trans-1,4-Dichloro-2-butene	U	J4	0.00231	0.00622	1	04/29/2020 14:44	WG1467916
2,2-Dichloropropane	U		0.00172	0.00311	1	04/29/2020 14:44	WG1467916
Di-isopropyl ether	U	J4	0.000510	0.00124	1	04/29/2020 14:44	WG1467916
Ethylbenzene	U		0.000916	0.00311	1	04/29/2020 14:44	WG1467916
Hexachloro-1,3-butadiene	U UJ	J0	0.00746	0.0311	1	04/29/2020 14:44	WG1467916
2-Hexanone	U		0.00418	0.0311	1	04/29/2020 14:44	WG1467916
n-Hexane	U		0.00281	0.00622	1	04/29/2020 14:44	WG1467916
Iodomethane	U		0.00288	0.0155	1	04/29/2020 14:44	WG1467916
Isopropylbenzene	U		0.000528	0.00311	1	04/29/2020 14:44	WG1467916
p-Isopropyltoluene	U		0.00317	0.00622	1	04/29/2020 14:44	WG1467916
2-Butanone (MEK)	U		0.0789	0.124	1	04/29/2020 14:44	WG1467916
Methylene Chloride	U		0.00825	0.0311	1	04/29/2020 14:44	WG1467916
4-Methyl-2-pentanone (MIBK)	U		0.00283	0.0311	1	04/29/2020 14:44	WG1467916

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Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.000435	0.00124	1	04/29/2020 14:44	WG1467916
Naphthalene	U		0.00607	0.0155	1	04/29/2020 14:44	WG1467916
n-Propylbenzene	U		0.00118	0.00622	1	04/29/2020 14:44	WG1467916
Styrene	U		0.000285	0.0155	1	04/29/2020 14:44	WG1467916
1,1,1,2-Tetrachloroethane	U		0.00118	0.00311	1	04/29/2020 14:44	WG1467916
1,1,2,2-Tetrachloroethane	U		0.000864	0.00311	1	04/29/2020 14:44	WG1467916
1,1,2-Trichlorotrifluoroethane	U		0.000937	0.00311	1	04/29/2020 14:44	WG1467916
Tetrachloroethene	0.0849		0.00111	0.00311	1	04/29/2020 14:44	WG1467916
Toluene	U		0.00162	0.00622	1	04/29/2020 14:44	WG1467916
1,2,3-Trichlorobenzene	U		0.00911	0.0155	1	04/29/2020 14:44	WG1467916
1,2,4-Trichlorobenzene	U	UJ J0	0.00547	0.0155	1	04/29/2020 14:44	WG1467916
1,1,1-Trichloroethane	U		0.00115	0.00311	1	04/29/2020 14:44	WG1467916
1,1,2-Trichloroethane	U		0.000742	0.00311	1	04/29/2020 14:44	WG1467916
Trichloroethene	0.116		0.000726	0.00124	1	04/29/2020 14:44	WG1467916
Trichlorofluoromethane	U		0.00103	0.00311	1	04/29/2020 14:44	WG1467916
1,2,3-Trichloropropane	U		0.00201	0.0155	1	04/29/2020 14:44	WG1467916
1,2,4-Trimethylbenzene	U		0.00196	0.00622	1	04/29/2020 14:44	WG1467916
1,2,3-Trimethylbenzene	U		0.00196	0.00622	1	04/29/2020 14:44	WG1467916
1,3,5-Trimethylbenzene	U		0.00249	0.00622	1	04/29/2020 14:44	WG1467916
Vinyl acetate	U		0.00316	0.0155	1	04/29/2020 14:44	WG1467916
Vinyl chloride	U	J4	0.00144	0.00311	1	04/29/2020 14:44	WG1467916
Xylenes, Total	U		0.00109	0.00808	1	04/29/2020 14:44	WG1467916
(S) Toluene-d8	*107*			*75.0-131*		*04/29/2020 14:44*	WG1467916
(S) 4-Bromofluorobenzene	*90.7*			*67.0-138*		*04/29/2020 14:44*	WG1467916
(S) 1,2-Dichloroethane-d4	*97.3*			*70.0-130*		*04/29/2020 14:44*	WG1467916

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Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	85.9		1	05/05/2020 06:18	WG1469319

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	U		0.0425	0.0582	1	04/29/2020 15:03	WG1467916
Acrylonitrile	U		0.00420	0.0145	1	04/29/2020 15:03	WG1467916
Benzene	U		0.000544	0.00116	1	04/29/2020 15:03	WG1467916
Bromobenzene	U		0.00105	0.0145	1	04/29/2020 15:03	WG1467916
Bromodichloromethane	U		0.000844	0.00291	1	04/29/2020 15:03	WG1467916
Bromochloromethane	U		0.000656	0.00582	1	04/29/2020 15:03	WG1467916
Bromoform	U UJ	J0	0.00136	0.0291	1	04/29/2020 15:03	WG1467916
Bromomethane	U		0.00229	0.0145	1	04/29/2020 15:03	WG1467916
n-Butylbenzene	U		0.00611	0.0145	1	04/29/2020 15:03	WG1467916
sec-Butylbenzene	U		0.00335	0.0145	1	04/29/2020 15:03	WG1467916
tert-Butylbenzene	U		0.00227	0.00582	1	04/29/2020 15:03	WG1467916
Carbon disulfide	U		0.000815	0.0145	1	04/29/2020 15:03	WG1467916
Carbon tetrachloride	U		0.00105	0.00582	1	04/29/2020 15:03	WG1467916
Chlorobenzene	U		0.000244	0.00291	1	04/29/2020 15:03	WG1467916
Chlorodibromomethane	U		0.000712	0.00291	1	04/29/2020 15:03	WG1467916
Chloroethane	U		0.00198	0.00582	1	04/29/2020 15:03	WG1467916
Chloroform	U		0.00120	0.00291	1	04/29/2020 15:03	WG1467916
Chloromethane	U	J4	0.00506	0.0145	1	04/29/2020 15:03	WG1467916
2-Chlorotoluene	U		0.00101	0.00291	1	04/29/2020 15:03	WG1467916
4-Chlorotoluene	U		0.000524	0.00582	1	04/29/2020 15:03	WG1467916
1,2-Dibromo-3-Chloropropane	U		0.00454	0.0291	1	04/29/2020 15:03	WG1467916
1,2-Dibromoethane	U		0.000754	0.00291	1	04/29/2020 15:03	WG1467916
Dibromomethane	U		0.000873	0.00582	1	04/29/2020 15:03	WG1467916
1,2-Dichlorobenzene	U		0.000495	0.00582	1	04/29/2020 15:03	WG1467916
1,3-Dichlorobenzene	U		0.000698	0.00582	1	04/29/2020 15:03	WG1467916
1,4-Dichlorobenzene	U		0.000815	0.00582	1	04/29/2020 15:03	WG1467916
Dichlorodifluoromethane	U		0.00187	0.00291	1	04/29/2020 15:03	WG1467916
1,1-Dichloroethane	U		0.000572	0.00291	1	04/29/2020 15:03	WG1467916
1,2-Dichloroethane	U		0.000755	0.00291	1	04/29/2020 15:03	WG1467916
1,1-Dichloroethene	U		0.000705	0.00291	1	04/29/2020 15:03	WG1467916
cis-1,2-Dichloroethene	0.0517		0.000854	0.00291	1	04/29/2020 15:03	WG1467916
trans-1,2-Dichloroethene	U		0.00121	0.00582	1	04/29/2020 15:03	WG1467916
1,2-Dichloropropane	U		0.00165	0.00582	1	04/29/2020 15:03	WG1467916
1,1-Dichloropropene	U		0.000942	0.00291	1	04/29/2020 15:03	WG1467916
1,3-Dichloropropane	U		0.000583	0.00582	1	04/29/2020 15:03	WG1467916
cis-1,3-Dichloropropene	U		0.000881	0.00291	1	04/29/2020 15:03	WG1467916
trans-1,3-Dichloropropene	U		0.00133	0.00582	1	04/29/2020 15:03	WG1467916
trans-1,4-Dichloro-2-butene	U	J4	0.00216	0.00582	1	04/29/2020 15:03	WG1467916
2,2-Dichloropropane	U		0.00161	0.00291	1	04/29/2020 15:03	WG1467916
Di-isopropyl ether	U	J4	0.000477	0.00116	1	04/29/2020 15:03	WG1467916
Ethylbenzene	U		0.000858	0.00291	1	04/29/2020 15:03	WG1467916
Hexachloro-1,3-butadiene	U UJ	J0	0.00698	0.0291	1	04/29/2020 15:03	WG1467916
2-Hexanone	U		0.00391	0.0291	1	04/29/2020 15:03	WG1467916
n-Hexane	U		0.00263	0.00582	1	04/29/2020 15:03	WG1467916
Iodomethane	U		0.00270	0.0145	1	04/29/2020 15:03	WG1467916
Isopropylbenzene	U		0.000495	0.00291	1	04/29/2020 15:03	WG1467916
p-Isopropyltoluene	U		0.00297	0.00582	1	04/29/2020 15:03	WG1467916
2-Butanone (MEK)	U		0.0739	0.116	1	04/29/2020 15:03	WG1467916
Methylene Chloride	U		0.00773	0.0291	1	04/29/2020 15:03	WG1467916
4-Methyl-2-pentanone (MIBK)	U		0.00265	0.0291	1	04/29/2020 15:03	WG1467916

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1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.000407	0.00116	1	04/29/2020 15:03	WG1467916
Naphthalene	U		0.00568	0.0145	1	04/29/2020 15:03	WG1467916
n-Propylbenzene	U		0.00111	0.00582	1	04/29/2020 15:03	WG1467916
Styrene	U		0.000267	0.0145	1	04/29/2020 15:03	WG1467916
1,1,1,2-Tetrachloroethane	U		0.00110	0.00291	1	04/29/2020 15:03	WG1467916
1,1,2,2-Tetrachloroethane	U		0.000809	0.00291	1	04/29/2020 15:03	WG1467916
1,1,2-Trichlorotrifluoroethane	U		0.000878	0.00291	1	04/29/2020 15:03	WG1467916
Tetrachloroethene	U		0.00104	0.00291	1	04/29/2020 15:03	WG1467916
Toluene	U		0.00151	0.00582	1	04/29/2020 15:03	WG1467916
1,2,3-Trichlorobenzene	U		0.00853	0.0145	1	04/29/2020 15:03	WG1467916
1,2,4-Trichlorobenzene	U UJ	J0	0.00512	0.0145	1	04/29/2020 15:03	WG1467916
1,1,1-Trichloroethane	U		0.00107	0.00291	1	04/29/2020 15:03	WG1467916
1,1,2-Trichloroethane	U		0.000695	0.00291	1	04/29/2020 15:03	WG1467916
Trichloroethene	U		0.000680	0.00116	1	04/29/2020 15:03	WG1467916
Trichlorofluoromethane	U		0.000963	0.00291	1	04/29/2020 15:03	WG1467916
1,2,3-Trichloropropane	U		0.00189	0.0145	1	04/29/2020 15:03	WG1467916
1,2,4-Trimethylbenzene	U		0.00184	0.00582	1	04/29/2020 15:03	WG1467916
1,2,3-Trimethylbenzene	U		0.00184	0.00582	1	04/29/2020 15:03	WG1467916
1,3,5-Trimethylbenzene	U		0.00233	0.00582	1	04/29/2020 15:03	WG1467916
Vinyl acetate	U		0.00296	0.0145	1	04/29/2020 15:03	WG1467916
Vinyl chloride	U	J4	0.00135	0.00291	1	04/29/2020 15:03	WG1467916
Xylenes, Total	U		0.00102	0.00757	1	04/29/2020 15:03	WG1467916
(S) Toluene-d8	*107*			*75.0-131*		*04/29/2020 15:03*	WG1467916
(S) 4-Bromofluorobenzene	*91.1*			*67.0-138*		*04/29/2020 15:03*	WG1467916
(S) 1,2-Dichloroethane-d4	*94.3*			*70.0-130*		*04/29/2020 15:03*	WG1467916

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Total Solids by Method 2540 G-2011

	Result	Qualifier	Dilution	Analysis	Batch
Analyte	%			date / time	
Total Solids	83.3		1	05/05/2020 06:18	WG1469319

Volatile Organic Compounds (GC/MS) by Method 8260D

	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg		date / time	
Acetone	U		0.0438	0.0600	1	04/29/2020 15:22	WG1467916
Acrylonitrile	U		0.00433	0.0150	1	04/29/2020 15:22	WG1467916
Benzene	U		0.000560	0.00120	1	04/29/2020 15:22	WG1467916
Bromobenzene	U		0.00108	0.0150	1	04/29/2020 15:22	WG1467916
Bromodichloromethane	U		0.000870	0.00300	1	04/29/2020 15:22	WG1467916
Bromochloromethane	U		0.000677	0.00600	1	04/29/2020 15:22	WG1467916
Bromoform	U	UJ J0	0.00140	0.0300	1	04/29/2020 15:22	WG1467916
Bromomethane	U		0.00236	0.0150	1	04/29/2020 15:22	WG1467916
n-Butylbenzene	U		0.00630	0.0150	1	04/29/2020 15:22	WG1467916
sec-Butylbenzene	U		0.00346	0.0150	1	04/29/2020 15:22	WG1467916
tert-Butylbenzene	U		0.00234	0.00600	1	04/29/2020 15:22	WG1467916
Carbon disulfide	U		0.000840	0.0150	1	04/29/2020 15:22	WG1467916
Carbon tetrachloride	U		0.00108	0.00600	1	04/29/2020 15:22	WG1467916
Chlorobenzene	U		0.000252	0.00300	1	04/29/2020 15:22	WG1467916
Chlorodibromomethane	U		0.000734	0.00300	1	04/29/2020 15:22	WG1467916
Chloroethane	U		0.00204	0.00600	1	04/29/2020 15:22	WG1467916
Chloroform	U		0.00124	0.00300	1	04/29/2020 15:22	WG1467916
Chloromethane	U	J4	0.00522	0.0150	1	04/29/2020 15:22	WG1467916
2-Chlorotoluene	U		0.00104	0.00300	1	04/29/2020 15:22	WG1467916
4-Chlorotoluene	U		0.000540	0.00600	1	04/29/2020 15:22	WG1467916
1,2-Dibromo-3-Chloropropane	U		0.00468	0.0300	1	04/29/2020 15:22	WG1467916
1,2-Dibromoethane	U		0.000778	0.00300	1	04/29/2020 15:22	WG1467916
Dibromomethane	U		0.000900	0.00600	1	04/29/2020 15:22	WG1467916
1,2-Dichlorobenzene	U		0.000510	0.00600	1	04/29/2020 15:22	WG1467916
1,3-Dichlorobenzene	U		0.000720	0.00600	1	04/29/2020 15:22	WG1467916
1,4-Dichlorobenzene	U		0.000840	0.00600	1	04/29/2020 15:22	WG1467916
Dichlorodifluoromethane	U		0.00193	0.00300	1	04/29/2020 15:22	WG1467916
1,1-Dichloroethane	U		0.000589	0.00300	1	04/29/2020 15:22	WG1467916
1,2-Dichloroethane	U		0.000779	0.00300	1	04/29/2020 15:22	WG1467916
1,1-Dichloroethene	U		0.000727	0.00300	1	04/29/2020 15:22	WG1467916
cis-1,2-Dichloroethene	0.0673		0.000881	0.00300	1	04/29/2020 15:22	WG1467916
trans-1,2-Dichloroethene	U		0.00125	0.00600	1	04/29/2020 15:22	WG1467916
1,2-Dichloropropane	U		0.00170	0.00600	1	04/29/2020 15:22	WG1467916
1,1-Dichloropropene	U		0.000971	0.00300	1	04/29/2020 15:22	WG1467916
1,3-Dichloropropane	U		0.000601	0.00600	1	04/29/2020 15:22	WG1467916
cis-1,3-Dichloropropene	U		0.000908	0.00300	1	04/29/2020 15:22	WG1467916
trans-1,3-Dichloropropene	U		0.00137	0.00600	1	04/29/2020 15:22	WG1467916
trans-1,4-Dichloro-2-butene	U	J4	0.00223	0.00600	1	04/29/2020 15:22	WG1467916
2,2-Dichloropropane	U		0.00166	0.00300	1	04/29/2020 15:22	WG1467916
Di-isopropyl ether	U	J4	0.000492	0.00120	1	04/29/2020 15:22	WG1467916
Ethylbenzene	U		0.000884	0.00300	1	04/29/2020 15:22	WG1467916
Hexachloro-1,3-butadiene	U	UJ J0	0.00720	0.0300	1	04/29/2020 15:22	WG1467916
2-Hexanone	U		0.00403	0.0300	1	04/29/2020 15:22	WG1467916
n-Hexane	U		0.00271	0.00600	1	04/29/2020 15:22	WG1467916
Iodomethane	U		0.00278	0.0150	1	04/29/2020 15:22	WG1467916
Isopropylbenzene	U		0.000510	0.00300	1	04/29/2020 15:22	WG1467916
p-Isopropyltoluene	U		0.00306	0.00600	1	04/29/2020 15:22	WG1467916
2-Butanone (MEK)	U		0.0762	0.120	1	04/29/2020 15:22	WG1467916
Methylene Chloride	U		0.00797	0.0300	1	04/29/2020 15:22	WG1467916
4-Methyl-2-pentanone (MIBK)	U		0.00274	0.0300	1	04/29/2020 15:22	WG1467916

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Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.000420	0.00120	1	04/29/2020 15:22	WG1467916
Naphthalene	U		0.00586	0.0150	1	04/29/2020 15:22	WG1467916
n-Propylbenzene	U		0.00114	0.00600	1	04/29/2020 15:22	WG1467916
Styrene	U		0.000275	0.0150	1	04/29/2020 15:22	WG1467916
1,1,1,2-Tetrachloroethane	U		0.00114	0.00300	1	04/29/2020 15:22	WG1467916
1,1,2,2-Tetrachloroethane	U		0.000834	0.00300	1	04/29/2020 15:22	WG1467916
1,1,2-Trichlorotrifluoroethane	U		0.000905	0.00300	1	04/29/2020 15:22	WG1467916
Tetrachloroethene	U		0.00108	0.00300	1	04/29/2020 15:22	WG1467916
Toluene	U		0.00156	0.00600	1	04/29/2020 15:22	WG1467916
1,2,3-Trichlorobenzene	U		0.00879	0.0150	1	04/29/2020 15:22	WG1467916
1,2,4-Trichlorobenzene	U UJ	J0	0.00528	0.0150	1	04/29/2020 15:22	WG1467916
1,1,1-Trichloroethane	U		0.00111	0.00300	1	04/29/2020 15:22	WG1467916
1,1,2-Trichloroethane	U		0.000716	0.00300	1	04/29/2020 15:22	WG1467916
Trichloroethene	U		0.000701	0.00120	1	04/29/2020 15:22	WG1467916
Trichlorofluoromethane	U		0.000992	0.00300	1	04/29/2020 15:22	WG1467916
1,2,3-Trichloropropane	U		0.00194	0.0150	1	04/29/2020 15:22	WG1467916
1,2,4-Trimethylbenzene	U		0.00190	0.00600	1	04/29/2020 15:22	WG1467916
1,2,3-Trimethylbenzene	U		0.00190	0.00600	1	04/29/2020 15:22	WG1467916
1,3,5-Trimethylbenzene	U		0.00240	0.00600	1	04/29/2020 15:22	WG1467916
Vinyl acetate	U		0.00305	0.0150	1	04/29/2020 15:22	WG1467916
Vinyl chloride	U	J4	0.00139	0.00300	1	04/29/2020 15:22	WG1467916
Xylenes, Total	U		0.00106	0.00780	1	04/29/2020 15:22	WG1467916
(S) Toluene-d8	*109*			*75.0-131*		*04/29/2020 15:22*	WG1467916
(S) 4-Bromofluorobenzene	*89.1*			*67.0-138*		*04/29/2020 15:22*	WG1467916
(S) 1,2-Dichloroethane-d4	*94.4*			*70.0-130*		*04/29/2020 15:22*	WG1467916

JC 5/28/2020

MW-336-85
Collected date/time: 04/22/20 13:37

SAMPLE RESULTS - 30
L1212082

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	83.2		1	05/05/2020 06:18	WG1469319

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	U		0.0439	0.0601	1	04/29/2020 17:15	WG1467916
Acrylonitrile	U		0.00434	0.0150	1	04/29/2020 17:15	WG1467916
Benzene	U		0.000561	0.00120	1	04/29/2020 17:15	WG1467916
Bromobenzene	U		0.00108	0.0150	1	04/29/2020 17:15	WG1467916
Bromodichloromethane	U		0.000871	0.00300	1	04/29/2020 17:15	WG1467916
Bromochloromethane	U		0.000678	0.00601	1	04/29/2020 17:15	WG1467916
Bromoform	U	UJ J0	0.00141	0.0300	1	04/29/2020 17:15	WG1467916
Bromomethane	U		0.00237	0.0150	1	04/29/2020 17:15	WG1467916
n-Butylbenzene	U		0.00631	0.0150	1	04/29/2020 17:15	WG1467916
sec-Butylbenzene	U		0.00346	0.0150	1	04/29/2020 17:15	WG1467916
tert-Butylbenzene	U		0.00234	0.00601	1	04/29/2020 17:15	WG1467916
Carbon disulfide	U		0.000841	0.0150	1	04/29/2020 17:15	WG1467916
Carbon tetrachloride	U		0.00108	0.00601	1	04/29/2020 17:15	WG1467916
Chlorobenzene	0.000523	J	0.000252	0.00300	1	04/29/2020 17:15	WG1467916
Chlorodibromomethane	U		0.000736	0.00300	1	04/29/2020 17:15	WG1467916
Chloroethane	U		0.00204	0.00601	1	04/29/2020 17:15	WG1467916
Chloroform	U		0.00124	0.00300	1	04/29/2020 17:15	WG1467916
Chloromethane	U	J4	0.00523	0.0150	1	04/29/2020 17:15	WG1467916
2-Chlorotoluene	U		0.00104	0.00300	1	04/29/2020 17:15	WG1467916
4-Chlorotoluene	U		0.000541	0.00601	1	04/29/2020 17:15	WG1467916
1,2-Dibromo-3-Chloropropane	U		0.00469	0.0300	1	04/29/2020 17:15	WG1467916
1,2-Dibromoethane	U		0.000779	0.00300	1	04/29/2020 17:15	WG1467916
Dibromomethane	U		0.000901	0.00601	1	04/29/2020 17:15	WG1467916
1,2-Dichlorobenzene	U		0.000511	0.00601	1	04/29/2020 17:15	WG1467916
1,3-Dichlorobenzene	U		0.000721	0.00601	1	04/29/2020 17:15	WG1467916
1,4-Dichlorobenzene	U		0.000841	0.00601	1	04/29/2020 17:15	WG1467916
Dichlorodifluoromethane	U		0.00193	0.00300	1	04/29/2020 17:15	WG1467916
1,1-Dichloroethane	U		0.000590	0.00300	1	04/29/2020 17:15	WG1467916
1,2-Dichloroethane	U		0.000780	0.00300	1	04/29/2020 17:15	WG1467916
1,1-Dichloroethene	U		0.000728	0.00300	1	04/29/2020 17:15	WG1467916
cis-1,2-Dichloroethene	0.0560		0.000882	0.00300	1	04/29/2020 17:15	WG1467916
trans-1,2-Dichloroethene	U		0.00125	0.00601	1	04/29/2020 17:15	WG1467916
1,2-Dichloropropane	U		0.00171	0.00601	1	04/29/2020 17:15	WG1467916
1,1-Dichloropropene	U		0.000972	0.00300	1	04/29/2020 17:15	WG1467916
1,3-Dichloropropane	U		0.000602	0.00601	1	04/29/2020 17:15	WG1467916
cis-1,3-Dichloropropene	U		0.000910	0.00300	1	04/29/2020 17:15	WG1467916
trans-1,3-Dichloropropene	U		0.00137	0.00601	1	04/29/2020 17:15	WG1467916
trans-1,4-Dichloro-2-butene	U	J4	0.00224	0.00601	1	04/29/2020 17:15	WG1467916
2,2-Dichloropropane	U		0.00166	0.00300	1	04/29/2020 17:15	WG1467916
Di-isopropyl ether	U	J4	0.000493	0.00120	1	04/29/2020 17:15	WG1467916
Ethylbenzene	U		0.000886	0.00300	1	04/29/2020 17:15	WG1467916
Hexachloro-1,3-butadiene	U	UJ J0	0.00721	0.0300	1	04/29/2020 17:15	WG1467916
2-Hexanone	U		0.00404	0.0300	1	04/29/2020 17:15	WG1467916
n-Hexane	U		0.00272	0.00601	1	04/29/2020 17:15	WG1467916
Iodomethane	U		0.00279	0.0150	1	04/29/2020 17:15	WG1467916
Isopropylbenzene	U		0.000511	0.00300	1	04/29/2020 17:15	WG1467916
p-Isopropyltoluene	U		0.00306	0.00601	1	04/29/2020 17:15	WG1467916
2-Butanone (MEK)	U		0.0763	0.120	1	04/29/2020 17:15	WG1467916
Methylene Chloride	U		0.00798	0.0300	1	04/29/2020 17:15	WG1467916
4-Methyl-2-pentanone (MIBK)	U		0.00274	0.0300	1	04/29/2020 17:15	WG1467916

JC 5/28/2020

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.000421	0.00120	1	04/29/2020 17:15	WG1467916
Naphthalene	U		0.00586	0.0150	1	04/29/2020 17:15	WG1467916
n-Propylbenzene	U		0.00114	0.00601	1	04/29/2020 17:15	WG1467916
Styrene	U		0.000275	0.0150	1	04/29/2020 17:15	WG1467916
1,1,1,2-Tetrachloroethane	U		0.00114	0.00300	1	04/29/2020 17:15	WG1467916
1,1,2,2-Tetrachloroethane	U		0.000835	0.00300	1	04/29/2020 17:15	WG1467916
1,1,2-Trichlorotrifluoroethane	U		0.000906	0.00300	1	04/29/2020 17:15	WG1467916
Tetrachloroethene	U		0.00108	0.00300	1	04/29/2020 17:15	WG1467916
Toluene	0.00214	J	0.00156	0.00601	1	04/29/2020 17:15	WG1467916
1,2,3-Trichlorobenzene	U		0.00881	0.0150	1	04/29/2020 17:15	WG1467916
1,2,4-Trichlorobenzene	U UJ	J0	0.00529	0.0150	1	04/29/2020 17:15	WG1467916
1,1,1-Trichloroethane	U		0.00111	0.00300	1	04/29/2020 17:15	WG1467916
1,1,2-Trichloroethane	U		0.000717	0.00300	1	04/29/2020 17:15	WG1467916
Trichloroethene	U		0.000702	0.00120	1	04/29/2020 17:15	WG1467916
Trichlorofluoromethane	U		0.000994	0.00300	1	04/29/2020 17:15	WG1467916
1,2,3-Trichloropropane	U		0.00195	0.0150	1	04/29/2020 17:15	WG1467916
1,2,4-Trimethylbenzene	U		0.00190	0.00601	1	04/29/2020 17:15	WG1467916
1,2,3-Trimethylbenzene	U		0.00190	0.00601	1	04/29/2020 17:15	WG1467916
1,3,5-Trimethylbenzene	U		0.00240	0.00601	1	04/29/2020 17:15	WG1467916
Vinyl acetate	U		0.00305	0.0150	1	04/29/2020 17:15	WG1467916
Vinyl chloride	U	J4	0.00139	0.00300	1	04/29/2020 17:15	WG1467916
Xylenes, Total	U		0.00106	0.00781	1	04/29/2020 17:15	WG1467916
(S) Toluene-d8	*104*			*75.0-131*		*04/29/2020 17:15*	WG1467916
(S) 4-Bromofluorobenzene	*91.9*			*67.0-138*		*04/29/2020 17:15*	WG1467916
(S) 1,2-Dichloroethane-d4	*97.3*			*70.0-130*		*04/29/2020 17:15*	WG1467916

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

JC 5/28/2020

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	82.9		1	05/05/2020 06:18	WG1469319

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	U		0.0440	0.0603	1	04/29/2020 17:34	WG1467916
Acrylonitrile	U		0.00435	0.0151	1	04/29/2020 17:34	WG1467916
Benzene	U		0.000563	0.00121	1	04/29/2020 17:34	WG1467916
Bromobenzene	U		0.00109	0.0151	1	04/29/2020 17:34	WG1467916
Bromodichloromethane	U		0.000874	0.00301	1	04/29/2020 17:34	WG1467916
Bromochloromethane	U		0.000680	0.00603	1	04/29/2020 17:34	WG1467916
Bromoform	U UJ	J0	0.00141	0.0301	1	04/29/2020 17:34	WG1467916
Bromomethane	U		0.00238	0.0151	1	04/29/2020 17:34	WG1467916
n-Butylbenzene	U		0.00633	0.0151	1	04/29/2020 17:34	WG1467916
sec-Butylbenzene	U		0.00347	0.0151	1	04/29/2020 17:34	WG1467916
tert-Butylbenzene	U		0.00235	0.00603	1	04/29/2020 17:34	WG1467916
Carbon disulfide	U		0.000844	0.0151	1	04/29/2020 17:34	WG1467916
Carbon tetrachloride	U		0.00108	0.00603	1	04/29/2020 17:34	WG1467916
Chlorobenzene	0.000434	J	0.000253	0.00301	1	04/29/2020 17:34	WG1467916
Chlorodibromomethane	U		0.000738	0.00301	1	04/29/2020 17:34	WG1467916
Chloroethane	U		0.00205	0.00603	1	04/29/2020 17:34	WG1467916
Chloroform	U		0.00124	0.00301	1	04/29/2020 17:34	WG1467916
Chloromethane	U	J4	0.00524	0.0151	1	04/29/2020 17:34	WG1467916
2-Chlorotoluene	U		0.00104	0.00301	1	04/29/2020 17:34	WG1467916
4-Chlorotoluene	U		0.000543	0.00603	1	04/29/2020 17:34	WG1467916
1,2-Dibromo-3-Chloropropane	U		0.00470	0.0301	1	04/29/2020 17:34	WG1467916
1,2-Dibromoethane	U		0.000781	0.00301	1	04/29/2020 17:34	WG1467916
Dibromomethane	U		0.000904	0.00603	1	04/29/2020 17:34	WG1467916
1,2-Dichlorobenzene	U		0.000512	0.00603	1	04/29/2020 17:34	WG1467916
1,3-Dichlorobenzene	U		0.000723	0.00603	1	04/29/2020 17:34	WG1467916
1,4-Dichlorobenzene	U		0.000844	0.00603	1	04/29/2020 17:34	WG1467916
Dichlorodifluoromethane	U		0.00194	0.00301	1	04/29/2020 17:34	WG1467916
1,1-Dichloroethane	U		0.000592	0.00301	1	04/29/2020 17:34	WG1467916
1,2-Dichloroethane	U		0.000783	0.00301	1	04/29/2020 17:34	WG1467916
1,1-Dichloroethene	U		0.000731	0.00301	1	04/29/2020 17:34	WG1467916
cis-1,2-Dichloroethene	0.0382		0.000885	0.00301	1	04/29/2020 17:34	WG1467916
trans-1,2-Dichloroethene	U		0.00125	0.00603	1	04/29/2020 17:34	WG1467916
1,2-Dichloropropane	U		0.00171	0.00603	1	04/29/2020 17:34	WG1467916
1,1-Dichloropropene	U		0.000975	0.00301	1	04/29/2020 17:34	WG1467916
1,3-Dichloropropane	U		0.000604	0.00603	1	04/29/2020 17:34	WG1467916
cis-1,3-Dichloropropene	U		0.000913	0.00301	1	04/29/2020 17:34	WG1467916
trans-1,3-Dichloropropene	U		0.00137	0.00603	1	04/29/2020 17:34	WG1467916
trans-1,4-Dichloro-2-butene	U	J4	0.00224	0.00603	1	04/29/2020 17:34	WG1467916
2,2-Dichloropropane	U		0.00166	0.00301	1	04/29/2020 17:34	WG1467916
Di-isopropyl ether	U	J4	0.000494	0.00121	1	04/29/2020 17:34	WG1467916
Ethylbenzene	U		0.000889	0.00301	1	04/29/2020 17:34	WG1467916
Hexachloro-1,3-butadiene	U UJ	J0	0.00723	0.0301	1	04/29/2020 17:34	WG1467916
2-Hexanone	U		0.00405	0.0301	1	04/29/2020 17:34	WG1467916
n-Hexane	U		0.00272	0.00603	1	04/29/2020 17:34	WG1467916
Iodomethane	U		0.00280	0.0151	1	04/29/2020 17:34	WG1467916
Isopropylbenzene	U		0.000512	0.00301	1	04/29/2020 17:34	WG1467916
p-Isopropyltoluene	U		0.00307	0.00603	1	04/29/2020 17:34	WG1467916
2-Butanone (MEK)	U		0.0766	0.121	1	04/29/2020 17:34	WG1467916
Methylene Chloride	U		0.00801	0.0301	1	04/29/2020 17:34	WG1467916
4-Methyl-2-pentanone (MIBK)	U		0.00275	0.0301	1	04/29/2020 17:34	WG1467916

JC 5/28/2020

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.000422	0.00121	1	04/29/2020 17:34	WG1467916
Naphthalene	U		0.00588	0.0151	1	04/29/2020 17:34	WG1467916
n-Propylbenzene	U		0.00115	0.00603	1	04/29/2020 17:34	WG1467916
Styrene	U		0.000276	0.0151	1	04/29/2020 17:34	WG1467916
1,1,1,2-Tetrachloroethane	U		0.00114	0.00301	1	04/29/2020 17:34	WG1467916
1,1,2,2-Tetrachloroethane	U		0.000838	0.00301	1	04/29/2020 17:34	WG1467916
1,1,2-Trichlorotrifluoroethane	U		0.000909	0.00301	1	04/29/2020 17:34	WG1467916
Tetrachloroethene	U		0.00108	0.00301	1	04/29/2020 17:34	WG1467916
Toluene	0.00210	J	0.00157	0.00603	1	04/29/2020 17:34	WG1467916
1,2,3-Trichlorobenzene	U		0.00884	0.0151	1	04/29/2020 17:34	WG1467916
1,2,4-Trichlorobenzene	U UJ	J0	0.00531	0.0151	1	04/29/2020 17:34	WG1467916
1,1,1-Trichloroethane	U		0.00111	0.00301	1	04/29/2020 17:34	WG1467916
1,1,2-Trichloroethane	U		0.000720	0.00301	1	04/29/2020 17:34	WG1467916
Trichloroethene	U		0.000704	0.00121	1	04/29/2020 17:34	WG1467916
Trichlorofluoromethane	U		0.000997	0.00301	1	04/29/2020 17:34	WG1467916
1,2,3-Trichloropropane	U		0.00195	0.0151	1	04/29/2020 17:34	WG1467916
1,2,4-Trimethylbenzene	U		0.00191	0.00603	1	04/29/2020 17:34	WG1467916
1,2,3-Trimethylbenzene	U		0.00191	0.00603	1	04/29/2020 17:34	WG1467916
1,3,5-Trimethylbenzene	U		0.00241	0.00603	1	04/29/2020 17:34	WG1467916
Vinyl acetate	U		0.00306	0.0151	1	04/29/2020 17:34	WG1467916
Vinyl chloride	U	J4	0.00140	0.00301	1	04/29/2020 17:34	WG1467916
Xylenes, Total	U		0.00106	0.00784	1	04/29/2020 17:34	WG1467916
(S) Toluene-d8	*105*			*75.0-131*		*04/29/2020 17:34*	WG1467916
(S) 4-Bromofluorobenzene	*91.5*			*67.0-138*		*04/29/2020 17:34*	WG1467916
(S) 1,2-Dichloroethane-d4	*92.0*			*70.0-130*		*04/29/2020 17:34*	WG1467916

JC 5/28/2020

MW-336-95

Collected date/time: 04/22/20 13:52

SAMPLE RESULTS - 32

L1212082

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	83.2		1	05/05/2020 06:18	WG1469319

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg		Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	U			0.0439	0.0601	1	04/29/2020 17:53	WG1467916
Acrylonitrile	U			0.00434	0.0150	1	04/29/2020 17:53	WG1467916
Benzene	U			0.000561	0.00120	1	04/29/2020 17:53	WG1467916
Bromobenzene	U			0.00108	0.0150	1	04/29/2020 17:53	WG1467916
Bromodichloromethane	U			0.000871	0.00300	1	04/29/2020 17:53	WG1467916
Bromochloromethane	U			0.000678	0.00601	1	04/29/2020 17:53	WG1467916
Bromoform	U	UJ	J0	0.00141	0.0300	1	04/29/2020 17:53	WG1467916
Bromomethane	U			0.00237	0.0150	1	04/29/2020 17:53	WG1467916
n-Butylbenzene	U			0.00631	0.0150	1	04/29/2020 17:53	WG1467916
sec-Butylbenzene	U			0.00346	0.0150	1	04/29/2020 17:53	WG1467916
tert-Butylbenzene	U			0.00234	0.00601	1	04/29/2020 17:53	WG1467916
Carbon disulfide	U			0.000841	0.0150	1	04/29/2020 17:53	WG1467916
Carbon tetrachloride	U			0.00108	0.00601	1	04/29/2020 17:53	WG1467916
Chlorobenzene	0.000517		J	0.000252	0.00300	1	04/29/2020 17:53	WG1467916
Chlorodibromomethane	U			0.000735	0.00300	1	04/29/2020 17:53	WG1467916
Chloroethane	U			0.00204	0.00601	1	04/29/2020 17:53	WG1467916
Chloroform	U			0.00124	0.00300	1	04/29/2020 17:53	WG1467916
Chloromethane	U		J4	0.00523	0.0150	1	04/29/2020 17:53	WG1467916
2-Chlorotoluene	U			0.00104	0.00300	1	04/29/2020 17:53	WG1467916
4-Chlorotoluene	U			0.000541	0.00601	1	04/29/2020 17:53	WG1467916
1,2-Dibromo-3-Chloropropane	U			0.00469	0.0300	1	04/29/2020 17:53	WG1467916
1,2-Dibromoethane	U			0.000779	0.00300	1	04/29/2020 17:53	WG1467916
Dibromomethane	U			0.000901	0.00601	1	04/29/2020 17:53	WG1467916
1,2-Dichlorobenzene	U			0.000511	0.00601	1	04/29/2020 17:53	WG1467916
1,3-Dichlorobenzene	U			0.000721	0.00601	1	04/29/2020 17:53	WG1467916
1,4-Dichlorobenzene	U			0.000841	0.00601	1	04/29/2020 17:53	WG1467916
Dichlorodifluoromethane	U			0.00193	0.00300	1	04/29/2020 17:53	WG1467916
1,1-Dichloroethane	U			0.000590	0.00300	1	04/29/2020 17:53	WG1467916
1,2-Dichloroethane	U			0.000780	0.00300	1	04/29/2020 17:53	WG1467916
1,1-Dichloroethene	U			0.000728	0.00300	1	04/29/2020 17:53	WG1467916
cis-1,2-Dichloroethene	U			0.000882	0.00300	1	04/29/2020 17:53	WG1467916
trans-1,2-Dichloroethene	U			0.00125	0.00601	1	04/29/2020 17:53	WG1467916
1,2-Dichloropropane	0.0341			0.00171	0.00601	1	04/29/2020 17:53	WG1467916
1,1-Dichloropropene	U			0.000972	0.00300	1	04/29/2020 17:53	WG1467916
1,3-Dichloropropane	U			0.000602	0.00601	1	04/29/2020 17:53	WG1467916
cis-1,3-Dichloropropene	U			0.000910	0.00300	1	04/29/2020 17:53	WG1467916
trans-1,3-Dichloropropene	U			0.00137	0.00601	1	04/29/2020 17:53	WG1467916
trans-1,4-Dichloro-2-butene	U		J4	0.00224	0.00601	1	04/29/2020 17:53	WG1467916
2,2-Dichloropropane	U			0.00166	0.00300	1	04/29/2020 17:53	WG1467916
Di-isopropyl ether	U		J4	0.000493	0.00120	1	04/29/2020 17:53	WG1467916
Ethylbenzene	U			0.000886	0.00300	1	04/29/2020 17:53	WG1467916
Hexachloro-1,3-butadiene	U	UJ	J0	0.00721	0.0300	1	04/29/2020 17:53	WG1467916
2-Hexanone	U			0.00404	0.0300	1	04/29/2020 17:53	WG1467916
n-Hexane	U			0.00272	0.00601	1	04/29/2020 17:53	WG1467916
Iodomethane	U			0.00279	0.0150	1	04/29/2020 17:53	WG1467916
Isopropylbenzene	U			0.000511	0.00300	1	04/29/2020 17:53	WG1467916
p-Isopropyltoluene	U			0.00306	0.00601	1	04/29/2020 17:53	WG1467916
2-Butanone (MEK)	U			0.0763	0.120	1	04/29/2020 17:53	WG1467916
Methylene Chloride	U			0.00798	0.0300	1	04/29/2020 17:53	WG1467916
4-Methyl-2-pentanone (MIBK)	U			0.00274	0.0300	1	04/29/2020 17:53	WG1467916

JC 5/28/2020

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.000421	0.00120	1	04/29/2020 17:53	WG1467916
Naphthalene	U		0.00586	0.0150	1	04/29/2020 17:53	WG1467916
n-Propylbenzene	U		0.00114	0.00601	1	04/29/2020 17:53	WG1467916
Styrene	U		0.000275	0.0150	1	04/29/2020 17:53	WG1467916
1,1,1,2-Tetrachloroethane	U		0.00114	0.00300	1	04/29/2020 17:53	WG1467916
1,1,2,2-Tetrachloroethane	U		0.000835	0.00300	1	04/29/2020 17:53	WG1467916
1,1,2-Trichlorotrifluoroethane	U		0.000906	0.00300	1	04/29/2020 17:53	WG1467916
Tetrachloroethene	U		0.00108	0.00300	1	04/29/2020 17:53	WG1467916
Toluene	U		0.00156	0.00601	1	04/29/2020 17:53	WG1467916
1,2,3-Trichlorobenzene	U		0.00881	0.0150	1	04/29/2020 17:53	WG1467916
1,2,4-Trichlorobenzene	U UJ	J0	0.00529	0.0150	1	04/29/2020 17:53	WG1467916
1,1,1-Trichloroethane	U		0.00111	0.00300	1	04/29/2020 17:53	WG1467916
1,1,2-Trichloroethane	U		0.000717	0.00300	1	04/29/2020 17:53	WG1467916
Trichloroethene	U		0.000702	0.00120	1	04/29/2020 17:53	WG1467916
Trichlorofluoromethane	U		0.000994	0.00300	1	04/29/2020 17:53	WG1467916
1,2,3-Trichloropropane	U		0.00195	0.0150	1	04/29/2020 17:53	WG1467916
1,2,4-Trimethylbenzene	U		0.00190	0.00601	1	04/29/2020 17:53	WG1467916
1,2,3-Trimethylbenzene	U		0.00190	0.00601	1	04/29/2020 17:53	WG1467916
1,3,5-Trimethylbenzene	U		0.00240	0.00601	1	04/29/2020 17:53	WG1467916
Vinyl acetate	U		0.00305	0.0150	1	04/29/2020 17:53	WG1467916
Vinyl chloride	U	J4	0.00139	0.00300	1	04/29/2020 17:53	WG1467916
Xylenes, Total	U		0.00106	0.00781	1	04/29/2020 17:53	WG1467916
(S) Toluene-d8	*106*			*75.0-131*		*04/29/2020 17:53*	WG1467916
(S) 4-Bromofluorobenzene	*91.5*			*67.0-138*		*04/29/2020 17:53*	WG1467916
(S) 1,2-Dichloroethane-d4	*99.8*			*70.0-130*		*04/29/2020 17:53*	WG1467916

JC 5/28/2020

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	82.0		1	05/05/2020 06:18	WG1469319

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	U		0.0445	0.0610	1	04/29/2020 18:12	WG1467916
Acrylonitrile	U		0.00440	0.0152	1	04/29/2020 18:12	WG1467916
Benzene	U		0.000570	0.00122	1	04/29/2020 18:12	WG1467916
Bromobenzene	U		0.00110	0.0152	1	04/29/2020 18:12	WG1467916
Bromodichloromethane	U		0.000884	0.00305	1	04/29/2020 18:12	WG1467916
Bromochloromethane	U		0.000688	0.00610	1	04/29/2020 18:12	WG1467916
Bromoform	U	UJ J0	0.00143	0.0305	1	04/29/2020 18:12	WG1467916
Bromomethane	U		0.00240	0.0152	1	04/29/2020 18:12	WG1467916
n-Butylbenzene	0.0119	J	0.00640	0.0152	1	04/29/2020 18:12	WG1467916
sec-Butylbenzene	0.00480	J	0.00351	0.0152	1	04/29/2020 18:12	WG1467916
tert-Butylbenzene	U		0.00238	0.00610	1	04/29/2020 18:12	WG1467916
Carbon disulfide	0.00409	J	0.000854	0.0152	1	04/29/2020 18:12	WG1467916
Carbon tetrachloride	U		0.00110	0.00610	1	04/29/2020 18:12	WG1467916
Chlorobenzene	0.000423	J	0.000256	0.00305	1	04/29/2020 18:12	WG1467916
Chlorodibromomethane	U		0.000746	0.00305	1	04/29/2020 18:12	WG1467916
Chloroethane	U		0.00207	0.00610	1	04/29/2020 18:12	WG1467916
Chloroform	U		0.00126	0.00305	1	04/29/2020 18:12	WG1467916
Chloromethane	U	J4	0.00530	0.0152	1	04/29/2020 18:12	WG1467916
2-Chlorotoluene	U		0.00105	0.00305	1	04/29/2020 18:12	WG1467916
4-Chlorotoluene	0.00474	J	0.000549	0.00610	1	04/29/2020 18:12	WG1467916
1,2-Dibromo-3-Chloropropane	U		0.00476	0.0305	1	04/29/2020 18:12	WG1467916
1,2-Dibromoethane	U		0.000790	0.00305	1	04/29/2020 18:12	WG1467916
Dibromomethane	U		0.000915	0.00610	1	04/29/2020 18:12	WG1467916
1,2-Dichlorobenzene	U		0.000518	0.00610	1	04/29/2020 18:12	WG1467916
1,3-Dichlorobenzene	U		0.000732	0.00610	1	04/29/2020 18:12	WG1467916
1,4-Dichlorobenzene	U		0.000854	0.00610	1	04/29/2020 18:12	WG1467916
Dichlorodifluoromethane	U		0.00196	0.00305	1	04/29/2020 18:12	WG1467916
1,1-Dichloroethane	U		0.000599	0.00305	1	04/29/2020 18:12	WG1467916
1,2-Dichloroethane	U		0.000791	0.00305	1	04/29/2020 18:12	WG1467916
1,1-Dichloroethene	U		0.000739	0.00305	1	04/29/2020 18:12	WG1467916
cis-1,2-Dichloroethene	U		0.000895	0.00305	1	04/29/2020 18:12	WG1467916
trans-1,2-Dichloroethene	U		0.00127	0.00610	1	04/29/2020 18:12	WG1467916
1,2-Dichloropropane	0.0107		0.00173	0.00610	1	04/29/2020 18:12	WG1467916
1,1-Dichloropropene	U		0.000987	0.00305	1	04/29/2020 18:12	WG1467916
1,3-Dichloropropane	U		0.000611	0.00610	1	04/29/2020 18:12	WG1467916
cis-1,3-Dichloropropene	U		0.000923	0.00305	1	04/29/2020 18:12	WG1467916
trans-1,3-Dichloropropene	U		0.00139	0.00610	1	04/29/2020 18:12	WG1467916
trans-1,4-Dichloro-2-butene	U	J4	0.00227	0.00610	1	04/29/2020 18:12	WG1467916
2,2-Dichloropropane	U		0.00168	0.00305	1	04/29/2020 18:12	WG1467916
Di-isopropyl ether	U	J4	0.000500	0.00122	1	04/29/2020 18:12	WG1467916
Ethylbenzene	U		0.000899	0.00305	1	04/29/2020 18:12	WG1467916
Hexachloro-1,3-butadiene	U	UJ J0	0.00732	0.0305	1	04/29/2020 18:12	WG1467916
2-Hexanone	U		0.00410	0.0305	1	04/29/2020 18:12	WG1467916
n-Hexane	0.00294	J	0.00276	0.00610	1	04/29/2020 18:12	WG1467916
Iodomethane	U		0.00283	0.0152	1	04/29/2020 18:12	WG1467916
Isopropylbenzene	0.000665	J	0.000518	0.00305	1	04/29/2020 18:12	WG1467916
p-Isopropyltoluene	0.184	J	0.00311	0.00610	1	04/29/2020 18:12	WG1467916
2-Butanone (MEK)	U		0.0774	0.122	1	04/29/2020 18:12	WG1467916
Methylene Chloride	U		0.00810	0.0305	1	04/29/2020 18:12	WG1467916
4-Methyl-2-pentanone (MIBK)	U		0.00278	0.0305	1	04/29/2020 18:12	WG1467916

JC 5/28/2020

MW-2019-11.5

Collected date/time: 04/22/20 08:30

SAMPLE RESULTS - 33

L1212082

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.000427	0.00122	1	04/29/2020 18:12	WG1467916
Naphthalene	U		0.00595	0.0152	1	04/29/2020 18:12	WG1467916
n-Propylbenzene	U		0.00116	0.00610	1	04/29/2020 18:12	WG1467916
Styrene	0.00272	J	0.000279	0.0152	1	04/29/2020 18:12	WG1467916
1,1,1,2-Tetrachloroethane	U		0.00116	0.00305	1	04/29/2020 18:12	WG1467916
1,1,2,2-Tetrachloroethane	0.000946	J	0.000848	0.00305	1	04/29/2020 18:12	WG1467916
1,1,2-Trichlorotrifluoroethane	U		0.000919	0.00305	1	04/29/2020 18:12	WG1467916
Tetrachloroethene	U		0.00109	0.00305	1	04/29/2020 18:12	WG1467916
Toluene	0.00239	J	0.00159	0.00610	1	04/29/2020 18:12	WG1467916
1,2,3-Trichlorobenzene	U		0.00894	0.0152	1	04/29/2020 18:12	WG1467916
1,2,4-Trichlorobenzene	U	UJ J0	0.00537	0.0152	1	04/29/2020 18:12	WG1467916
1,1,1-Trichloroethane	U		0.00113	0.00305	1	04/29/2020 18:12	WG1467916
1,1,2-Trichloroethane	U		0.000728	0.00305	1	04/29/2020 18:12	WG1467916
Trichloroethene	U		0.000712	0.00122	1	04/29/2020 18:12	WG1467916
Trichlorofluoromethane	U		0.00101	0.00305	1	04/29/2020 18:12	WG1467916
1,2,3-Trichloropropane	U		0.00198	0.0152	1	04/29/2020 18:12	WG1467916
1,2,4-Trimethylbenzene	U		0.00193	0.00610	1	04/29/2020 18:12	WG1467916
1,2,3-Trimethylbenzene	U		0.00193	0.00610	1	04/29/2020 18:12	WG1467916
1,3,5-Trimethylbenzene	U		0.00244	0.00610	1	04/29/2020 18:12	WG1467916
Vinyl acetate	U		0.00310	0.0152	1	04/29/2020 18:12	WG1467916
Vinyl chloride	U	J4	0.00141	0.00305	1	04/29/2020 18:12	WG1467916
Xylenes, Total	U		0.00107	0.00793	1	04/29/2020 18:12	WG1467916
(S) Toluene-d8	*107*			*75.0-131*		*04/29/2020 18:12*	WG1467916
(S) 4-Bromofluorobenzene	*87.9*			*67.0-138*		*04/29/2020 18:12*	WG1467916
(S) 1,2-Dichloroethane-d4	*92.8*			*70.0-130*		*04/29/2020 18:12*	WG1467916

JC 5/28/2020

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	84.0		1	05/05/2020 06:18	WG1469319

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	U		0.0435	0.0595	1	04/29/2020 18:31	WG1467916
Acrylonitrile	U		0.00430	0.0149	1	04/29/2020 18:31	WG1467916
Benzene	U		0.000556	0.00119	1	04/29/2020 18:31	WG1467916
Bromobenzene	U		0.00107	0.0149	1	04/29/2020 18:31	WG1467916
Bromodichloromethane	U		0.000863	0.00298	1	04/29/2020 18:31	WG1467916
Bromochloromethane	U		0.000672	0.00595	1	04/29/2020 18:31	WG1467916
Bromoform	U UJ	J0	0.00139	0.0298	1	04/29/2020 18:31	WG1467916
Bromomethane	U		0.00235	0.0149	1	04/29/2020 18:31	WG1467916
n-Butylbenzene	U		0.00625	0.0149	1	04/29/2020 18:31	WG1467916
sec-Butylbenzene	U		0.00343	0.0149	1	04/29/2020 18:31	WG1467916
tert-Butylbenzene	U		0.00232	0.00595	1	04/29/2020 18:31	WG1467916
Carbon disulfide	U		0.000834	0.0149	1	04/29/2020 18:31	WG1467916
Carbon tetrachloride	U		0.00107	0.00595	1	04/29/2020 18:31	WG1467916
Chlorobenzene	0.000512	J	0.000250	0.00298	1	04/29/2020 18:31	WG1467916
Chlorodibromomethane	U		0.000729	0.00298	1	04/29/2020 18:31	WG1467916
Chloroethane	U		0.00202	0.00595	1	04/29/2020 18:31	WG1467916
Chloroform	U		0.00123	0.00298	1	04/29/2020 18:31	WG1467916
Chloromethane	U	J4	0.00518	0.0149	1	04/29/2020 18:31	WG1467916
2-Chlorotoluene	U		0.00103	0.00298	1	04/29/2020 18:31	WG1467916
4-Chlorotoluene	U		0.000536	0.00595	1	04/29/2020 18:31	WG1467916
1,2-Dibromo-3-Chloropropane	U		0.00464	0.0298	1	04/29/2020 18:31	WG1467916
1,2-Dibromoethane	U		0.000772	0.00298	1	04/29/2020 18:31	WG1467916
Dibromomethane	U		0.000893	0.00595	1	04/29/2020 18:31	WG1467916
1,2-Dichlorobenzene	U		0.000506	0.00595	1	04/29/2020 18:31	WG1467916
1,3-Dichlorobenzene	U		0.000714	0.00595	1	04/29/2020 18:31	WG1467916
1,4-Dichlorobenzene	U		0.000834	0.00595	1	04/29/2020 18:31	WG1467916
Dichlorodifluoromethane	U		0.00192	0.00298	1	04/29/2020 18:31	WG1467916
1,1-Dichloroethane	U		0.000585	0.00298	1	04/29/2020 18:31	WG1467916
1,2-Dichloroethane	U		0.000773	0.00298	1	04/29/2020 18:31	WG1467916
1,1-Dichloroethene	U		0.000722	0.00298	1	04/29/2020 18:31	WG1467916
cis-1,2-Dichloroethene	U		0.000874	0.00298	1	04/29/2020 18:31	WG1467916
trans-1,2-Dichloroethene	U		0.00124	0.00595	1	04/29/2020 18:31	WG1467916
1,2-Dichloropropane	0.0260		0.00169	0.00595	1	04/29/2020 18:31	WG1467916
1,1-Dichloropropene	U		0.000963	0.00298	1	04/29/2020 18:31	WG1467916
1,3-Dichloropropane	U		0.000597	0.00595	1	04/29/2020 18:31	WG1467916
cis-1,3-Dichloropropene	U		0.000901	0.00298	1	04/29/2020 18:31	WG1467916
trans-1,3-Dichloropropene	U		0.00136	0.00595	1	04/29/2020 18:31	WG1467916
trans-1,4-Dichloro-2-butene	U	J4	0.00221	0.00595	1	04/29/2020 18:31	WG1467916
2,2-Dichloropropane	U		0.00164	0.00298	1	04/29/2020 18:31	WG1467916
Di-isopropyl ether	U	J4	0.000488	0.00119	1	04/29/2020 18:31	WG1467916
Ethylbenzene	U		0.000878	0.00298	1	04/29/2020 18:31	WG1467916
Hexachloro-1,3-butadiene	U UJ	J0	0.00714	0.0298	1	04/29/2020 18:31	WG1467916
2-Hexanone	U		0.00400	0.0298	1	04/29/2020 18:31	WG1467916
n-Hexane	U		0.00269	0.00595	1	04/29/2020 18:31	WG1467916
Iodomethane	U		0.00276	0.0149	1	04/29/2020 18:31	WG1467916
Isopropylbenzene	U		0.000506	0.00298	1	04/29/2020 18:31	WG1467916
p-Isopropyltoluene	U		0.00304	0.00595	1	04/29/2020 18:31	WG1467916
2-Butanone (MEK)	U		0.0756	0.119	1	04/29/2020 18:31	WG1467916
Methylene Chloride	U		0.00791	0.0298	1	04/29/2020 18:31	WG1467916
4-Methyl-2-pentanone (MIBK)	U		0.00272	0.0298	1	04/29/2020 18:31	WG1467916

JC 5/28/2020

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.000417	0.00119	1	04/29/2020 18:31	WG1467916
Naphthalene	U		0.00581	0.0149	1	04/29/2020 18:31	WG1467916
n-Propylbenzene	U		0.00113	0.00595	1	04/29/2020 18:31	WG1467916
Styrene	U		0.000273	0.0149	1	04/29/2020 18:31	WG1467916
1,1,1,2-Tetrachloroethane	U		0.00113	0.00298	1	04/29/2020 18:31	WG1467916
1,1,2,2-Tetrachloroethane	U		0.000828	0.00298	1	04/29/2020 18:31	WG1467916
1,1,2-Trichlorotrifluoroethane	U		0.000898	0.00298	1	04/29/2020 18:31	WG1467916
Tetrachloroethene	U		0.00107	0.00298	1	04/29/2020 18:31	WG1467916
Toluene	U		0.00155	0.00595	1	04/29/2020 18:31	WG1467916
1,2,3-Trichlorobenzene	U		0.00873	0.0149	1	04/29/2020 18:31	WG1467916
1,2,4-Trichlorobenzene	U UJ	J0	0.00524	0.0149	1	04/29/2020 18:31	WG1467916
1,1,1-Trichloroethane	U		0.00110	0.00298	1	04/29/2020 18:31	WG1467916
1,1,2-Trichloroethane	U		0.000711	0.00298	1	04/29/2020 18:31	WG1467916
Trichloroethene	U		0.000695	0.00119	1	04/29/2020 18:31	WG1467916
Trichlorofluoromethane	U		0.000985	0.00298	1	04/29/2020 18:31	WG1467916
1,2,3-Trichloropropane	U		0.00193	0.0149	1	04/29/2020 18:31	WG1467916
1,2,4-Trimethylbenzene	U		0.00188	0.00595	1	04/29/2020 18:31	WG1467916
1,2,3-Trimethylbenzene	U		0.00188	0.00595	1	04/29/2020 18:31	WG1467916
1,3,5-Trimethylbenzene	U		0.00238	0.00595	1	04/29/2020 18:31	WG1467916
Vinyl acetate	U		0.00302	0.0149	1	04/29/2020 18:31	WG1467916
Vinyl chloride	U	J4	0.00138	0.00298	1	04/29/2020 18:31	WG1467916
Xylenes, Total	U		0.00105	0.00774	1	04/29/2020 18:31	WG1467916
(S) Toluene-d8	*107*			*75.0-131*		*04/29/2020 18:31*	WG1467916
(S) 4-Bromofluorobenzene	*90.3*			*67.0-138*		*04/29/2020 18:31*	WG1467916
(S) 1,2-Dichloroethane-d4	*93.1*			*70.0-130*		*04/29/2020 18:31*	WG1467916

JC 5/28/2020

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	82.5		1	05/12/2020 17:34	WG1473914

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	U		0.0443	0.0606	1	05/10/2020 16:10	WG1473272
Acrylonitrile	U		0.00438	0.0152	1	05/10/2020 16:10	WG1473272
Benzene	U		0.000566	0.00121	1	05/10/2020 16:10	WG1473272
Bromobenzene	U		0.00109	0.0152	1	05/10/2020 16:10	WG1473272
Bromodichloromethane	U		0.000879	0.00303	1	05/10/2020 16:10	WG1473272
Bromochloromethane	U		0.000684	0.00606	1	05/10/2020 16:10	WG1473272
Bromoform	U		0.00142	0.0303	1	05/10/2020 16:10	WG1473272
Bromomethane	U		0.00239	0.0152	1	05/10/2020 16:10	WG1473272
n-Butylbenzene	U		0.00637	0.0152	1	05/10/2020 16:10	WG1473272
sec-Butylbenzene	U		0.00349	0.0152	1	05/10/2020 16:10	WG1473272
tert-Butylbenzene	U		0.00236	0.00606	1	05/10/2020 16:10	WG1473272
Carbon disulfide	U		0.000849	0.0152	1	05/10/2020 16:10	WG1473272
Carbon tetrachloride	U		0.00109	0.00606	1	05/10/2020 16:10	WG1473272
Chlorobenzene	U		0.000255	0.00303	1	05/10/2020 16:10	WG1473272
Chlorodibromomethane	U		0.000742	0.00303	1	05/10/2020 16:10	WG1473272
Chloroethane	U		0.00206	0.00606	1	05/10/2020 16:10	WG1473272
Chloroform	U		0.00125	0.00303	1	05/10/2020 16:10	WG1473272
Chloromethane	U		0.00528	0.0152	1	05/10/2020 16:10	WG1473272
2-Chlorotoluene	U		0.00105	0.00303	1	05/10/2020 16:10	WG1473272
4-Chlorotoluene	U		0.000546	0.00606	1	05/10/2020 16:10	WG1473272
1,2-Dibromo-3-Chloropropane	U		0.00473	0.0303	1	05/10/2020 16:10	WG1473272
1,2-Dibromoethane	U		0.000786	0.00303	1	05/10/2020 16:10	WG1473272
Dibromomethane	U		0.000910	0.00606	1	05/10/2020 16:10	WG1473272
1,2-Dichlorobenzene	U		0.000515	0.00606	1	05/10/2020 16:10	WG1473272
1,3-Dichlorobenzene	U		0.000728	0.00606	1	05/10/2020 16:10	WG1473272
1,4-Dichlorobenzene	U		0.000849	0.00606	1	05/10/2020 16:10	WG1473272
Dichlorodifluoromethane	U		0.00195	0.00303	1	05/10/2020 16:10	WG1473272
1,1-Dichloroethane	U		0.000595	0.00303	1	05/10/2020 16:10	WG1473272
1,2-Dichloroethane	U		0.000787	0.00303	1	05/10/2020 16:10	WG1473272
1,1-Dichloroethene	U		0.000735	0.00303	1	05/10/2020 16:10	WG1473272
cis-1,2-Dichloroethene	U		0.000890	0.00303	1	05/10/2020 16:10	WG1473272
trans-1,2-Dichloroethene	U		0.00126	0.00606	1	05/10/2020 16:10	WG1473272
1,2-Dichloropropane	U		0.00172	0.00606	1	05/10/2020 16:10	WG1473272
1,1-Dichloropropene	U		0.000981	0.00303	1	05/10/2020 16:10	WG1473272
1,3-Dichloropropane	U		0.000608	0.00606	1	05/10/2020 16:10	WG1473272
cis-1,3-Dichloropropene	U		0.000918	0.00303	1	05/10/2020 16:10	WG1473272
trans-1,3-Dichloropropene	U		0.00138	0.00606	1	05/10/2020 16:10	WG1473272
trans-1,4-Dichloro-2-butene	U		0.00226	0.00606	1	05/10/2020 16:10	WG1473272
2,2-Dichloropropane	U		0.00167	0.00303	1	05/10/2020 16:10	WG1473272
Di-isopropyl ether	U		0.000497	0.00121	1	05/10/2020 16:10	WG1473272
Ethylbenzene	U		0.000894	0.00303	1	05/10/2020 16:10	WG1473272
Hexachloro-1,3-butadiene	U		0.00728	0.0303	1	05/10/2020 16:10	WG1473272
2-Hexanone	U		0.00407	0.0303	1	05/10/2020 16:10	WG1473272
n-Hexane	U		0.00274	0.00606	1	05/10/2020 16:10	WG1473272
Iodomethane	U		0.00281	0.0152	1	05/10/2020 16:10	WG1473272
Isopropylbenzene	U		0.000515	0.00303	1	05/10/2020 16:10	WG1473272
p-Isopropyltoluene	U		0.00309	0.00606	1	05/10/2020 16:10	WG1473272
2-Butanone (MEK)	U		0.0770	0.121	1	05/10/2020 16:10	WG1473272
Methylene Chloride	U		0.00805	0.0303	1	05/10/2020 16:10	WG1473272
4-Methyl-2-pentanone (MIBK)	U		0.00277	0.0303	1	05/10/2020 16:10	WG1473272

JC 5/28/2020

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.000424	0.00121	1	05/10/2020 16:10	WG1473272
Naphthalene	U		0.00592	0.0152	1	05/10/2020 16:10	WG1473272
n-Propylbenzene	U		0.00115	0.00606	1	05/10/2020 16:10	WG1473272
Styrene	U		0.000278	0.0152	1	05/10/2020 16:10	WG1473272
1,1,1,2-Tetrachloroethane	U		0.00115	0.00303	1	05/10/2020 16:10	WG1473272
1,1,2,2-Tetrachloroethane	U		0.000843	0.00303	1	05/10/2020 16:10	WG1473272
1,1,2-Trichlorotrifluoroethane	U		0.000914	0.00303	1	05/10/2020 16:10	WG1473272
Tetrachloroethene	U		0.00109	0.00303	1	05/10/2020 16:10	WG1473272
Toluene	U		0.00158	0.00606	1	05/10/2020 16:10	WG1473272
1,2,3-Trichlorobenzene	U		0.00889	0.0152	1	05/10/2020 16:10	WG1473272
1,2,4-Trichlorobenzene	U		0.00534	0.0152	1	05/10/2020 16:10	WG1473272
1,1,1-Trichloroethane	U		0.00112	0.00303	1	05/10/2020 16:10	WG1473272
1,1,2-Trichloroethane	U		0.000724	0.00303	1	05/10/2020 16:10	WG1473272
Trichloroethene	U		0.000708	0.00121	1	05/10/2020 16:10	WG1473272
Trichlorofluoromethane	U		0.00100	0.00303	1	05/10/2020 16:10	WG1473272
1,2,3-Trichloropropane	U		0.00196	0.0152	1	05/10/2020 16:10	WG1473272
1,2,4-Trimethylbenzene	U		0.00192	0.00606	1	05/10/2020 16:10	WG1473272
1,2,3-Trimethylbenzene	U		0.00192	0.00606	1	05/10/2020 16:10	WG1473272
1,3,5-Trimethylbenzene	U		0.00243	0.00606	1	05/10/2020 16:10	WG1473272
Vinyl acetate	U		0.00308	0.0152	1	05/10/2020 16:10	WG1473272
Vinyl chloride	U		0.00141	0.00303	1	05/10/2020 16:10	WG1473272
Xylenes, Total	U		0.00107	0.00788	1	05/10/2020 16:10	WG1473272
(S) Toluene-d8	*100*			*75.0-131*		*05/10/2020 16:10*	WG1473272
(S) 4-Bromofluorobenzene	*95.3*			*67.0-138*		*05/10/2020 16:10*	WG1473272
(S) 1,2-Dichloroethane-d4	*103*			*70.0-130*		*05/10/2020 16:10*	WG1473272

JC 5/28/2020

Total Solids by Method 2540 G-2011

	Result	Qualifier	Dilution	Analysis	Batch
Analyte	%			date / time	
Total Solids	75.6		1	05/12/2020 17:34	WG1473914

Volatile Organic Compounds (GC/MS) by Method 8260D

	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg		date / time	
Acetone	U		0.0483	0.0661	1	05/10/2020 16:29	WG1473272
Acrylonitrile	U		0.00477	0.0165	1	05/10/2020 16:29	WG1473272
Benzene	U		0.000618	0.00132	1	05/10/2020 16:29	WG1473272
Bromobenzene	U		0.00119	0.0165	1	05/10/2020 16:29	WG1473272
Bromodichloromethane	U		0.000959	0.00331	1	05/10/2020 16:29	WG1473272
Bromochloromethane	U		0.000746	0.00661	1	05/10/2020 16:29	WG1473272
Bromoform	U		0.00155	0.0331	1	05/10/2020 16:29	WG1473272
Bromomethane	U		0.00261	0.0165	1	05/10/2020 16:29	WG1473272
n-Butylbenzene	U		0.00694	0.0165	1	05/10/2020 16:29	WG1473272
sec-Butylbenzene	U		0.00381	0.0165	1	05/10/2020 16:29	WG1473272
tert-Butylbenzene	U		0.00258	0.00661	1	05/10/2020 16:29	WG1473272
Carbon disulfide	U		0.000926	0.0165	1	05/10/2020 16:29	WG1473272
Carbon tetrachloride	U		0.00119	0.00661	1	05/10/2020 16:29	WG1473272
Chlorobenzene	U		0.000278	0.00331	1	05/10/2020 16:29	WG1473272
Chlorodibromomethane	U		0.000809	0.00331	1	05/10/2020 16:29	WG1473272
Chloroethane	U		0.00225	0.00661	1	05/10/2020 16:29	WG1473272
Chloroform	U		0.00136	0.00331	1	05/10/2020 16:29	WG1473272
Chloromethane	U		0.00575	0.0165	1	05/10/2020 16:29	WG1473272
2-Chlorotoluene	U		0.00114	0.00331	1	05/10/2020 16:29	WG1473272
4-Chlorotoluene	U		0.000595	0.00661	1	05/10/2020 16:29	WG1473272
1,2-Dibromo-3-Chloropropane	U		0.00516	0.0331	1	05/10/2020 16:29	WG1473272
1,2-Dibromoethane	U		0.000857	0.00331	1	05/10/2020 16:29	WG1473272
Dibromomethane	U		0.000992	0.00661	1	05/10/2020 16:29	WG1473272
1,2-Dichlorobenzene	U		0.000562	0.00661	1	05/10/2020 16:29	WG1473272
1,3-Dichlorobenzene	U		0.000793	0.00661	1	05/10/2020 16:29	WG1473272
1,4-Dichlorobenzene	U		0.000926	0.00661	1	05/10/2020 16:29	WG1473272
Dichlorodifluoromethane	U		0.00213	0.00331	1	05/10/2020 16:29	WG1473272
1,1-Dichloroethane	U		0.000649	0.00331	1	05/10/2020 16:29	WG1473272
1,2-Dichloroethane	U		0.000858	0.00331	1	05/10/2020 16:29	WG1473272
1,1-Dichloroethene	U		0.000801	0.00331	1	05/10/2020 16:29	WG1473272
cis-1,2-Dichloroethene	U		0.000971	0.00331	1	05/10/2020 16:29	WG1473272
trans-1,2-Dichloroethene	U		0.00138	0.00661	1	05/10/2020 16:29	WG1473272
1,2-Dichloropropane	U		0.00188	0.00661	1	05/10/2020 16:29	WG1473272
1,1-Dichloropropene	U		0.00107	0.00331	1	05/10/2020 16:29	WG1473272
1,3-Dichloropropane	U		0.000663	0.00661	1	05/10/2020 16:29	WG1473272
cis-1,3-Dichloropropene	U		0.00100	0.00331	1	05/10/2020 16:29	WG1473272
trans-1,3-Dichloropropene	U		0.00151	0.00661	1	05/10/2020 16:29	WG1473272
trans-1,4-Dichloro-2-butene	U		0.00246	0.00661	1	05/10/2020 16:29	WG1473272
2,2-Dichloropropane	U		0.00182	0.00331	1	05/10/2020 16:29	WG1473272
Di-isopropyl ether	U		0.000542	0.00132	1	05/10/2020 16:29	WG1473272
Ethylbenzene	U		0.000975	0.00331	1	05/10/2020 16:29	WG1473272
Hexachloro-1,3-butadiene	U		0.00793	0.0331	1	05/10/2020 16:29	WG1473272
2-Hexanone	U		0.00444	0.0331	1	05/10/2020 16:29	WG1473272
n-Hexane	U		0.00299	0.00661	1	05/10/2020 16:29	WG1473272
Iodomethane	U		0.00307	0.0165	1	05/10/2020 16:29	WG1473272
Isopropylbenzene	U		0.000562	0.00331	1	05/10/2020 16:29	WG1473272
p-Isopropyltoluene	U		0.00337	0.00661	1	05/10/2020 16:29	WG1473272
2-Butanone (MEK)	U		0.0840	0.132	1	05/10/2020 16:29	WG1473272
Methylene Chloride	U		0.00878	0.0331	1	05/10/2020 16:29	WG1473272
4-Methyl-2-pentanone (MIBK)	U		0.00302	0.0331	1	05/10/2020 16:29	WG1473272

JC 5/28/2020

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.000463	0.00132	1	05/10/2020 16:29	WG1473272
Naphthalene	U		0.00645	0.0165	1	05/10/2020 16:29	WG1473272
n-Propylbenzene	U		0.00126	0.00661	1	05/10/2020 16:29	WG1473272
Styrene	U		0.000303	0.0165	1	05/10/2020 16:29	WG1473272
1,1,1,2-Tetrachloroethane	U		0.00125	0.00331	1	05/10/2020 16:29	WG1473272
1,1,2,2-Tetrachloroethane	U		0.000919	0.00331	1	05/10/2020 16:29	WG1473272
1,1,2-Trichlorotrifluoroethane	U		0.000997	0.00331	1	05/10/2020 16:29	WG1473272
Tetrachloroethene	U		0.00118	0.00331	1	05/10/2020 16:29	WG1473272
Toluene	0.00262	J	0.00172	0.00661	1	05/10/2020 16:29	WG1473272
1,2,3-Trichlorobenzene	U		0.00969	0.0165	1	05/10/2020 16:29	WG1473272
1,2,4-Trichlorobenzene	U		0.00582	0.0165	1	05/10/2020 16:29	WG1473272
1,1,1-Trichloroethane	U		0.00122	0.00331	1	05/10/2020 16:29	WG1473272
1,1,2-Trichloroethane	U		0.000789	0.00331	1	05/10/2020 16:29	WG1473272
Trichloroethene	U		0.000772	0.00132	1	05/10/2020 16:29	WG1473272
Trichlorofluoromethane	U		0.00109	0.00331	1	05/10/2020 16:29	WG1473272
1,2,3-Trichloropropane	U		0.00214	0.0165	1	05/10/2020 16:29	WG1473272
1,2,4-Trimethylbenzene	U		0.00209	0.00661	1	05/10/2020 16:29	WG1473272
1,2,3-Trimethylbenzene	U		0.00209	0.00661	1	05/10/2020 16:29	WG1473272
1,3,5-Trimethylbenzene	U		0.00264	0.00661	1	05/10/2020 16:29	WG1473272
Vinyl acetate	U		0.00336	0.0165	1	05/10/2020 16:29	WG1473272
Vinyl chloride	U		0.00153	0.00331	1	05/10/2020 16:29	WG1473272
Xylenes, Total	U		0.00116	0.00860	1	05/10/2020 16:29	WG1473272
(S) Toluene-d8	*99.7*			*75.0-131*		*05/10/2020 16:29*	WG1473272
(S) 4-Bromofluorobenzene	*98.8*			*67.0-138*		*05/10/2020 16:29*	WG1473272
(S) 1,2-Dichloroethane-d4	*103*			*70.0-130*		*05/10/2020 16:29*	WG1473272

1	Cp
2	Tc
3	Ss
4	Cn
5	Sr
6	Qc
7	Gl
8	Al
9	Sc

JC 5/28/2020

MW-338-20

Collected date/time: 05/01/20 10:10

SAMPLE RESULTS - 03

L1214576

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	86.3		1	05/12/2020 17:34	WG1473914

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	U		0.0423	0.0580	1	05/10/2020 16:49	WG1473272
Acrylonitrile	U		0.00418	0.0145	1	05/10/2020 16:49	WG1473272
Benzene	U		0.000541	0.00116	1	05/10/2020 16:49	WG1473272
Bromobenzene	U		0.00104	0.0145	1	05/10/2020 16:49	WG1473272
Bromodichloromethane	U		0.000840	0.00290	1	05/10/2020 16:49	WG1473272
Bromochloromethane	U		0.000654	0.00580	1	05/10/2020 16:49	WG1473272
Bromoform	U		0.00136	0.0290	1	05/10/2020 16:49	WG1473272
Bromomethane	U		0.00228	0.0145	1	05/10/2020 16:49	WG1473272
n-Butylbenzene	U		0.00608	0.0145	1	05/10/2020 16:49	WG1473272
sec-Butylbenzene	U		0.00334	0.0145	1	05/10/2020 16:49	WG1473272
tert-Butylbenzene	U		0.00226	0.00580	1	05/10/2020 16:49	WG1473272
Carbon disulfide	U		0.000811	0.0145	1	05/10/2020 16:49	WG1473272
Carbon tetrachloride	U		0.00104	0.00580	1	05/10/2020 16:49	WG1473272
Chlorobenzene	U		0.000243	0.00290	1	05/10/2020 16:49	WG1473272
Chlorodibromomethane	U		0.000709	0.00290	1	05/10/2020 16:49	WG1473272
Chloroethane	U		0.00197	0.00580	1	05/10/2020 16:49	WG1473272
Chloroform	U		0.00119	0.00290	1	05/10/2020 16:49	WG1473272
Chloromethane	U		0.00504	0.0145	1	05/10/2020 16:49	WG1473272
2-Chlorotoluene	U		0.00100	0.00290	1	05/10/2020 16:49	WG1473272
4-Chlorotoluene	U		0.000522	0.00580	1	05/10/2020 16:49	WG1473272
1,2-Dibromo-3-Chloropropane	U		0.00452	0.0290	1	05/10/2020 16:49	WG1473272
1,2-Dibromoethane	U		0.000751	0.00290	1	05/10/2020 16:49	WG1473272
Dibromomethane	U		0.000869	0.00580	1	05/10/2020 16:49	WG1473272
1,2-Dichlorobenzene	U		0.000493	0.00580	1	05/10/2020 16:49	WG1473272
1,3-Dichlorobenzene	U		0.000695	0.00580	1	05/10/2020 16:49	WG1473272
1,4-Dichlorobenzene	U		0.000811	0.00580	1	05/10/2020 16:49	WG1473272
Dichlorodifluoromethane	U		0.00187	0.00290	1	05/10/2020 16:49	WG1473272
1,1-Dichloroethane	U		0.000569	0.00290	1	05/10/2020 16:49	WG1473272
1,2-Dichloroethane	U		0.000752	0.00290	1	05/10/2020 16:49	WG1473272
1,1-Dichloroethene	U		0.000702	0.00290	1	05/10/2020 16:49	WG1473272
cis-1,2-Dichloroethene	U		0.000851	0.00290	1	05/10/2020 16:49	WG1473272
trans-1,2-Dichloroethene	U		0.00121	0.00580	1	05/10/2020 16:49	WG1473272
1,2-Dichloropropane	U		0.00165	0.00580	1	05/10/2020 16:49	WG1473272
1,1-Dichloropropene	U		0.000938	0.00290	1	05/10/2020 16:49	WG1473272
1,3-Dichloropropane	U		0.000581	0.00580	1	05/10/2020 16:49	WG1473272
cis-1,3-Dichloropropene	U		0.000877	0.00290	1	05/10/2020 16:49	WG1473272
trans-1,3-Dichloropropene	U		0.00132	0.00580	1	05/10/2020 16:49	WG1473272
trans-1,4-Dichloro-2-butene	U		0.00216	0.00580	1	05/10/2020 16:49	WG1473272
2,2-Dichloropropane	U		0.00160	0.00290	1	05/10/2020 16:49	WG1473272
Di-isopropyl ether	U		0.000475	0.00116	1	05/10/2020 16:49	WG1473272
Ethylbenzene	U		0.000854	0.00290	1	05/10/2020 16:49	WG1473272
Hexachloro-1,3-butadiene	U		0.00695	0.0290	1	05/10/2020 16:49	WG1473272
2-Hexanone	U		0.00389	0.0290	1	05/10/2020 16:49	WG1473272
n-Hexane	U		0.00262	0.00580	1	05/10/2020 16:49	WG1473272
Iodomethane	U		0.00269	0.0145	1	05/10/2020 16:49	WG1473272
Isopropylbenzene	U		0.000493	0.00290	1	05/10/2020 16:49	WG1473272
p-Isopropyltoluene	U		0.00296	0.00580	1	05/10/2020 16:49	WG1473272
2-Butanone (MEK)	U		0.0736	0.116	1	05/10/2020 16:49	WG1473272
Methylene Chloride	U		0.00770	0.0290	1	05/10/2020 16:49	WG1473272
4-Methyl-2-pentanone (MIBK)	U		0.00264	0.0290	1	05/10/2020 16:49	WG1473272

JC 5/28/2020

MW-338-20

Collected date/time: 05/01/20 10:10

SAMPLE RESULTS - 03

L1214576

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Methyl tert-butyl ether	U		0.000406	0.00116	1	05/10/2020 16:49	WG1473272
Naphthalene	U		0.00566	0.0145	1	05/10/2020 16:49	WG1473272
n-Propylbenzene	U		0.00110	0.00580	1	05/10/2020 16:49	WG1473272
Styrene	U		0.000265	0.0145	1	05/10/2020 16:49	WG1473272
1,1,1,2-Tetrachloroethane	U		0.00110	0.00290	1	05/10/2020 16:49	WG1473272
1,1,2,2-Tetrachloroethane	U		0.000806	0.00290	1	05/10/2020 16:49	WG1473272
1,1,2-Trichlorotrifluoroethane	U		0.000874	0.00290	1	05/10/2020 16:49	WG1473272
Tetrachloroethene	U		0.00104	0.00290	1	05/10/2020 16:49	WG1473272
Toluene	U		0.00151	0.00580	1	05/10/2020 16:49	WG1473272
1,2,3-Trichlorobenzene	U		0.00850	0.0145	1	05/10/2020 16:49	WG1473272
1,2,4-Trichlorobenzene	U		0.00510	0.0145	1	05/10/2020 16:49	WG1473272
1,1,1-Trichloroethane	U		0.00107	0.00290	1	05/10/2020 16:49	WG1473272
1,1,2-Trichloroethane	U		0.000692	0.00290	1	05/10/2020 16:49	WG1473272
Trichloroethene	U		0.000677	0.00116	1	05/10/2020 16:49	WG1473272
Trichlorofluoromethane	U		0.000959	0.00290	1	05/10/2020 16:49	WG1473272
1,2,3-Trichloropropane	U		0.00188	0.0145	1	05/10/2020 16:49	WG1473272
1,2,4-Trimethylbenzene	U		0.00183	0.00580	1	05/10/2020 16:49	WG1473272
1,2,3-Trimethylbenzene	U		0.00183	0.00580	1	05/10/2020 16:49	WG1473272
1,3,5-Trimethylbenzene	U		0.00232	0.00580	1	05/10/2020 16:49	WG1473272
Vinyl acetate	U		0.00294	0.0145	1	05/10/2020 16:49	WG1473272
Vinyl chloride	U		0.00134	0.00290	1	05/10/2020 16:49	WG1473272
Xylenes, Total	U		0.00102	0.00753	1	05/10/2020 16:49	WG1473272
(S) Toluene-d8	*101*			*75.0-131*		*05/10/2020 16:49*	WG1473272
(S) 4-Bromofluorobenzene	*98.8*			*67.0-138*		*05/10/2020 16:49*	WG1473272
(S) 1,2-Dichloroethane-d4	*106*			*70.0-130*		*05/10/2020 16:49*	WG1473272

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

JC 5/28/2020

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Total Solids by Method 2540 G-2011

	Result	Qualifier	Dilution	Analysis	Batch
Analyte	%			date / time	
Total Solids	78.7		1	05/12/2020 17:34	WG1473914

Volatile Organic Compounds (GC/MS) by Method 8260D

	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg		date / time	
Acetone	U		0.0464	0.0635	1	05/10/2020 17:08	WG1473272
Acrylonitrile	U		0.00459	0.0159	1	05/10/2020 17:08	WG1473272
Benzene	U		0.000593	0.00127	1	05/10/2020 17:08	WG1473272
Bromobenzene	U		0.00114	0.0159	1	05/10/2020 17:08	WG1473272
Bromodichloromethane	U		0.000921	0.00318	1	05/10/2020 17:08	WG1473272
Bromochloromethane	U		0.000717	0.00635	1	05/10/2020 17:08	WG1473272
Bromoform	U		0.00149	0.0318	1	05/10/2020 17:08	WG1473272
Bromomethane	U		0.00250	0.0159	1	05/10/2020 17:08	WG1473272
n-Butylbenzene	U		0.00667	0.0159	1	05/10/2020 17:08	WG1473272
sec-Butylbenzene	U		0.00366	0.0159	1	05/10/2020 17:08	WG1473272
tert-Butylbenzene	U		0.00248	0.00635	1	05/10/2020 17:08	WG1473272
Carbon disulfide	U		0.000890	0.0159	1	05/10/2020 17:08	WG1473272
Carbon tetrachloride	U		0.00114	0.00635	1	05/10/2020 17:08	WG1473272
Chlorobenzene	U		0.000267	0.00318	1	05/10/2020 17:08	WG1473272
Chlorodibromomethane	U		0.000778	0.00318	1	05/10/2020 17:08	WG1473272
Chloroethane	U		0.00216	0.00635	1	05/10/2020 17:08	WG1473272
Chloroform	U		0.00131	0.00318	1	05/10/2020 17:08	WG1473272
Chloromethane	U		0.00553	0.0159	1	05/10/2020 17:08	WG1473272
2-Chlorotoluene	U		0.00110	0.00318	1	05/10/2020 17:08	WG1473272
4-Chlorotoluene	U		0.000572	0.00635	1	05/10/2020 17:08	WG1473272
1,2-Dibromo-3-Chloropropane	U		0.00496	0.0318	1	05/10/2020 17:08	WG1473272
1,2-Dibromoethane	U		0.000823	0.00318	1	05/10/2020 17:08	WG1473272
Dibromomethane	U		0.000953	0.00635	1	05/10/2020 17:08	WG1473272
1,2-Dichlorobenzene	U		0.000540	0.00635	1	05/10/2020 17:08	WG1473272
1,3-Dichlorobenzene	U		0.000762	0.00635	1	05/10/2020 17:08	WG1473272
1,4-Dichlorobenzene	U		0.000890	0.00635	1	05/10/2020 17:08	WG1473272
Dichlorodifluoromethane	U		0.00205	0.00318	1	05/10/2020 17:08	WG1473272
1,1-Dichloroethane	U		0.000624	0.00318	1	05/10/2020 17:08	WG1473272
1,2-Dichloroethane	U		0.000825	0.00318	1	05/10/2020 17:08	WG1473272
1,1-Dichloroethene	U		0.000770	0.00318	1	05/10/2020 17:08	WG1473272
cis-1,2-Dichloroethene	U		0.000933	0.00318	1	05/10/2020 17:08	WG1473272
trans-1,2-Dichloroethene	U		0.00132	0.00635	1	05/10/2020 17:08	WG1473272
1,2-Dichloropropane	U		0.00180	0.00635	1	05/10/2020 17:08	WG1473272
1,1-Dichloropropene	U		0.00103	0.00318	1	05/10/2020 17:08	WG1473272
1,3-Dichloropropane	U		0.000637	0.00635	1	05/10/2020 17:08	WG1473272
cis-1,3-Dichloropropene	U		0.000962	0.00318	1	05/10/2020 17:08	WG1473272
trans-1,3-Dichloropropene	U		0.00145	0.00635	1	05/10/2020 17:08	WG1473272
trans-1,4-Dichloro-2-butene	U		0.00236	0.00635	1	05/10/2020 17:08	WG1473272
2,2-Dichloropropane	U		0.00175	0.00318	1	05/10/2020 17:08	WG1473272
Di-isopropyl ether	U		0.000521	0.00127	1	05/10/2020 17:08	WG1473272
Ethylbenzene	U		0.000937	0.00318	1	05/10/2020 17:08	WG1473272
Hexachloro-1,3-butadiene	U		0.00762	0.0318	1	05/10/2020 17:08	WG1473272
2-Hexanone	U		0.00427	0.0318	1	05/10/2020 17:08	WG1473272
n-Hexane	U		0.00287	0.00635	1	05/10/2020 17:08	WG1473272
Iodomethane	U		0.00295	0.0159	1	05/10/2020 17:08	WG1473272
Isopropylbenzene	U		0.000540	0.00318	1	05/10/2020 17:08	WG1473272
p-Isopropyltoluene	U		0.00324	0.00635	1	05/10/2020 17:08	WG1473272
2-Butanone (MEK)	U		0.0807	0.127	1	05/10/2020 17:08	WG1473272
Methylene Chloride	U		0.00844	0.0318	1	05/10/2020 17:08	WG1473272
4-Methyl-2-pentanone (MIBK)	U		0.00290	0.0318	1	05/10/2020 17:08	WG1473272

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MW-338-23

Collected date/time: 05/01/20 10:30

SAMPLE RESULTS - 04

L1214576

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.000445	0.00127	1	05/10/2020 17:08	WG1473272
Naphthalene	U		0.00620	0.0159	1	05/10/2020 17:08	WG1473272
n-Propylbenzene	U		0.00121	0.00635	1	05/10/2020 17:08	WG1473272
Styrene	U		0.000291	0.0159	1	05/10/2020 17:08	WG1473272
1,1,1,2-Tetrachloroethane	U		0.00120	0.00318	1	05/10/2020 17:08	WG1473272
1,1,2,2-Tetrachloroethane	U		0.000883	0.00318	1	05/10/2020 17:08	WG1473272
1,1,2-Trichlorotrifluoroethane	U		0.000958	0.00318	1	05/10/2020 17:08	WG1473272
Tetrachloroethene	U		0.00114	0.00318	1	05/10/2020 17:08	WG1473272
Toluene	U		0.00165	0.00635	1	05/10/2020 17:08	WG1473272
1,2,3-Trichlorobenzene	U		0.00931	0.0159	1	05/10/2020 17:08	WG1473272
1,2,4-Trichlorobenzene	U		0.00559	0.0159	1	05/10/2020 17:08	WG1473272
1,1,1-Trichloroethane	U		0.00117	0.00318	1	05/10/2020 17:08	WG1473272
1,1,2-Trichloroethane	U		0.000759	0.00318	1	05/10/2020 17:08	WG1473272
Trichloroethene	U		0.000742	0.00127	1	05/10/2020 17:08	WG1473272
Trichlorofluoromethane	U		0.00105	0.00318	1	05/10/2020 17:08	WG1473272
1,2,3-Trichloropropane	U		0.00206	0.0159	1	05/10/2020 17:08	WG1473272
1,2,4-Trimethylbenzene	U		0.00201	0.00635	1	05/10/2020 17:08	WG1473272
1,2,3-Trimethylbenzene	U		0.00201	0.00635	1	05/10/2020 17:08	WG1473272
1,3,5-Trimethylbenzene	U		0.00254	0.00635	1	05/10/2020 17:08	WG1473272
Vinyl acetate	U		0.00323	0.0159	1	05/10/2020 17:08	WG1473272
Vinyl chloride	U		0.00147	0.00318	1	05/10/2020 17:08	WG1473272
Xylenes, Total	U		0.00112	0.00826	1	05/10/2020 17:08	WG1473272
(S) Toluene-d8	*103*			*75.0-131*		*05/10/2020 17:08*	WG1473272
(S) 4-Bromofluorobenzene	*99.6*			*67.0-138*		*05/10/2020 17:08*	WG1473272
(S) 1,2-Dichloroethane-d4	*105*			*70.0-130*		*05/10/2020 17:08*	WG1473272

JC 5/28/2020

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	79.5		1	05/12/2020 17:34	WG1473914

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	U		0.0459	0.0629	1	05/10/2020 17:27	WG1473272
Acrylonitrile	U		0.00454	0.0157	1	05/10/2020 17:27	WG1473272
Benzene	U		0.000587	0.00126	1	05/10/2020 17:27	WG1473272
Bromobenzene	U		0.00113	0.0157	1	05/10/2020 17:27	WG1473272
Bromodichloromethane	U		0.000912	0.00314	1	05/10/2020 17:27	WG1473272
Bromochloromethane	U		0.000709	0.00629	1	05/10/2020 17:27	WG1473272
Bromoform	U		0.00147	0.0314	1	05/10/2020 17:27	WG1473272
Bromomethane	U		0.00248	0.0157	1	05/10/2020 17:27	WG1473272
n-Butylbenzene	U		0.00660	0.0157	1	05/10/2020 17:27	WG1473272
sec-Butylbenzene	U		0.00362	0.0157	1	05/10/2020 17:27	WG1473272
tert-Butylbenzene	U		0.00245	0.00629	1	05/10/2020 17:27	WG1473272
Carbon disulfide	U		0.000880	0.0157	1	05/10/2020 17:27	WG1473272
Carbon tetrachloride	U		0.00113	0.00629	1	05/10/2020 17:27	WG1473272
Chlorobenzene	U		0.000264	0.00314	1	05/10/2020 17:27	WG1473272
Chlorodibromomethane	U		0.000770	0.00314	1	05/10/2020 17:27	WG1473272
Chloroethane	U		0.00214	0.00629	1	05/10/2020 17:27	WG1473272
Chloroform	U		0.00130	0.00314	1	05/10/2020 17:27	WG1473272
Chloromethane	U		0.00547	0.0157	1	05/10/2020 17:27	WG1473272
2-Chlorotoluene	U		0.00109	0.00314	1	05/10/2020 17:27	WG1473272
4-Chlorotoluene	U		0.000566	0.00629	1	05/10/2020 17:27	WG1473272
1,2-Dibromo-3-Chloropropane	U		0.00490	0.0314	1	05/10/2020 17:27	WG1473272
1,2-Dibromoethane	U		0.000815	0.00314	1	05/10/2020 17:27	WG1473272
Dibromomethane	U		0.000943	0.00629	1	05/10/2020 17:27	WG1473272
1,2-Dichlorobenzene	U		0.000534	0.00629	1	05/10/2020 17:27	WG1473272
1,3-Dichlorobenzene	U		0.000755	0.00629	1	05/10/2020 17:27	WG1473272
1,4-Dichlorobenzene	U		0.000880	0.00629	1	05/10/2020 17:27	WG1473272
Dichlorodifluoromethane	U		0.00202	0.00314	1	05/10/2020 17:27	WG1473272
1,1-Dichloroethane	U		0.000617	0.00314	1	05/10/2020 17:27	WG1473272
1,2-Dichloroethane	U		0.000816	0.00314	1	05/10/2020 17:27	WG1473272
1,1-Dichloroethene	U		0.000762	0.00314	1	05/10/2020 17:27	WG1473272
cis-1,2-Dichloroethene	U		0.000923	0.00314	1	05/10/2020 17:27	WG1473272
trans-1,2-Dichloroethene	U		0.00131	0.00629	1	05/10/2020 17:27	WG1473272
1,2-Dichloropropane	U		0.00179	0.00629	1	05/10/2020 17:27	WG1473272
1,1-Dichloropropene	U		0.00102	0.00314	1	05/10/2020 17:27	WG1473272
1,3-Dichloropropane	U		0.000630	0.00629	1	05/10/2020 17:27	WG1473272
cis-1,3-Dichloropropene	U		0.000952	0.00314	1	05/10/2020 17:27	WG1473272
trans-1,3-Dichloropropene	U		0.00143	0.00629	1	05/10/2020 17:27	WG1473272
trans-1,4-Dichloro-2-butene	U		0.00234	0.00629	1	05/10/2020 17:27	WG1473272
2,2-Dichloropropane	U		0.00174	0.00314	1	05/10/2020 17:27	WG1473272
Di-isopropyl ether	U		0.000516	0.00126	1	05/10/2020 17:27	WG1473272
Ethylbenzene	U		0.000927	0.00314	1	05/10/2020 17:27	WG1473272
Hexachloro-1,3-butadiene	U		0.00755	0.0314	1	05/10/2020 17:27	WG1473272
2-Hexanone	U		0.00423	0.0314	1	05/10/2020 17:27	WG1473272
n-Hexane	U		0.00284	0.00629	1	05/10/2020 17:27	WG1473272
Iodomethane	U		0.00292	0.0157	1	05/10/2020 17:27	WG1473272
Isopropylbenzene	U		0.000534	0.00314	1	05/10/2020 17:27	WG1473272
p-Isopropyltoluene	U		0.00321	0.00629	1	05/10/2020 17:27	WG1473272
2-Butanone (MEK)	U		0.0799	0.126	1	05/10/2020 17:27	WG1473272
Methylene Chloride	U		0.00835	0.0314	1	05/10/2020 17:27	WG1473272
4-Methyl-2-pentanone (MIBK)	U		0.00287	0.0314	1	05/10/2020 17:27	WG1473272

JC 5/28/2020

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.000440	0.00126	1	05/10/2020 17:27	WG1473272
Naphthalene	U		0.00614	0.0157	1	05/10/2020 17:27	WG1473272
n-Propylbenzene	U		0.00119	0.00629	1	05/10/2020 17:27	WG1473272
Styrene	U		0.000288	0.0157	1	05/10/2020 17:27	WG1473272
1,1,1,2-Tetrachloroethane	U		0.00119	0.00314	1	05/10/2020 17:27	WG1473272
1,1,2,2-Tetrachloroethane	U		0.000874	0.00314	1	05/10/2020 17:27	WG1473272
1,1,2-Trichlorotrifluoroethane	U		0.000948	0.00314	1	05/10/2020 17:27	WG1473272
Tetrachloroethene	U		0.00113	0.00314	1	05/10/2020 17:27	WG1473272
Toluene	U		0.00163	0.00629	1	05/10/2020 17:27	WG1473272
1,2,3-Trichlorobenzene	U		0.00922	0.0157	1	05/10/2020 17:27	WG1473272
1,2,4-Trichlorobenzene	U		0.00553	0.0157	1	05/10/2020 17:27	WG1473272
1,1,1-Trichloroethane	U		0.00116	0.00314	1	05/10/2020 17:27	WG1473272
1,1,2-Trichloroethane	U		0.000751	0.00314	1	05/10/2020 17:27	WG1473272
Trichloroethene	U		0.000734	0.00126	1	05/10/2020 17:27	WG1473272
Trichlorofluoromethane	U		0.00104	0.00314	1	05/10/2020 17:27	WG1473272
1,2,3-Trichloropropane	U		0.00204	0.0157	1	05/10/2020 17:27	WG1473272
1,2,4-Trimethylbenzene	U		0.00199	0.00629	1	05/10/2020 17:27	WG1473272
1,2,3-Trimethylbenzene	U		0.00199	0.00629	1	05/10/2020 17:27	WG1473272
1,3,5-Trimethylbenzene	U		0.00252	0.00629	1	05/10/2020 17:27	WG1473272
Vinyl acetate	U		0.00319	0.0157	1	05/10/2020 17:27	WG1473272
Vinyl chloride	U		0.00146	0.00314	1	05/10/2020 17:27	WG1473272
Xylenes, Total	U		0.00111	0.00817	1	05/10/2020 17:27	WG1473272
(S) Toluene-d8	*97.9*			*75.0-131*		*05/10/2020 17:27*	WG1473272
(S) 4-Bromofluorobenzene	*98.7*			*67.0-138*		*05/10/2020 17:27*	WG1473272
(S) 1,2-Dichloroethane-d4	*101*			*70.0-130*		*05/10/2020 17:27*	WG1473272

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

JC 5/28/2020

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	89.5		1	05/12/2020 17:34	WG1473914

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	U		0.0408	0.0559	1	05/10/2020 17:46	WG1473272
Acrylonitrile	U		0.00403	0.0140	1	05/10/2020 17:46	WG1473272
Benzene	0.000782	J	0.000522	0.00112	1	05/10/2020 17:46	WG1473272
Bromobenzene	U		0.00101	0.0140	1	05/10/2020 17:46	WG1473272
Bromodichloromethane	U		0.000810	0.00279	1	05/10/2020 17:46	WG1473272
Bromochloromethane	U		0.000630	0.00559	1	05/10/2020 17:46	WG1473272
Bromoform	U		0.00131	0.0279	1	05/10/2020 17:46	WG1473272
Bromomethane	U		0.00220	0.0140	1	05/10/2020 17:46	WG1473272
n-Butylbenzene	U		0.00587	0.0140	1	05/10/2020 17:46	WG1473272
sec-Butylbenzene	U		0.00322	0.0140	1	05/10/2020 17:46	WG1473272
tert-Butylbenzene	U		0.00218	0.00559	1	05/10/2020 17:46	WG1473272
Carbon disulfide	0.00182	J	0.000782	0.0140	1	05/10/2020 17:46	WG1473272
Carbon tetrachloride	U		0.00100	0.00559	1	05/10/2020 17:46	WG1473272
Chlorobenzene	U		0.000235	0.00279	1	05/10/2020 17:46	WG1473272
Chlorodibromomethane	U		0.000684	0.00279	1	05/10/2020 17:46	WG1473272
Chloroethane	U		0.00190	0.00559	1	05/10/2020 17:46	WG1473272
Chloroform	U		0.00115	0.00279	1	05/10/2020 17:46	WG1473272
Chloromethane	U		0.00486	0.0140	1	05/10/2020 17:46	WG1473272
2-Chlorotoluene	U		0.000967	0.00279	1	05/10/2020 17:46	WG1473272
4-Chlorotoluene	U		0.000503	0.00559	1	05/10/2020 17:46	WG1473272
1,2-Dibromo-3-Chloropropane	U		0.00436	0.0279	1	05/10/2020 17:46	WG1473272
1,2-Dibromoethane	U		0.000724	0.00279	1	05/10/2020 17:46	WG1473272
Dibromomethane	U		0.000838	0.00559	1	05/10/2020 17:46	WG1473272
1,2-Dichlorobenzene	U		0.000475	0.00559	1	05/10/2020 17:46	WG1473272
1,3-Dichlorobenzene	U		0.000671	0.00559	1	05/10/2020 17:46	WG1473272
1,4-Dichlorobenzene	U		0.000782	0.00559	1	05/10/2020 17:46	WG1473272
Dichlorodifluoromethane	U		0.00180	0.00279	1	05/10/2020 17:46	WG1473272
1,1-Dichloroethane	U		0.000549	0.00279	1	05/10/2020 17:46	WG1473272
1,2-Dichloroethane	U		0.000725	0.00279	1	05/10/2020 17:46	WG1473272
1,1-Dichloroethene	U		0.000677	0.00279	1	05/10/2020 17:46	WG1473272
cis-1,2-Dichloroethene	U		0.000820	0.00279	1	05/10/2020 17:46	WG1473272
trans-1,2-Dichloroethene	U		0.00116	0.00559	1	05/10/2020 17:46	WG1473272
1,2-Dichloropropane	U		0.00159	0.00559	1	05/10/2020 17:46	WG1473272
1,1-Dichloropropene	U		0.000904	0.00279	1	05/10/2020 17:46	WG1473272
1,3-Dichloropropane	U		0.000560	0.00559	1	05/10/2020 17:46	WG1473272
cis-1,3-Dichloropropene	U		0.000846	0.00279	1	05/10/2020 17:46	WG1473272
trans-1,3-Dichloropropene	U		0.00127	0.00559	1	05/10/2020 17:46	WG1473272
trans-1,4-Dichloro-2-butene	U		0.00208	0.00559	1	05/10/2020 17:46	WG1473272
2,2-Dichloropropane	U		0.00154	0.00279	1	05/10/2020 17:46	WG1473272
Di-isopropyl ether	U		0.000458	0.00112	1	05/10/2020 17:46	WG1473272
Ethylbenzene	U		0.000824	0.00279	1	05/10/2020 17:46	WG1473272
Hexachloro-1,3-butadiene	U		0.00671	0.0279	1	05/10/2020 17:46	WG1473272
2-Hexanone	U		0.00376	0.0279	1	05/10/2020 17:46	WG1473272
n-Hexane	U		0.00253	0.00559	1	05/10/2020 17:46	WG1473272
Iodomethane	U		0.00259	0.0140	1	05/10/2020 17:46	WG1473272
Isopropylbenzene	U		0.000475	0.00279	1	05/10/2020 17:46	WG1473272
p-Isopropyltoluene	U		0.00285	0.00559	1	05/10/2020 17:46	WG1473272
2-Butanone (MEK)	U		0.0710	0.112	1	05/10/2020 17:46	WG1473272
Methylene Chloride	U		0.00742	0.0279	1	05/10/2020 17:46	WG1473272 0202/82/5 CJ
4-Methyl-2-pentanone (MIBK)	U		0.00255	0.0279	1	05/10/2020 17:46	WG1473272

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Methyl tert-butyl ether	U		0.000391	0.00112	1	05/10/2020 17:46	WG1473272
Naphthalene	U		0.00545	0.0140	1	05/10/2020 17:46	WG1473272
n-Propylbenzene	U		0.00106	0.00559	1	05/10/2020 17:46	WG1473272
Styrene	U		0.000256	0.0140	1	05/10/2020 17:46	WG1473272
1,1,1,2-Tetrachloroethane	U		0.00106	0.00279	1	05/10/2020 17:46	WG1473272
1,1,2,2-Tetrachloroethane	U		0.000777	0.00279	1	05/10/2020 17:46	WG1473272
1,1,2-Trichlorotrifluoroethane	U		0.000843	0.00279	1	05/10/2020 17:46	WG1473272
Tetrachloroethene	U		0.00100	0.00279	1	05/10/2020 17:46	WG1473272
Toluene	0.00219	J	0.00145	0.00559	1	05/10/2020 17:46	WG1473272
1,2,3-Trichlorobenzene	U		0.00819	0.0140	1	05/10/2020 17:46	WG1473272
1,2,4-Trichlorobenzene	U		0.00492	0.0140	1	05/10/2020 17:46	WG1473272
1,1,1-Trichloroethane	U		0.00103	0.00279	1	05/10/2020 17:46	WG1473272
1,1,2-Trichloroethane	U		0.000667	0.00279	1	05/10/2020 17:46	WG1473272
Trichloroethene	U		0.000653	0.00112	1	05/10/2020 17:46	WG1473272
Trichlorofluoromethane	U		0.000924	0.00279	1	05/10/2020 17:46	WG1473272
1,2,3-Trichloropropane	U		0.00181	0.0140	1	05/10/2020 17:46	WG1473272
1,2,4-Trimethylbenzene	0.00182	J	0.00177	0.00559	1	05/10/2020 17:46	WG1473272
1,2,3-Trimethylbenzene	U		0.00177	0.00559	1	05/10/2020 17:46	WG1473272
1,3,5-Trimethylbenzene	U		0.00224	0.00559	1	05/10/2020 17:46	WG1473272
Vinyl acetate	U		0.00284	0.0140	1	05/10/2020 17:46	WG1473272
Vinyl chloride	U		0.00130	0.00279	1	05/10/2020 17:46	WG1473272
Xylenes, Total	0.00329	J	0.000984	0.00726	1	05/10/2020 17:46	WG1473272
(S) Toluene-d8	*97.9*			*75.0-131*		*05/10/2020 17:46*	WG1473272
(S) 4-Bromofluorobenzene	*101*			*67.0-138*		*05/10/2020 17:46*	WG1473272
(S) 1,2-Dichloroethane-d4	*106*			*70.0-130*		*05/10/2020 17:46*	WG1473272

JC 5/28/2020

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	82.6		1	05/12/2020 17:24	WG1473915

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	U		0.0442	0.0606	1	05/10/2020 18:05	WG1473272
Acrylonitrile	U		0.00437	0.0151	1	05/10/2020 18:05	WG1473272
Benzene	U		0.000566	0.00121	1	05/10/2020 18:05	WG1473272
Bromobenzene	U		0.00109	0.0151	1	05/10/2020 18:05	WG1473272
Bromodichloromethane	U		0.000878	0.00303	1	05/10/2020 18:05	WG1473272
Bromochloromethane	U		0.000683	0.00606	1	05/10/2020 18:05	WG1473272
Bromoform	U		0.00142	0.0303	1	05/10/2020 18:05	WG1473272
Bromomethane	U		0.00239	0.0151	1	05/10/2020 18:05	WG1473272
n-Butylbenzene	U		0.00636	0.0151	1	05/10/2020 18:05	WG1473272
sec-Butylbenzene	U		0.00349	0.0151	1	05/10/2020 18:05	WG1473272
tert-Butylbenzene	U		0.00236	0.00606	1	05/10/2020 18:05	WG1473272
Carbon disulfide	U		0.000848	0.0151	1	05/10/2020 18:05	WG1473272
Carbon tetrachloride	U		0.00109	0.00606	1	05/10/2020 18:05	WG1473272
Chlorobenzene	U		0.000254	0.00303	1	05/10/2020 18:05	WG1473272
Chlorodibromomethane	U		0.000741	0.00303	1	05/10/2020 18:05	WG1473272
Chloroethane	U		0.00206	0.00606	1	05/10/2020 18:05	WG1473272
Chloroform	U		0.00125	0.00303	1	05/10/2020 18:05	WG1473272
Chloromethane	U		0.00527	0.0151	1	05/10/2020 18:05	WG1473272
2-Chlorotoluene	U		0.00105	0.00303	1	05/10/2020 18:05	WG1473272
4-Chlorotoluene	U		0.000545	0.00606	1	05/10/2020 18:05	WG1473272
1,2-Dibromo-3-Chloropropane	U		0.00472	0.0303	1	05/10/2020 18:05	WG1473272
1,2-Dibromoethane	U		0.000785	0.00303	1	05/10/2020 18:05	WG1473272
Dibromomethane	U		0.000908	0.00606	1	05/10/2020 18:05	WG1473272
1,2-Dichlorobenzene	U		0.000515	0.00606	1	05/10/2020 18:05	WG1473272
1,3-Dichlorobenzene	U		0.000727	0.00606	1	05/10/2020 18:05	WG1473272
1,4-Dichlorobenzene	U		0.000848	0.00606	1	05/10/2020 18:05	WG1473272
Dichlorodifluoromethane	U		0.00195	0.00303	1	05/10/2020 18:05	WG1473272
1,1-Dichloroethane	U		0.000595	0.00303	1	05/10/2020 18:05	WG1473272
1,2-Dichloroethane	U		0.000786	0.00303	1	05/10/2020 18:05	WG1473272
1,1-Dichloroethene	U		0.000734	0.00303	1	05/10/2020 18:05	WG1473272
cis-1,2-Dichloroethene	U		0.000889	0.00303	1	05/10/2020 18:05	WG1473272
trans-1,2-Dichloroethene	U		0.00126	0.00606	1	05/10/2020 18:05	WG1473272
1,2-Dichloropropane	U		0.00172	0.00606	1	05/10/2020 18:05	WG1473272
1,1-Dichloropropene	U		0.000980	0.00303	1	05/10/2020 18:05	WG1473272
1,3-Dichloropropane	U		0.000607	0.00606	1	05/10/2020 18:05	WG1473272
cis-1,3-Dichloropropene	U		0.000917	0.00303	1	05/10/2020 18:05	WG1473272
trans-1,3-Dichloropropene	U		0.00138	0.00606	1	05/10/2020 18:05	WG1473272
trans-1,4-Dichloro-2-butene	U		0.00225	0.00606	1	05/10/2020 18:05	WG1473272
2,2-Dichloropropane	U		0.00167	0.00303	1	05/10/2020 18:05	WG1473272
Di-isopropyl ether	U		0.000497	0.00121	1	05/10/2020 18:05	WG1473272
Ethylbenzene	U		0.000893	0.00303	1	05/10/2020 18:05	WG1473272
Hexachloro-1,3-butadiene	U		0.00727	0.0303	1	05/10/2020 18:05	WG1473272
2-Hexanone	U		0.00407	0.0303	1	05/10/2020 18:05	WG1473272
n-Hexane	U		0.00274	0.00606	1	05/10/2020 18:05	WG1473272
Iodomethane	U		0.00281	0.0151	1	05/10/2020 18:05	WG1473272
Isopropylbenzene	U		0.000515	0.00303	1	05/10/2020 18:05	WG1473272
p-Isopropyltoluene	U		0.00309	0.00606	1	05/10/2020 18:05	WG1473272
2-Butanone (MEK)	U		0.0769	0.121	1	05/10/2020 18:05	WG1473272
Methylene Chloride	U		0.00804	0.0303	1	05/10/2020 18:05	WG1473272
4-Methyl-2-pentanone (MIBK)	U		0.00276	0.0303	1	05/10/2020 18:05	WG1473272

JC 5/28/2020

MW-338-39

Collected date/time: 05/01/20 11:07

SAMPLE RESULTS - 07

L1214576

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.000424	0.00121	1	05/10/2020 18:05	WG1473272
Naphthalene	U		0.00591	0.0151	1	05/10/2020 18:05	WG1473272
n-Propylbenzene	U		0.00115	0.00606	1	05/10/2020 18:05	WG1473272
Styrene	U		0.000277	0.0151	1	05/10/2020 18:05	WG1473272
1,1,1,2-Tetrachloroethane	U		0.00115	0.00303	1	05/10/2020 18:05	WG1473272
1,1,2,2-Tetrachloroethane	U		0.000842	0.00303	1	05/10/2020 18:05	WG1473272
1,1,2-Trichlorotrifluoroethane	U		0.000913	0.00303	1	05/10/2020 18:05	WG1473272
Tetrachloroethene	U		0.00109	0.00303	1	05/10/2020 18:05	WG1473272
Toluene	U		0.00157	0.00606	1	05/10/2020 18:05	WG1473272
1,2,3-Trichlorobenzene	U		0.00888	0.0151	1	05/10/2020 18:05	WG1473272
1,2,4-Trichlorobenzene	U		0.00533	0.0151	1	05/10/2020 18:05	WG1473272
1,1,1-Trichloroethane	U		0.00112	0.00303	1	05/10/2020 18:05	WG1473272
1,1,2-Trichloroethane	U		0.000723	0.00303	1	05/10/2020 18:05	WG1473272
Trichloroethene	U		0.000707	0.00121	1	05/10/2020 18:05	WG1473272
Trichlorofluoromethane	U		0.00100	0.00303	1	05/10/2020 18:05	WG1473272
1,2,3-Trichloropropane	U		0.00196	0.0151	1	05/10/2020 18:05	WG1473272
1,2,4-Trimethylbenzene	U		0.00191	0.00606	1	05/10/2020 18:05	WG1473272
1,2,3-Trimethylbenzene	U		0.00191	0.00606	1	05/10/2020 18:05	WG1473272
1,3,5-Trimethylbenzene	U		0.00242	0.00606	1	05/10/2020 18:05	WG1473272
Vinyl acetate	U		0.00308	0.0151	1	05/10/2020 18:05	WG1473272
Vinyl chloride	U		0.00140	0.00303	1	05/10/2020 18:05	WG1473272
Xylenes, Total	U		0.00107	0.00787	1	05/10/2020 18:05	WG1473272
(S) Toluene-d8	*102*			*75.0-131*		*05/10/2020 18:05*	WG1473272
(S) 4-Bromofluorobenzene	*96.9*			*67.0-138*		*05/10/2020 18:05*	WG1473272
(S) 1,2-Dichloroethane-d4	*102*			*70.0-130*		*05/10/2020 18:05*	WG1473272

JC 5/28/2020

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Total Solids by Method 2540 G-2011

	Result	Qualifier	Dilution	Analysis	Batch
Analyte	%			date / time	
Total Solids	81.1		1	05/12/2020 17:24	WG1473915

Volatile Organic Compounds (GC/MS) by Method 8260D

	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg		date / time	
Acetone	U		0.0450	0.0616	1	05/10/2020 18:24	WG1473272
Acrylonitrile	U		0.00445	0.0154	1	05/10/2020 18:24	WG1473272
Benzene	U		0.000576	0.00123	1	05/10/2020 18:24	WG1473272
Bromobenzene	U		0.00111	0.0154	1	05/10/2020 18:24	WG1473272
Bromodichloromethane	U		0.000894	0.00308	1	05/10/2020 18:24	WG1473272
Bromochloromethane	U		0.000695	0.00616	1	05/10/2020 18:24	WG1473272
Bromoform	U		0.00144	0.0308	1	05/10/2020 18:24	WG1473272
Bromomethane	U		0.00243	0.0154	1	05/10/2020 18:24	WG1473272
n-Butylbenzene	U		0.00647	0.0154	1	05/10/2020 18:24	WG1473272
sec-Butylbenzene	U		0.00355	0.0154	1	05/10/2020 18:24	WG1473272
tert-Butylbenzene	U		0.00240	0.00616	1	05/10/2020 18:24	WG1473272
Carbon disulfide	U		0.000863	0.0154	1	05/10/2020 18:24	WG1473272
Carbon tetrachloride	U		0.00111	0.00616	1	05/10/2020 18:24	WG1473272
Chlorobenzene	U		0.000259	0.00308	1	05/10/2020 18:24	WG1473272
Chlorodibromomethane	U		0.000754	0.00308	1	05/10/2020 18:24	WG1473272
Chloroethane	U		0.00210	0.00616	1	05/10/2020 18:24	WG1473272
Chloroform	U		0.00127	0.00308	1	05/10/2020 18:24	WG1473272
Chloromethane	U		0.00536	0.0154	1	05/10/2020 18:24	WG1473272
2-Chlorotoluene	U		0.00107	0.00308	1	05/10/2020 18:24	WG1473272
4-Chlorotoluene	U		0.000555	0.00616	1	05/10/2020 18:24	WG1473272
1,2-Dibromo-3-Chloropropane	U		0.00481	0.0308	1	05/10/2020 18:24	WG1473272
1,2-Dibromoethane	U		0.000799	0.00308	1	05/10/2020 18:24	WG1473272
Dibromomethane	U		0.000925	0.00616	1	05/10/2020 18:24	WG1473272
1,2-Dichlorobenzene	U		0.000524	0.00616	1	05/10/2020 18:24	WG1473272
1,3-Dichlorobenzene	U		0.000740	0.00616	1	05/10/2020 18:24	WG1473272
1,4-Dichlorobenzene	U		0.000863	0.00616	1	05/10/2020 18:24	WG1473272
Dichlorodifluoromethane	U		0.00198	0.00308	1	05/10/2020 18:24	WG1473272
1,1-Dichloroethane	U		0.000605	0.00308	1	05/10/2020 18:24	WG1473272
1,2-Dichloroethane	U		0.000800	0.00308	1	05/10/2020 18:24	WG1473272
1,1-Dichloroethene	U		0.000747	0.00308	1	05/10/2020 18:24	WG1473272
cis-1,2-Dichloroethene	U		0.000905	0.00308	1	05/10/2020 18:24	WG1473272
trans-1,2-Dichloroethene	U		0.00128	0.00616	1	05/10/2020 18:24	WG1473272
1,2-Dichloropropane	U		0.00175	0.00616	1	05/10/2020 18:24	WG1473272
1,1-Dichloropropene	U		0.000997	0.00308	1	05/10/2020 18:24	WG1473272
1,3-Dichloropropane	U		0.000618	0.00616	1	05/10/2020 18:24	WG1473272
cis-1,3-Dichloropropene	U		0.000933	0.00308	1	05/10/2020 18:24	WG1473272
trans-1,3-Dichloropropene	U		0.00141	0.00616	1	05/10/2020 18:24	WG1473272
trans-1,4-Dichloro-2-butene	U		0.00229	0.00616	1	05/10/2020 18:24	WG1473272
2,2-Dichloropropane	U		0.00170	0.00308	1	05/10/2020 18:24	WG1473272
Di-isopropyl ether	U		0.000505	0.00123	1	05/10/2020 18:24	WG1473272
Ethylbenzene	U		0.000909	0.00308	1	05/10/2020 18:24	WG1473272
Hexachloro-1,3-butadiene	U		0.00740	0.0308	1	05/10/2020 18:24	WG1473272
2-Hexanone	U		0.00414	0.0308	1	05/10/2020 18:24	WG1473272
n-Hexane	U		0.00279	0.00616	1	05/10/2020 18:24	WG1473272
Iodomethane	U		0.00286	0.0154	1	05/10/2020 18:24	WG1473272
Isopropylbenzene	U		0.000524	0.00308	1	05/10/2020 18:24	WG1473272
p-Isopropyltoluene	U		0.00314	0.00616	1	05/10/2020 18:24	WG1473272
2-Butanone (MEK)	U		0.0783	0.123	1	05/10/2020 18:24	WG1473272
Methylene Chloride	U		0.00819	0.0308	1	05/10/2020 18:24	WG1473272
4-Methyl-2-pentanone (MIBK)	U		0.00281	0.0308	1	05/10/2020 18:24	WG1473272

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Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.000431	0.00123	1	05/10/2020 18:24	WG1473272
Naphthalene	U		0.00602	0.0154	1	05/10/2020 18:24	WG1473272
n-Propylbenzene	U		0.00117	0.00616	1	05/10/2020 18:24	WG1473272
Styrene	U		0.000282	0.0154	1	05/10/2020 18:24	WG1473272
1,1,1,2-Tetrachloroethane	U		0.00117	0.00308	1	05/10/2020 18:24	WG1473272
1,1,2,2-Tetrachloroethane	U		0.000857	0.00308	1	05/10/2020 18:24	WG1473272
1,1,2-Trichlorotrifluoroethane	U		0.000930	0.00308	1	05/10/2020 18:24	WG1473272
Tetrachloroethene	U		0.00110	0.00308	1	05/10/2020 18:24	WG1473272
Toluene	U		0.00160	0.00616	1	05/10/2020 18:24	WG1473272
1,2,3-Trichlorobenzene	U		0.00904	0.0154	1	05/10/2020 18:24	WG1473272
1,2,4-Trichlorobenzene	U		0.00542	0.0154	1	05/10/2020 18:24	WG1473272
1,1,1-Trichloroethane	U		0.00114	0.00308	1	05/10/2020 18:24	WG1473272
1,1,2-Trichloroethane	U		0.000736	0.00308	1	05/10/2020 18:24	WG1473272
Trichloroethene	U		0.000720	0.00123	1	05/10/2020 18:24	WG1473272
Trichlorofluoromethane	U		0.00102	0.00308	1	05/10/2020 18:24	WG1473272
1,2,3-Trichloropropane	U		0.00200	0.0154	1	05/10/2020 18:24	WG1473272
1,2,4-Trimethylbenzene	U		0.00195	0.00616	1	05/10/2020 18:24	WG1473272
1,2,3-Trimethylbenzene	U		0.00195	0.00616	1	05/10/2020 18:24	WG1473272
1,3,5-Trimethylbenzene	U		0.00247	0.00616	1	05/10/2020 18:24	WG1473272
Vinyl acetate	U		0.00313	0.0154	1	05/10/2020 18:24	WG1473272
Vinyl chloride	U		0.00143	0.00308	1	05/10/2020 18:24	WG1473272
Xylenes, Total	U		0.00108	0.00801	1	05/10/2020 18:24	WG1473272
(S) Toluene-d8	*99.2*			*75.0-131*		*05/10/2020 18:24*	WG1473272
(S) 4-Bromofluorobenzene	*100*			*67.0-138*		*05/10/2020 18:24*	WG1473272
(S) 1,2-Dichloroethane-d4	*108*			*70.0-130*		*05/10/2020 18:24*	WG1473272

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

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1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	81.9		1	05/12/2020 17:24	WG1473915

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	U		0.0446	0.0610	1	05/10/2020 18:43	WG1473272
Acrylonitrile	U		0.00441	0.0153	1	05/10/2020 18:43	WG1473272
Benzene	U		0.000570	0.00122	1	05/10/2020 18:43	WG1473272
Bromobenzene	U		0.00110	0.0153	1	05/10/2020 18:43	WG1473272
Bromodichloromethane	U		0.000885	0.00305	1	05/10/2020 18:43	WG1473272
Bromochloromethane	U		0.000688	0.00610	1	05/10/2020 18:43	WG1473272
Bromoform	U		0.00143	0.0305	1	05/10/2020 18:43	WG1473272
Bromomethane	U		0.00240	0.0153	1	05/10/2020 18:43	WG1473272
n-Butylbenzene	U		0.00641	0.0153	1	05/10/2020 18:43	WG1473272
sec-Butylbenzene	U		0.00352	0.0153	1	05/10/2020 18:43	WG1473272
tert-Butylbenzene	U		0.00238	0.00610	1	05/10/2020 18:43	WG1473272
Carbon disulfide	U		0.000854	0.0153	1	05/10/2020 18:43	WG1473272
Carbon tetrachloride	U		0.00110	0.00610	1	05/10/2020 18:43	WG1473272
Chlorobenzene	U		0.000256	0.00305	1	05/10/2020 18:43	WG1473272
Chlorodibromomethane	U		0.000747	0.00305	1	05/10/2020 18:43	WG1473272
Chloroethane	U		0.00208	0.00610	1	05/10/2020 18:43	WG1473272
Chloroform	U		0.00126	0.00305	1	05/10/2020 18:43	WG1473272
Chloromethane	U		0.00531	0.0153	1	05/10/2020 18:43	WG1473272
2-Chlorotoluene	U		0.00106	0.00305	1	05/10/2020 18:43	WG1473272
4-Chlorotoluene	U		0.000549	0.00610	1	05/10/2020 18:43	WG1473272
1,2-Dibromo-3-Chloropropane	U		0.00476	0.0305	1	05/10/2020 18:43	WG1473272
1,2-Dibromoethane	U		0.000791	0.00305	1	05/10/2020 18:43	WG1473272
Dibromomethane	U		0.000916	0.00610	1	05/10/2020 18:43	WG1473272
1,2-Dichlorobenzene	U		0.000519	0.00610	1	05/10/2020 18:43	WG1473272
1,3-Dichlorobenzene	U		0.000732	0.00610	1	05/10/2020 18:43	WG1473272
1,4-Dichlorobenzene	U		0.000854	0.00610	1	05/10/2020 18:43	WG1473272
Dichlorodifluoromethane	U		0.00197	0.00305	1	05/10/2020 18:43	WG1473272
1,1-Dichloroethane	U		0.000599	0.00305	1	05/10/2020 18:43	WG1473272
1,2-Dichloroethane	U		0.000792	0.00305	1	05/10/2020 18:43	WG1473272
1,1-Dichloroethene	U		0.000740	0.00305	1	05/10/2020 18:43	WG1473272
cis-1,2-Dichloroethene	U		0.000896	0.00305	1	05/10/2020 18:43	WG1473272
trans-1,2-Dichloroethene	U		0.00127	0.00610	1	05/10/2020 18:43	WG1473272
1,2-Dichloropropane	U		0.00173	0.00610	1	05/10/2020 18:43	WG1473272
1,1-Dichloropropene	U		0.000988	0.00305	1	05/10/2020 18:43	WG1473272
1,3-Dichloropropane	U		0.000612	0.00610	1	05/10/2020 18:43	WG1473272
cis-1,3-Dichloropropene	U		0.000924	0.00305	1	05/10/2020 18:43	WG1473272
trans-1,3-Dichloropropene	U		0.00139	0.00610	1	05/10/2020 18:43	WG1473272
trans-1,4-Dichloro-2-butene	U		0.00227	0.00610	1	05/10/2020 18:43	WG1473272
2,2-Dichloropropane	U		0.00168	0.00305	1	05/10/2020 18:43	WG1473272
Di-isopropyl ether	U		0.000500	0.00122	1	05/10/2020 18:43	WG1473272
Ethylbenzene	U		0.000900	0.00305	1	05/10/2020 18:43	WG1473272
Hexachloro-1,3-butadiene	U		0.00732	0.0305	1	05/10/2020 18:43	WG1473272
2-Hexanone	U		0.00410	0.0305	1	05/10/2020 18:43	WG1473272
n-Hexane	U		0.00276	0.00610	1	05/10/2020 18:43	WG1473272
Iodomethane	U		0.00283	0.0153	1	05/10/2020 18:43	WG1473272
Isopropylbenzene	U		0.000519	0.00305	1	05/10/2020 18:43	WG1473272
p-Isopropyltoluene	U		0.00311	0.00610	1	05/10/2020 18:43	WG1473272
2-Butanone (MEK)	U		0.0775	0.122	1	05/10/2020 18:43	WG1473272
Methylene Chloride	U		0.00811	0.0305	1	05/10/2020 18:43	WG1473272
4-Methyl-2-pentanone (MIBK)	U		0.00278	0.0305	1	05/10/2020 18:43	WG1473272

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Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.000427	0.00122	1	05/10/2020 18:43	WG1473272
Naphthalene	U		0.00596	0.0153	1	05/10/2020 18:43	WG1473272
n-Propylbenzene	U		0.00116	0.00610	1	05/10/2020 18:43	WG1473272
Styrene	U		0.000280	0.0153	1	05/10/2020 18:43	WG1473272
1,1,1,2-Tetrachloroethane	U		0.00116	0.00305	1	05/10/2020 18:43	WG1473272
1,1,2,2-Tetrachloroethane	U		0.000848	0.00305	1	05/10/2020 18:43	WG1473272
1,1,2-Trichlorotrifluoroethane	U		0.000920	0.00305	1	05/10/2020 18:43	WG1473272
Tetrachloroethene	U		0.00109	0.00305	1	05/10/2020 18:43	WG1473272
Toluene	U		0.00159	0.00610	1	05/10/2020 18:43	WG1473272
1,2,3-Trichlorobenzene	U		0.00895	0.0153	1	05/10/2020 18:43	WG1473272
1,2,4-Trichlorobenzene	U		0.00537	0.0153	1	05/10/2020 18:43	WG1473272
1,1,1-Trichloroethane	U		0.00113	0.00305	1	05/10/2020 18:43	WG1473272
1,1,2-Trichloroethane	U		0.000729	0.00305	1	05/10/2020 18:43	WG1473272
Trichloroethene	U		0.000713	0.00122	1	05/10/2020 18:43	WG1473272
Trichlorofluoromethane	U		0.00101	0.00305	1	05/10/2020 18:43	WG1473272
1,2,3-Trichloropropane	U		0.00198	0.0153	1	05/10/2020 18:43	WG1473272
1,2,4-Trimethylbenzene	U		0.00193	0.00610	1	05/10/2020 18:43	WG1473272
1,2,3-Trimethylbenzene	U		0.00193	0.00610	1	05/10/2020 18:43	WG1473272
1,3,5-Trimethylbenzene	U		0.00244	0.00610	1	05/10/2020 18:43	WG1473272
Vinyl acetate	U		0.00310	0.0153	1	05/10/2020 18:43	WG1473272
Vinyl chloride	U		0.00142	0.00305	1	05/10/2020 18:43	WG1473272
Xylenes, Total	U		0.00107	0.00793	1	05/10/2020 18:43	WG1473272
(S) Toluene-d8	*101*			*75.0-131*		*05/10/2020 18:43*	WG1473272
(S) 4-Bromofluorobenzene	*98.1*			*67.0-138*		*05/10/2020 18:43*	WG1473272
(S) 1,2-Dichloroethane-d4	*104*			*70.0-130*		*05/10/2020 18:43*	WG1473272

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Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	80.7		1	05/12/2020 17:24	WG1473915

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	U		0.0452	0.0620	1	05/10/2020 19:02	WG1473272
Acrylonitrile	U		0.00447	0.0155	1	05/10/2020 19:02	WG1473272
Benzene	U		0.000579	0.00124	1	05/10/2020 19:02	WG1473272
Bromobenzene	U		0.00112	0.0155	1	05/10/2020 19:02	WG1473272
Bromodichloromethane	U		0.000899	0.00310	1	05/10/2020 19:02	WG1473272
Bromochloromethane	U		0.000699	0.00620	1	05/10/2020 19:02	WG1473272
Bromoform	U		0.00145	0.0310	1	05/10/2020 19:02	WG1473272
Bromomethane	U		0.00244	0.0155	1	05/10/2020 19:02	WG1473272
n-Butylbenzene	U		0.00651	0.0155	1	05/10/2020 19:02	WG1473272
sec-Butylbenzene	U		0.00357	0.0155	1	05/10/2020 19:02	WG1473272
tert-Butylbenzene	U		0.00242	0.00620	1	05/10/2020 19:02	WG1473272
Carbon disulfide	U		0.000868	0.0155	1	05/10/2020 19:02	WG1473272
Carbon tetrachloride	U		0.00111	0.00620	1	05/10/2020 19:02	WG1473272
Chlorobenzene	U		0.000260	0.00310	1	05/10/2020 19:02	WG1473272
Chlorodibromomethane	U		0.000758	0.00310	1	05/10/2020 19:02	WG1473272
Chloroethane	U		0.00211	0.00620	1	05/10/2020 19:02	WG1473272
Chloroform	U		0.00128	0.00310	1	05/10/2020 19:02	WG1473272
Chloromethane	U		0.00539	0.0155	1	05/10/2020 19:02	WG1473272
2-Chlorotoluene	U		0.00107	0.00310	1	05/10/2020 19:02	WG1473272
4-Chlorotoluene	U		0.000558	0.00620	1	05/10/2020 19:02	WG1473272
1,2-Dibromo-3-Chloropropane	U		0.00483	0.0310	1	05/10/2020 19:02	WG1473272
1,2-Dibromoethane	U		0.000803	0.00310	1	05/10/2020 19:02	WG1473272
Dibromomethane	U		0.000930	0.00620	1	05/10/2020 19:02	WG1473272
1,2-Dichlorobenzene	U		0.000527	0.00620	1	05/10/2020 19:02	WG1473272
1,3-Dichlorobenzene	U		0.000744	0.00620	1	05/10/2020 19:02	WG1473272
1,4-Dichlorobenzene	U		0.000868	0.00620	1	05/10/2020 19:02	WG1473272
Dichlorodifluoromethane	U		0.00200	0.00310	1	05/10/2020 19:02	WG1473272
1,1-Dichloroethane	U		0.000609	0.00310	1	05/10/2020 19:02	WG1473272
1,2-Dichloroethane	U		0.000804	0.00310	1	05/10/2020 19:02	WG1473272
1,1-Dichloroethene	U		0.000751	0.00310	1	05/10/2020 19:02	WG1473272
cis-1,2-Dichloroethene	U		0.000910	0.00310	1	05/10/2020 19:02	WG1473272
trans-1,2-Dichloroethene	U		0.00129	0.00620	1	05/10/2020 19:02	WG1473272
1,2-Dichloropropane	U		0.00176	0.00620	1	05/10/2020 19:02	WG1473272
1,1-Dichloropropene	U		0.00100	0.00310	1	05/10/2020 19:02	WG1473272
1,3-Dichloropropane	U		0.000621	0.00620	1	05/10/2020 19:02	WG1473272
cis-1,3-Dichloropropene	U		0.000938	0.00310	1	05/10/2020 19:02	WG1473272
trans-1,3-Dichloropropene	U		0.00141	0.00620	1	05/10/2020 19:02	WG1473272
trans-1,4-Dichloro-2-butene	U		0.00231	0.00620	1	05/10/2020 19:02	WG1473272
2,2-Dichloropropane	U		0.00171	0.00310	1	05/10/2020 19:02	WG1473272
Di-isopropyl ether	U		0.000508	0.00124	1	05/10/2020 19:02	WG1473272
Ethylbenzene	U		0.000913	0.00310	1	05/10/2020 19:02	WG1473272
Hexachloro-1,3-butadiene	U		0.00744	0.0310	1	05/10/2020 19:02	WG1473272
2-Hexanone	U		0.00416	0.0310	1	05/10/2020 19:02	WG1473272
n-Hexane	U		0.00280	0.00620	1	05/10/2020 19:02	WG1473272
Iodomethane	U		0.00288	0.0155	1	05/10/2020 19:02	WG1473272
Isopropylbenzene	U		0.000527	0.00310	1	05/10/2020 19:02	WG1473272
p-Isopropyltoluene	U		0.00316	0.00620	1	05/10/2020 19:02	WG1473272
2-Butanone (MEK)	U		0.0787	0.124	1	05/10/2020 19:02	WG1473272
Methylene Chloride	U		0.00823	0.0310	1	05/10/2020 19:02	WG1473272
4-Methyl-2-pentanone (MIBK)	U		0.00283	0.0310	1	05/10/2020 19:02	WG1473272

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Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.000434	0.00124	1	05/10/2020 19:02	WG1473272
Naphthalene	U		0.00605	0.0155	1	05/10/2020 19:02	WG1473272
n-Propylbenzene	U		0.00118	0.00620	1	05/10/2020 19:02	WG1473272
Styrene	U		0.000284	0.0155	1	05/10/2020 19:02	WG1473272
1,1,1,2-Tetrachloroethane	U		0.00117	0.00310	1	05/10/2020 19:02	WG1473272
1,1,2,2-Tetrachloroethane	U		0.000861	0.00310	1	05/10/2020 19:02	WG1473272
1,1,2-Trichlorotrifluoroethane	U		0.000934	0.00310	1	05/10/2020 19:02	WG1473272
Tetrachloroethene	U		0.00111	0.00310	1	05/10/2020 19:02	WG1473272
Toluene	U		0.00161	0.00620	1	05/10/2020 19:02	WG1473272
1,2,3-Trichlorobenzene	U		0.00908	0.0155	1	05/10/2020 19:02	WG1473272
1,2,4-Trichlorobenzene	U		0.00545	0.0155	1	05/10/2020 19:02	WG1473272
1,1,1-Trichloroethane	U		0.00114	0.00310	1	05/10/2020 19:02	WG1473272
1,1,2-Trichloroethane	U		0.000740	0.00310	1	05/10/2020 19:02	WG1473272
Trichloroethene	U		0.000724	0.00124	1	05/10/2020 19:02	WG1473272
Trichlorofluoromethane	U		0.00102	0.00310	1	05/10/2020 19:02	WG1473272
1,2,3-Trichloropropane	U		0.00201	0.0155	1	05/10/2020 19:02	WG1473272
1,2,4-Trimethylbenzene	U		0.00196	0.00620	1	05/10/2020 19:02	WG1473272
1,2,3-Trimethylbenzene	U		0.00196	0.00620	1	05/10/2020 19:02	WG1473272
1,3,5-Trimethylbenzene	U		0.00248	0.00620	1	05/10/2020 19:02	WG1473272
Vinyl acetate	U		0.00315	0.0155	1	05/10/2020 19:02	WG1473272
Vinyl chloride	U		0.00144	0.00310	1	05/10/2020 19:02	WG1473272
Xylenes, Total	U		0.00109	0.00806	1	05/10/2020 19:02	WG1473272
(S) Toluene-d8	*100*			*75.0-131*		*05/10/2020 19:02*	WG1473272
(S) 4-Bromofluorobenzene	*96.5*			*67.0-138*		*05/10/2020 19:02*	WG1473272
(S) 1,2-Dichloroethane-d4	*109*			*70.0-130*		*05/10/2020 19:02*	WG1473272

JC 5/28/2020

MW-338-55
Collected date/time: 05/01/20 12:07

SAMPLE RESULTS - 11

L1214576

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	87.1		1	05/12/2020 17:24	WG1473915

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	U		0.0419	0.0574	1	05/10/2020 19:21	WG1473272
Acrylonitrile	U		0.00414	0.0143	1	05/10/2020 19:21	WG1473272
Benzene	U		0.000536	0.00115	1	05/10/2020 19:21	WG1473272
Bromobenzene	U		0.00103	0.0143	1	05/10/2020 19:21	WG1473272
Bromodichloromethane	U		0.000832	0.00287	1	05/10/2020 19:21	WG1473272
Bromochloromethane	U		0.000647	0.00574	1	05/10/2020 19:21	WG1473272
Bromoform	U		0.00134	0.0287	1	05/10/2020 19:21	WG1473272
Bromomethane	U		0.00226	0.0143	1	05/10/2020 19:21	WG1473272
n-Butylbenzene	U		0.00603	0.0143	1	05/10/2020 19:21	WG1473272
sec-Butylbenzene	U		0.00331	0.0143	1	05/10/2020 19:21	WG1473272
tert-Butylbenzene	U		0.00224	0.00574	1	05/10/2020 19:21	WG1473272
Carbon disulfide	U		0.000804	0.0143	1	05/10/2020 19:21	WG1473272
Carbon tetrachloride	U		0.00103	0.00574	1	05/10/2020 19:21	WG1473272
Chlorobenzene	U		0.000241	0.00287	1	05/10/2020 19:21	WG1473272
Chlorodibromomethane	U		0.000703	0.00287	1	05/10/2020 19:21	WG1473272
Chloroethane	U		0.00195	0.00574	1	05/10/2020 19:21	WG1473272
Chloroform	U		0.00118	0.00287	1	05/10/2020 19:21	WG1473272
Chloromethane	U		0.00499	0.0143	1	05/10/2020 19:21	WG1473272
2-Chlorotoluene	U		0.000993	0.00287	1	05/10/2020 19:21	WG1473272
4-Chlorotoluene	U		0.000517	0.00574	1	05/10/2020 19:21	WG1473272
1,2-Dibromo-3-Chloropropane	U		0.00448	0.0287	1	05/10/2020 19:21	WG1473272
1,2-Dibromoethane	U		0.000744	0.00287	1	05/10/2020 19:21	WG1473272
Dibromomethane	U		0.000861	0.00574	1	05/10/2020 19:21	WG1473272
1,2-Dichlorobenzene	U		0.000488	0.00574	1	05/10/2020 19:21	WG1473272
1,3-Dichlorobenzene	U		0.000689	0.00574	1	05/10/2020 19:21	WG1473272
1,4-Dichlorobenzene	U		0.000804	0.00574	1	05/10/2020 19:21	WG1473272
Dichlorodifluoromethane	U		0.00185	0.00287	1	05/10/2020 19:21	WG1473272
1,1-Dichloroethane	U		0.000564	0.00287	1	05/10/2020 19:21	WG1473272
1,2-Dichloroethane	U		0.000745	0.00287	1	05/10/2020 19:21	WG1473272
1,1-Dichloroethene	U		0.000696	0.00287	1	05/10/2020 19:21	WG1473272
cis-1,2-Dichloroethene	U		0.000843	0.00287	1	05/10/2020 19:21	WG1473272
trans-1,2-Dichloroethene	U		0.00119	0.00574	1	05/10/2020 19:21	WG1473272
1,2-Dichloropropane	U		0.00163	0.00574	1	05/10/2020 19:21	WG1473272
1,1-Dichloropropene	U		0.000929	0.00287	1	05/10/2020 19:21	WG1473272
1,3-Dichloropropane	U		0.000575	0.00574	1	05/10/2020 19:21	WG1473272
cis-1,3-Dichloropropene	U		0.000869	0.00287	1	05/10/2020 19:21	WG1473272
trans-1,3-Dichloropropene	U		0.00131	0.00574	1	05/10/2020 19:21	WG1473272
trans-1,4-Dichloro-2-butene	U		0.00214	0.00574	1	05/10/2020 19:21	WG1473272
2,2-Dichloropropane	U		0.00158	0.00287	1	05/10/2020 19:21	WG1473272
Di-isopropyl ether	U		0.000471	0.00115	1	05/10/2020 19:21	WG1473272
Ethylbenzene	U		0.000846	0.00287	1	05/10/2020 19:21	WG1473272
Hexachloro-1,3-butadiene	U		0.00689	0.0287	1	05/10/2020 19:21	WG1473272
2-Hexanone	U		0.00386	0.0287	1	05/10/2020 19:21	WG1473272
n-Hexane	U		0.00259	0.00574	1	05/10/2020 19:21	WG1473272
Iodomethane	U		0.00266	0.0143	1	05/10/2020 19:21	WG1473272
Isopropylbenzene	U		0.000488	0.00287	1	05/10/2020 19:21	WG1473272
p-Isopropyltoluene	U		0.00293	0.00574	1	05/10/2020 19:21	WG1473272
2-Butanone (MEK)	U		0.0729	0.115	1	05/10/2020 19:21	WG1473272
Methylene Chloride	U		0.00762	0.0287	1	05/10/2020 19:21	WG1473272
4-Methyl-2-pentanone (MIBK)	U		0.00262	0.0287	1	05/10/2020 19:21	WG1473272

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Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.000402	0.00115	1	05/10/2020 19:21	WG1473272
Naphthalene	U		0.00560	0.0143	1	05/10/2020 19:21	WG1473272
n-Propylbenzene	U		0.00109	0.00574	1	05/10/2020 19:21	WG1473272
Styrene	U		0.000263	0.0143	1	05/10/2020 19:21	WG1473272
1,1,1,2-Tetrachloroethane	U		0.00109	0.00287	1	05/10/2020 19:21	WG1473272
1,1,2,2-Tetrachloroethane	U		0.000798	0.00287	1	05/10/2020 19:21	WG1473272
1,1,2-Trichlorotrifluoroethane	U		0.000866	0.00287	1	05/10/2020 19:21	WG1473272
Tetrachloroethene	U		0.00103	0.00287	1	05/10/2020 19:21	WG1473272
Toluene	U		0.00149	0.00574	1	05/10/2020 19:21	WG1473272
1,2,3-Trichlorobenzene	U		0.00841	0.0143	1	05/10/2020 19:21	WG1473272
1,2,4-Trichlorobenzene	U		0.00505	0.0143	1	05/10/2020 19:21	WG1473272
1,1,1-Trichloroethane	U		0.00106	0.00287	1	05/10/2020 19:21	WG1473272
1,1,2-Trichloroethane	U		0.000685	0.00287	1	05/10/2020 19:21	WG1473272
Trichloroethene	U		0.000670	0.00115	1	05/10/2020 19:21	WG1473272
Trichlorofluoromethane	U		0.000949	0.00287	1	05/10/2020 19:21	WG1473272
1,2,3-Trichloropropane	U		0.00186	0.0143	1	05/10/2020 19:21	WG1473272
1,2,4-Trimethylbenzene	U		0.00181	0.00574	1	05/10/2020 19:21	WG1473272
1,2,3-Trimethylbenzene	U		0.00181	0.00574	1	05/10/2020 19:21	WG1473272
1,3,5-Trimethylbenzene	U		0.00230	0.00574	1	05/10/2020 19:21	WG1473272
Vinyl acetate	U		0.00292	0.0143	1	05/10/2020 19:21	WG1473272
Vinyl chloride	U		0.00133	0.00287	1	05/10/2020 19:21	WG1473272
Xylenes, Total	U		0.00101	0.00746	1	05/10/2020 19:21	WG1473272
(S) Toluene-d8	*99.8*			*75.0-131*		*05/10/2020 19:21*	WG1473272
(S) 4-Bromofluorobenzene	*96.5*			*67.0-138*		*05/10/2020 19:21*	WG1473272
(S) 1,2-Dichloroethane-d4	*104*			*70.0-130*		*05/10/2020 19:21*	WG1473272

JC 5/28/2020

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	86.9		1	05/14/2020 13:41	WG1475034

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	U		0.0420	0.0576	1	05/11/2020 22:20	WG1474179
Acrylonitrile	U		0.00416	0.0144	1	05/11/2020 22:20	WG1474179
Benzene	0.0226		0.000538	0.00115	1	05/11/2020 22:20	WG1474179
Bromobenzene	U		0.00104	0.0144	1	05/11/2020 22:20	WG1474179
Bromodichloromethane	U		0.000835	0.00288	1	05/11/2020 22:20	WG1474179
Bromochloromethane	U	~~J4~~	0.000649	0.00576	1	05/11/2020 22:20	WG1474179
Bromoform	U		0.00135	0.0288	1	05/11/2020 22:20	WG1474179
Bromomethane	U		0.00227	0.0144	1	05/11/2020 22:20	WG1474179
n-Butylbenzene	U		0.00604	0.0144	1	05/11/2020 22:20	WG1474179
sec-Butylbenzene	U		0.00332	0.0144	1	05/11/2020 22:20	WG1474179
tert-Butylbenzene	U		0.00224	0.00576	1	05/11/2020 22:20	WG1474179
Carbon disulfide	U		0.000806	0.0144	1	05/11/2020 22:20	WG1474179
Carbon tetrachloride	U		0.00103	0.00576	1	05/11/2020 22:20	WG1474179
Chlorobenzene	U		0.000242	0.00288	1	05/11/2020 22:20	WG1474179
Chlorodibromomethane	U		0.000705	0.00288	1	05/11/2020 22:20	WG1474179
Chloroethane	U		0.00196	0.00576	1	05/11/2020 22:20	WG1474179
Chloroform	U		0.00119	0.00288	1	05/11/2020 22:20	WG1474179
Chloromethane	U		0.00501	0.0144	1	05/11/2020 22:20	WG1474179
2-Chlorotoluene	U		0.000996	0.00288	1	05/11/2020 22:20	WG1474179
4-Chlorotoluene	U		0.000518	0.00576	1	05/11/2020 22:20	WG1474179
1,2-Dibromo-3-Chloropropane	U		0.00449	0.0288	1	05/11/2020 22:20	WG1474179
1,2-Dibromoethane	U		0.000746	0.00288	1	05/11/2020 22:20	WG1474179
Dibromomethane	U		0.000863	0.00576	1	05/11/2020 22:20	WG1474179
1,2-Dichlorobenzene	U		0.000489	0.00576	1	05/11/2020 22:20	WG1474179
1,3-Dichlorobenzene	U		0.000691	0.00576	1	05/11/2020 22:20	WG1474179
1,4-Dichlorobenzene	U		0.000806	0.00576	1	05/11/2020 22:20	WG1474179
Dichlorodifluoromethane	U		0.00185	0.00288	1	05/11/2020 22:20	WG1474179
1,1-Dichloroethane	U		0.000565	0.00288	1	05/11/2020 22:20	WG1474179
1,2-Dichloroethane	U		0.000747	0.00288	1	05/11/2020 22:20	WG1474179
1,1-Dichloroethene	U		0.000698	0.00288	1	05/11/2020 22:20	WG1474179
cis-1,2-Dichloroethene	0.00774		0.000845	0.00288	1	05/11/2020 22:20	WG1474179
trans-1,2-Dichloroethene	U		0.00120	0.00576	1	05/11/2020 22:20	WG1474179
1,2-Dichloropropane	U		0.00163	0.00576	1	05/11/2020 22:20	WG1474179
1,1-Dichloropropene	U		0.000931	0.00288	1	05/11/2020 22:20	WG1474179
1,3-Dichloropropane	U		0.000577	0.00576	1	05/11/2020 22:20	WG1474179
cis-1,3-Dichloropropene	U		0.000871	0.00288	1	05/11/2020 22:20	WG1474179
trans-1,3-Dichloropropene	U		0.00131	0.00576	1	05/11/2020 22:20	WG1474179
trans-1,4-Dichloro-2-butene	U		0.00214	0.00576	1	05/11/2020 22:20	WG1474179
2,2-Dichloropropane	U		0.00159	0.00288	1	05/11/2020 22:20	WG1474179
Di-isopropyl ether	U		0.000472	0.00115	1	05/11/2020 22:20	WG1474179
Ethylbenzene	U		0.000848	0.00288	1	05/11/2020 22:20	WG1474179
Hexachloro-1,3-butadiene	U		0.00691	0.0288	1	05/11/2020 22:20	WG1474179
2-Hexanone	U		0.00387	0.0288	1	05/11/2020 22:20	WG1474179
n-Hexane	U		0.00260	0.00576	1	05/11/2020 22:20	WG1474179
Iodomethane	U		0.00267	0.0144	1	05/11/2020 22:20	WG1474179
Isopropylbenzene	U		0.000489	0.00288	1	05/11/2020 22:20	WG1474179
p-Isopropyltoluene	U		0.00294	0.00576	1	05/11/2020 22:20	WG1474179
2-Butanone (MEK)	U		0.0731	0.115	1	05/11/2020 22:20	WG1474179
Methylene Chloride	U		0.00764	0.0288	1	05/11/2020 22:20	WG1474179
4-Methyl-2-pentanone (MIBK)	U		0.00262	0.0288	1	05/11/2020 22:20	WG1474179

JC 5/28/2020

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.000403	0.00115	1	05/11/2020 22:20	WG1474179
Naphthalene	U		0.00562	0.0144	1	05/12/2020 20:57	WG1474881
n-Propylbenzene	U		0.00109	0.00576	1	05/11/2020 22:20	WG1474179
Styrene	U		0.000264	0.0144	1	05/11/2020 22:20	WG1474179
1,1,1,2-Tetrachloroethane	U		0.00109	0.00288	1	05/11/2020 22:20	WG1474179
1,1,2,2-Tetrachloroethane	U		0.000800	0.00288	1	05/11/2020 22:20	WG1474179
1,1,2-Trichlorotrifluoroethane	U		0.000868	0.00288	1	05/11/2020 22:20	WG1474179
Tetrachloroethene	0.0670		0.00103	0.00288	1	05/11/2020 22:20	WG1474179
Toluene	U		0.00150	0.00576	1	05/11/2020 22:20	WG1474179
1,2,3-Trichlorobenzene	U		0.00844	0.0144	1	05/11/2020 22:20	WG1474179
1,2,4-Trichlorobenzene	U		0.00507	0.0144	1	05/11/2020 22:20	WG1474179
1,1,1-Trichloroethane	U		0.00106	0.00288	1	05/11/2020 22:20	WG1474179
1,1,2-Trichloroethane	U		0.000687	0.00288	1	05/11/2020 22:20	WG1474179
Trichloroethene	0.0132		0.000672	0.00115	1	05/11/2020 22:20	WG1474179
Trichlorofluoromethane	U		0.000952	0.00288	1	05/11/2020 22:20	WG1474179
1,2,3-Trichloropropane	U		0.00187	0.0144	1	05/11/2020 22:20	WG1474179
1,2,4-Trimethylbenzene	U		0.00182	0.00576	1	05/11/2020 22:20	WG1474179
1,2,3-Trimethylbenzene	U		0.00182	0.00576	1	05/11/2020 22:20	WG1474179
1,3,5-Trimethylbenzene	U		0.00230	0.00576	1	05/11/2020 22:20	WG1474179
Vinyl acetate	U		0.00292	0.0144	1	05/11/2020 22:20	WG1474179
Vinyl chloride	U		0.00134	0.00288	1	05/11/2020 22:20	WG1474179
Xylenes, Total	U		0.00101	0.00748	1	05/11/2020 22:20	WG1474179
(S) Toluene-d8	*101*			*75.0-131*		*05/11/2020 22:20*	WG1474179
(S) Toluene-d8	*107*			*75.0-131*		*05/12/2020 20:57*	WG1474881
(S) 4-Bromofluorobenzene	*99.4*			*67.0-138*		*05/11/2020 22:20*	WG1474179
(S) 4-Bromofluorobenzene	*85.1*			*67.0-138*		*05/12/2020 20:57*	WG1474881
(S) 1,2-Dichloroethane-d4	*107*			*70.0-130*		*05/11/2020 22:20*	WG1474179
(S) 1,2-Dichloroethane-d4	*89.4*			*70.0-130*		*05/12/2020 20:57*	WG1474881

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

JC 5/28/2020

JC 5/28/2020

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	88.0		1	05/14/2020 13:41	WG1475034

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	U		0.0415	0.0568	1	05/11/2020 22:39	WG1474179
Acrylonitrile	U		0.00410	0.0142	1	05/11/2020 22:39	WG1474179
Benzene	0.0194		0.000531	0.00114	1	05/11/2020 22:39	WG1474179
Bromobenzene	U		0.00102	0.0142	1	05/11/2020 22:39	WG1474179
Bromodichloromethane	U		0.000824	0.00284	1	05/11/2020 22:39	WG1474179
Bromochloromethane	U	~~J4~~	0.000641	0.00568	1	05/11/2020 22:39	WG1474179
Bromoform	U		0.00133	0.0284	1	05/11/2020 22:39	WG1474179
Bromomethane	U		0.00224	0.0142	1	05/11/2020 22:39	WG1474179
n-Butylbenzene	U		0.00596	0.0142	1	05/11/2020 22:39	WG1474179
sec-Butylbenzene	U		0.00327	0.0142	1	05/11/2020 22:39	WG1474179
tert-Butylbenzene	U		0.00222	0.00568	1	05/11/2020 22:39	WG1474179
Carbon disulfide	U		0.000795	0.0142	1	05/11/2020 22:39	WG1474179
Carbon tetrachloride	U		0.00102	0.00568	1	05/11/2020 22:39	WG1474179
Chlorobenzene	U		0.000239	0.00284	1	05/11/2020 22:39	WG1474179
Chlorodibromomethane	U		0.000695	0.00284	1	05/11/2020 22:39	WG1474179
Chloroethane	U		0.00193	0.00568	1	05/11/2020 22:39	WG1474179
Chloroform	U		0.00117	0.00284	1	05/11/2020 22:39	WG1474179
Chloromethane	U		0.00494	0.0142	1	05/11/2020 22:39	WG1474179
2-Chlorotoluene	U		0.000983	0.00284	1	05/11/2020 22:39	WG1474179
4-Chlorotoluene	U		0.000511	0.00568	1	05/11/2020 22:39	WG1474179
1,2-Dibromo-3-Chloropropane	U		0.00443	0.0284	1	05/11/2020 22:39	WG1474179
1,2-Dibromoethane	U		0.000736	0.00284	1	05/11/2020 22:39	WG1474179
Dibromomethane	U		0.000852	0.00568	1	05/11/2020 22:39	WG1474179
1,2-Dichlorobenzene	U		0.000483	0.00568	1	05/11/2020 22:39	WG1474179
1,3-Dichlorobenzene	U		0.000682	0.00568	1	05/11/2020 22:39	WG1474179
1,4-Dichlorobenzene	U		0.000795	0.00568	1	05/11/2020 22:39	WG1474179
Dichlorodifluoromethane	U		0.00183	0.00284	1	05/11/2020 22:39	WG1474179
1,1-Dichloroethane	U		0.000558	0.00284	1	05/11/2020 22:39	WG1474179
1,2-Dichloroethane	U		0.000737	0.00284	1	05/11/2020 22:39	WG1474179
1,1-Dichloroethene	U		0.000688	0.00284	1	05/11/2020 22:39	WG1474179
cis-1,2-Dichloroethene	0.00626		0.000834	0.00284	1	05/11/2020 22:39	WG1474179
trans-1,2-Dichloroethene	U		0.00118	0.00568	1	05/11/2020 22:39	WG1474179
1,2-Dichloropropane	U		0.00161	0.00568	1	05/11/2020 22:39	WG1474179
1,1-Dichloropropene	U		0.000919	0.00284	1	05/11/2020 22:39	WG1474179
1,3-Dichloropropane	U		0.000569	0.00568	1	05/11/2020 22:39	WG1474179
cis-1,3-Dichloropropene	U		0.000860	0.00284	1	05/11/2020 22:39	WG1474179
trans-1,3-Dichloropropene	U		0.00130	0.00568	1	05/11/2020 22:39	WG1474179
trans-1,4-Dichloro-2-butene	U		0.00211	0.00568	1	05/11/2020 22:39	WG1474179
2,2-Dichloropropane	U		0.00157	0.00284	1	05/11/2020 22:39	WG1474179
Di-isopropyl ether	U		0.000466	0.00114	1	05/11/2020 22:39	WG1474179
Ethylbenzene	U		0.000837	0.00284	1	05/11/2020 22:39	WG1474179
Hexachloro-1,3-butadiene	U		0.00682	0.0284	1	05/11/2020 22:39	WG1474179
2-Hexanone	U		0.00382	0.0284	1	05/11/2020 22:39	WG1474179
n-Hexane	U		0.00257	0.00568	1	05/11/2020 22:39	WG1474179
Iodomethane	U		0.00264	0.0142	1	05/11/2020 22:39	WG1474179
Isopropylbenzene	U		0.000483	0.00284	1	05/11/2020 22:39	WG1474179
p-Isopropyltoluene	U		0.00290	0.00568	1	05/11/2020 22:39	WG1474179
2-Butanone (MEK)	U		0.0721	0.114	1	05/11/2020 22:39	WG1474179
Methylene Chloride	U		0.00754	0.0284	1	05/11/2020 22:39	WG1474179
4-Methyl-2-pentanone (MIBK)	U		0.00259	0.0284	1	05/11/2020 22:39	WG1474179

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Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.000398	0.00114	1	05/11/2020 22:39	WG1474179
Naphthalene	U		0.00554	0.0142	1	05/12/2020 21:16	WG1474881
n-Propylbenzene	U		0.00108	0.00568	1	05/11/2020 22:39	WG1474179
Styrene	U		0.000260	0.0142	1	05/11/2020 22:39	WG1474179
1,1,1,2-Tetrachloroethane	U		0.00108	0.00284	1	05/11/2020 22:39	WG1474179
1,1,2,2-Tetrachloroethane	U		0.000790	0.00284	1	05/11/2020 22:39	WG1474179
1,1,2-Trichlorotrifluoroethane	U		0.000857	0.00284	1	05/11/2020 22:39	WG1474179
Tetrachloroethene	0.0488		0.00102	0.00284	1	05/11/2020 22:39	WG1474179
Toluene	U		0.00148	0.00568	1	05/11/2020 22:39	WG1474179
1,2,3-Trichlorobenzene	U		0.00833	0.0142	1	05/11/2020 22:39	WG1474179
1,2,4-Trichlorobenzene	U		0.00500	0.0142	1	05/11/2020 22:39	WG1474179
1,1,1-Trichloroethane	U		0.00105	0.00284	1	05/11/2020 22:39	WG1474179
1,1,2-Trichloroethane	U		0.000678	0.00284	1	05/11/2020 22:39	WG1474179
Trichloroethene	0.00855		0.000663	0.00114	1	05/11/2020 22:39	WG1474179
Trichlorofluoromethane	U		0.000940	0.00284	1	05/11/2020 22:39	WG1474179
1,2,3-Trichloropropane	U		0.00184	0.0142	1	05/11/2020 22:39	WG1474179
1,2,4-Trimethylbenzene	U		0.00179	0.00568	1	05/11/2020 22:39	WG1474179
1,2,3-Trimethylbenzene	U		0.00179	0.00568	1	05/11/2020 22:39	WG1474179
1,3,5-Trimethylbenzene	U		0.00227	0.00568	1	05/11/2020 22:39	WG1474179
Vinyl acetate	U		0.00289	0.0142	1	05/11/2020 22:39	WG1474179
Vinyl chloride	U		0.00132	0.00284	1	05/11/2020 22:39	WG1474179
Xylenes, Total	U		0.00100	0.00738	1	05/11/2020 22:39	WG1474179
(S) Toluene-d8	*98.2*			*75.0-131*		*05/11/2020 22:39*	WG1474179
(S) Toluene-d8	*108*			*75.0-131*		*05/12/2020 21:16*	WG1474881
(S) 4-Bromofluorobenzene	*97.2*			*67.0-138*		*05/11/2020 22:39*	WG1474179
(S) 4-Bromofluorobenzene	*84.5*			*67.0-138*		*05/12/2020 21:16*	WG1474881
(S) 1,2-Dichloroethane-d4	*109*			*70.0-130*		*05/11/2020 22:39*	WG1474179
(S) 1,2-Dichloroethane-d4	*90.5*			*70.0-130*		*05/12/2020 21:16*	WG1474881

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Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	88.9		1	05/14/2020 13:41	WG1475034

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	U		0.0411	0.0562	1	05/11/2020 22:58	WG1474179
Acrylonitrile	U		0.00406	0.0141	1	05/11/2020 22:58	WG1474179
Benzene	0.0278		0.000525	0.00112	1	05/11/2020 22:58	WG1474179
Bromobenzene	U		0.00101	0.0141	1	05/11/2020 22:58	WG1474179
Bromodichloromethane	U		0.000816	0.00281	1	05/11/2020 22:58	WG1474179
Bromochloromethane	U	~~J4~~	0.000634	0.00562	1	05/11/2020 22:58	WG1474179
Bromoform	U		0.00132	0.0281	1	05/11/2020 22:58	WG1474179
Bromomethane	U		0.00222	0.0141	1	05/11/2020 22:58	WG1474179
n-Butylbenzene	U		0.00591	0.0141	1	05/11/2020 22:58	WG1474179
sec-Butylbenzene	U		0.00324	0.0141	1	05/11/2020 22:58	WG1474179
tert-Butylbenzene	U		0.00219	0.00562	1	05/11/2020 22:58	WG1474179
Carbon disulfide	U		0.000787	0.0141	1	05/11/2020 22:58	WG1474179
Carbon tetrachloride	U		0.00101	0.00562	1	05/11/2020 22:58	WG1474179
Chlorobenzene	U		0.000236	0.00281	1	05/11/2020 22:58	WG1474179
Chlorodibromomethane	U		0.000688	0.00281	1	05/11/2020 22:58	WG1474179
Chloroethane	U		0.00191	0.00562	1	05/11/2020 22:58	WG1474179
Chloroform	U		0.00116	0.00281	1	05/11/2020 22:58	WG1474179
Chloromethane	U		0.00489	0.0141	1	05/11/2020 22:58	WG1474179
2-Chlorotoluene	U		0.000973	0.00281	1	05/11/2020 22:58	WG1474179
4-Chlorotoluene	U		0.000506	0.00562	1	05/11/2020 22:58	WG1474179
1,2-Dibromo-3-Chloropropane	U		0.00439	0.0281	1	05/11/2020 22:58	WG1474179
1,2-Dibromoethane	U		0.000729	0.00281	1	05/11/2020 22:58	WG1474179
Dibromomethane	U		0.000844	0.00562	1	05/11/2020 22:58	WG1474179
1,2-Dichlorobenzene	U		0.000478	0.00562	1	05/11/2020 22:58	WG1474179
1,3-Dichlorobenzene	U		0.000675	0.00562	1	05/11/2020 22:58	WG1474179
1,4-Dichlorobenzene	U		0.000787	0.00562	1	05/11/2020 22:58	WG1474179
Dichlorodifluoromethane	U		0.00181	0.00281	1	05/11/2020 22:58	WG1474179
1,1-Dichloroethane	U		0.000552	0.00281	1	05/11/2020 22:58	WG1474179
1,2-Dichloroethane	U		0.000730	0.00281	1	05/11/2020 22:58	WG1474179
1,1-Dichloroethene	U		0.000682	0.00281	1	05/11/2020 22:58	WG1474179
cis-1,2-Dichloroethene	0.0179		0.000826	0.00281	1	05/11/2020 22:58	WG1474179
trans-1,2-Dichloroethene	U		0.00117	0.00562	1	05/11/2020 22:58	WG1474179
1,2-Dichloropropane	U		0.00160	0.00562	1	05/11/2020 22:58	WG1474179
1,1-Dichloropropene	U		0.000910	0.00281	1	05/11/2020 22:58	WG1474179
1,3-Dichloropropane	U		0.000564	0.00562	1	05/11/2020 22:58	WG1474179
cis-1,3-Dichloropropene	U		0.000852	0.00281	1	05/11/2020 22:58	WG1474179
trans-1,3-Dichloropropene	U		0.00128	0.00562	1	05/11/2020 22:58	WG1474179
trans-1,4-Dichloro-2-butene	U		0.00209	0.00562	1	05/11/2020 22:58	WG1474179
2,2-Dichloropropane	U		0.00155	0.00281	1	05/11/2020 22:58	WG1474179
Di-isopropyl ether	U		0.000461	0.00112	1	05/11/2020 22:58	WG1474179
Ethylbenzene	U		0.000829	0.00281	1	05/11/2020 22:58	WG1474179
Hexachloro-1,3-butadiene	U		0.00675	0.0281	1	05/11/2020 22:58	WG1474179
2-Hexanone	U		0.00378	0.0281	1	05/11/2020 22:58	WG1474179
n-Hexane	U		0.00254	0.00562	1	05/11/2020 22:58	WG1474179
Iodomethane	U		0.00261	0.0141	1	05/11/2020 22:58	WG1474179
Isopropylbenzene	U		0.000478	0.00281	1	05/11/2020 22:58	WG1474179
p-Isopropyltoluene	U		0.00287	0.00562	1	05/11/2020 22:58	WG1474179
2-Butanone (MEK)	U		0.0714	0.112	1	05/11/2020 22:58	WG1474179
Methylene Chloride	U		0.00747	0.0281	1	05/11/2020 22:58	WG1474179
4-Methyl-2-pentanone (MIBK)	U		0.00256	0.0281	1	05/11/2020 22:58	WG1474179

JC 5/28/2020

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.000394	0.00112	1	05/11/2020 22:58	WG1474179
Naphthalene	U		0.00549	0.0141	1	05/12/2020 21:34	WG1474881
n-Propylbenzene	U		0.00107	0.00562	1	05/11/2020 22:58	WG1474179
Styrene	U		0.000258	0.0141	1	05/11/2020 22:58	WG1474179
1,1,1,2-Tetrachloroethane	U		0.00107	0.00281	1	05/11/2020 22:58	WG1474179
1,1,2,2-Tetrachloroethane	U		0.000782	0.00281	1	05/11/2020 22:58	WG1474179
1,1,2-Trichlorotrifluoroethane	U		0.000848	0.00281	1	05/11/2020 22:58	WG1474179
Tetrachloroethene	0.0603		0.00101	0.00281	1	05/11/2020 22:58	WG1474179
Toluene	U		0.00146	0.00562	1	05/11/2020 22:58	WG1474179
1,2,3-Trichlorobenzene	U		0.00825	0.0141	1	05/11/2020 22:58	WG1474179
1,2,4-Trichlorobenzene	U		0.00495	0.0141	1	05/11/2020 22:58	WG1474179
1,1,1-Trichloroethane	U		0.00104	0.00281	1	05/11/2020 22:58	WG1474179
1,1,2-Trichloroethane	U		0.000672	0.00281	1	05/11/2020 22:58	WG1474179
Trichloroethene	0.0549		0.000657	0.00112	1	05/11/2020 22:58	WG1474179
Trichlorofluoromethane	U		0.000930	0.00281	1	05/11/2020 22:58	WG1474179
1,2,3-Trichloropropane	U		0.00182	0.0141	1	05/11/2020 22:58	WG1474179
1,2,4-Trimethylbenzene	U		0.00178	0.00562	1	05/11/2020 22:58	WG1474179
1,2,3-Trimethylbenzene	U		0.00178	0.00562	1	05/11/2020 22:58	WG1474179
1,3,5-Trimethylbenzene	U		0.00225	0.00562	1	05/11/2020 22:58	WG1474179
Vinyl acetate	U		0.00286	0.0141	1	05/11/2020 22:58	WG1474179
Vinyl chloride	U		0.00130	0.00281	1	05/11/2020 22:58	WG1474179
Xylenes, Total	U		0.000990	0.00731	1	05/11/2020 22:58	WG1474179
(S) Toluene-d8	*96.9*			*75.0-131*		*05/11/2020 22:58*	WG1474179
(S) Toluene-d8	*107*			*75.0-131*		*05/12/2020 21:34*	WG1474881
(S) 4-Bromofluorobenzene	*96.4*			*67.0-138*		*05/11/2020 22:58*	WG1474179
(S) 4-Bromofluorobenzene	*87.1*			*67.0-138*		*05/12/2020 21:34*	WG1474881
(S) 1,2-Dichloroethane-d4	*106*			*70.0-130*		*05/11/2020 22:58*	WG1474179
(S) 1,2-Dichloroethane-d4	*85.5*			*70.0-130*		*05/12/2020 21:34*	WG1474881

JC 5/28/2020

MW-341-95

Collected date/time: 05/04/20 14:35

SAMPLE RESULTS - 04

L1215745

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	85.8		1	05/14/2020 13:41	WG1475034

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	U		0.0425	0.0583	1	05/11/2020 23:17	WG1474179
Acrylonitrile	U		0.00421	0.0146	1	05/11/2020 23:17	WG1474179
Benzene	0.0491		0.000544	0.00117	1	05/11/2020 23:17	WG1474179
Bromobenzene	U		0.00105	0.0146	1	05/11/2020 23:17	WG1474179
Bromodichloromethane	U		0.000845	0.00291	1	05/11/2020 23:17	WG1474179
Bromochloromethane	U	~~J4~~	0.000657	0.00583	1	05/11/2020 23:17	WG1474179
Bromoform	U		0.00136	0.0291	1	05/11/2020 23:17	WG1474179
Bromomethane	U		0.00230	0.0146	1	05/11/2020 23:17	WG1474179
n-Butylbenzene	U		0.00612	0.0146	1	05/11/2020 23:17	WG1474179
sec-Butylbenzene	U		0.00336	0.0146	1	05/11/2020 23:17	WG1474179
tert-Butylbenzene	U		0.00227	0.00583	1	05/11/2020 23:17	WG1474179
Carbon disulfide	U		0.000816	0.0146	1	05/11/2020 23:17	WG1474179
Carbon tetrachloride	U		0.00105	0.00583	1	05/11/2020 23:17	WG1474179
Chlorobenzene	U		0.000245	0.00291	1	05/11/2020 23:17	WG1474179
Chlorodibromomethane	U		0.000713	0.00291	1	05/11/2020 23:17	WG1474179
Chloroethane	U		0.00198	0.00583	1	05/11/2020 23:17	WG1474179
Chloroform	U		0.00120	0.00291	1	05/11/2020 23:17	WG1474179
Chloromethane	U		0.00507	0.0146	1	05/11/2020 23:17	WG1474179
2-Chlorotoluene	U		0.00101	0.00291	1	05/11/2020 23:17	WG1474179
4-Chlorotoluene	U		0.000524	0.00583	1	05/11/2020 23:17	WG1474179
1,2-Dibromo-3-Chloropropane	U		0.00454	0.0291	1	05/11/2020 23:17	WG1474179
1,2-Dibromoethane	U		0.000755	0.00291	1	05/11/2020 23:17	WG1474179
Dibromomethane	U		0.000874	0.00583	1	05/11/2020 23:17	WG1474179
1,2-Dichlorobenzene	U		0.000495	0.00583	1	05/11/2020 23:17	WG1474179
1,3-Dichlorobenzene	U		0.000699	0.00583	1	05/11/2020 23:17	WG1474179
1,4-Dichlorobenzene	U		0.000816	0.00583	1	05/11/2020 23:17	WG1474179
Dichlorodifluoromethane	U		0.00188	0.00291	1	05/11/2020 23:17	WG1474179
1,1-Dichloroethane	U		0.000572	0.00291	1	05/11/2020 23:17	WG1474179
1,2-Dichloroethane	U		0.000756	0.00291	1	05/11/2020 23:17	WG1474179
1,1-Dichloroethene	U		0.000706	0.00291	1	05/11/2020 23:17	WG1474179
cis-1,2-Dichloroethene	0.0692		0.000855	0.00291	1	05/11/2020 23:17	WG1474179
trans-1,2-Dichloroethene	U		0.00121	0.00583	1	05/11/2020 23:17	WG1474179
1,2-Dichloropropane	U		0.00165	0.00583	1	05/11/2020 23:17	WG1474179
1,1-Dichloropropene	U		0.000943	0.00291	1	05/11/2020 23:17	WG1474179
1,3-Dichloropropane	U		0.000584	0.00583	1	05/11/2020 23:17	WG1474179
cis-1,3-Dichloropropene	U		0.000882	0.00291	1	05/11/2020 23:17	WG1474179
trans-1,3-Dichloropropene	U		0.00133	0.00583	1	05/11/2020 23:17	WG1474179
trans-1,4-Dichloro-2-butene	U		0.00217	0.00583	1	05/11/2020 23:17	WG1474179
2,2-Dichloropropane	U		0.00161	0.00291	1	05/11/2020 23:17	WG1474179
Di-isopropyl ether	U		0.000478	0.00117	1	05/11/2020 23:17	WG1474179
Ethylbenzene	U		0.000859	0.00291	1	05/11/2020 23:17	WG1474179
Hexachloro-1,3-butadiene	U		0.00699	0.0291	1	05/11/2020 23:17	WG1474179
2-Hexanone	U		0.00391	0.0291	1	05/11/2020 23:17	WG1474179
n-Hexane	U		0.00263	0.00583	1	05/11/2020 23:17	WG1474179
Iodomethane	U		0.00270	0.0146	1	05/11/2020 23:17	WG1474179
Isopropylbenzene	U		0.000495	0.00291	1	05/11/2020 23:17	WG1474179
p-Isopropyltoluene	U		0.00297	0.00583	1	05/11/2020 23:17	WG1474179
2-Butanone (MEK)	U		0.0740	0.117	1	05/11/2020 23:17	WG1474179
Methylene Chloride	U		0.00774	0.0291	1	05/11/2020 23:17	WG1474179
4-Methyl-2-pentanone (MIBK)	U		0.00266	0.0291	1	05/11/2020 23:17	WG1474179

JC 5/28/2020

MW-341-95

Collected date/time: 05/04/20 14:35

SAMPLE RESULTS - 04

L1215745

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.000408	0.00117	1	05/11/2020 23:17	WG1474179
Naphthalene	U		0.00569	0.0146	1	05/12/2020 21:53	WG1474881
n-Propylbenzene	U		0.00111	0.00583	1	05/11/2020 23:17	WG1474179
Styrene	U		0.000267	0.0146	1	05/11/2020 23:17	WG1474179
1,1,1,2-Tetrachloroethane	U		0.00110	0.00291	1	05/11/2020 23:17	WG1474179
1,1,2,2-Tetrachloroethane	U		0.000810	0.00291	1	05/11/2020 23:17	WG1474179
1,1,2-Trichlorotrifluoroethane	U		0.000879	0.00291	1	05/11/2020 23:17	WG1474179
Tetrachloroethene	U		0.00104	0.00291	1	05/11/2020 23:17	WG1474179
Toluene	U		0.00151	0.00583	1	05/11/2020 23:17	WG1474179
1,2,3-Trichlorobenzene	U		0.00854	0.0146	1	05/11/2020 23:17	WG1474179
1,2,4-Trichlorobenzene	U		0.00513	0.0146	1	05/11/2020 23:17	WG1474179
1,1,1-Trichloroethane	U		0.00108	0.00291	1	05/11/2020 23:17	WG1474179
1,1,2-Trichloroethane	U		0.000696	0.00291	1	05/11/2020 23:17	WG1474179
Trichloroethene	U		0.000680	0.00117	1	05/11/2020 23:17	WG1474179
Trichlorofluoromethane	U		0.000964	0.00291	1	05/11/2020 23:17	WG1474179
1,2,3-Trichloropropane	U		0.00189	0.0146	1	05/11/2020 23:17	WG1474179
1,2,4-Trimethylbenzene	U		0.00184	0.00583	1	05/11/2020 23:17	WG1474179
1,2,3-Trimethylbenzene	U		0.00184	0.00583	1	05/11/2020 23:17	WG1474179
1,3,5-Trimethylbenzene	U		0.00233	0.00583	1	05/11/2020 23:17	WG1474179
Vinyl acetate	U		0.00296	0.0146	1	05/11/2020 23:17	WG1474179
Vinyl chloride	U		0.00135	0.00291	1	05/11/2020 23:17	WG1474179
Xylenes, Total	U		0.00103	0.00757	1	05/11/2020 23:17	WG1474179
(S) Toluene-d8	*98.4*			*75.0-131*		*05/11/2020 23:17*	WG1474179
(S) Toluene-d8	*105*			*75.0-131*		*05/12/2020 21:53*	WG1474881
(S) 4-Bromofluorobenzene	*97.4*			*67.0-138*		*05/11/2020 23:17*	WG1474179
(S) 4-Bromofluorobenzene	*86.7*			*67.0-138*		*05/12/2020 21:53*	WG1474881
(S) 1,2-Dichloroethane-d4	*112*			*70.0-130*		*05/11/2020 23:17*	WG1474179
(S) 1,2-Dichloroethane-d4	*90.1*			*70.0-130*		*05/12/2020 21:53*	WG1474881

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Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	85.3		1	05/14/2020 13:41	WG1475034

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	U		0.0428	0.0586	1	05/11/2020 23:36	WG1474179
Acrylonitrile	U		0.00423	0.0147	1	05/11/2020 23:36	WG1474179
Benzene	0.0400		0.000548	0.00117	1	05/11/2020 23:36	WG1474179
Bromobenzene	U		0.00106	0.0147	1	05/11/2020 23:36	WG1474179
Bromodichloromethane	U		0.000850	0.00293	1	05/11/2020 23:36	WG1474179
Bromochloromethane	U	~~J4~~	0.000661	0.00586	1	05/11/2020 23:36	WG1474179
Bromoform	U		0.00137	0.0293	1	05/11/2020 23:36	WG1474179
Bromomethane	U		0.00231	0.0147	1	05/11/2020 23:36	WG1474179
n-Butylbenzene	U		0.00616	0.0147	1	05/11/2020 23:36	WG1474179
sec-Butylbenzene	U		0.00338	0.0147	1	05/11/2020 23:36	WG1474179
tert-Butylbenzene	U		0.00229	0.00586	1	05/11/2020 23:36	WG1474179
Carbon disulfide	U		0.000821	0.0147	1	05/11/2020 23:36	WG1474179
Carbon tetrachloride	U		0.00105	0.00586	1	05/11/2020 23:36	WG1474179
Chlorobenzene	U		0.000246	0.00293	1	05/11/2020 23:36	WG1474179
Chlorodibromomethane	U		0.000718	0.00293	1	05/11/2020 23:36	WG1474179
Chloroethane	U		0.00199	0.00586	1	05/11/2020 23:36	WG1474179
Chloroform	U		0.00121	0.00293	1	05/11/2020 23:36	WG1474179
Chloromethane	U		0.00510	0.0147	1	05/11/2020 23:36	WG1474179
2-Chlorotoluene	U		0.00101	0.00293	1	05/11/2020 23:36	WG1474179
4-Chlorotoluene	U		0.000528	0.00586	1	05/11/2020 23:36	WG1474179
1,2-Dibromo-3-Chloropropane	U		0.00457	0.0293	1	05/11/2020 23:36	WG1474179
1,2-Dibromoethane	U		0.000760	0.00293	1	05/11/2020 23:36	WG1474179
Dibromomethane	U		0.000879	0.00586	1	05/11/2020 23:36	WG1474179
1,2-Dichlorobenzene	U		0.000498	0.00586	1	05/11/2020 23:36	WG1474179
1,3-Dichlorobenzene	U		0.000703	0.00586	1	05/11/2020 23:36	WG1474179
1,4-Dichlorobenzene	U		0.000821	0.00586	1	05/11/2020 23:36	WG1474179
Dichlorodifluoromethane	U		0.00189	0.00293	1	05/11/2020 23:36	WG1474179
1,1-Dichloroethane	U		0.000576	0.00293	1	05/11/2020 23:36	WG1474179
1,2-Dichloroethane	U		0.000761	0.00293	1	05/11/2020 23:36	WG1474179
1,1-Dichloroethene	U		0.000710	0.00293	1	05/11/2020 23:36	WG1474179
cis-1,2-Dichloroethene	0.0587		0.000861	0.00293	1	05/11/2020 23:36	WG1474179
trans-1,2-Dichloroethene	U		0.00122	0.00586	1	05/11/2020 23:36	WG1474179
1,2-Dichloropropane	U		0.00166	0.00586	1	05/11/2020 23:36	WG1474179
1,1-Dichloropropene	U		0.000948	0.00293	1	05/11/2020 23:36	WG1474179
1,3-Dichloropropane	U		0.000587	0.00586	1	05/11/2020 23:36	WG1474179
cis-1,3-Dichloropropene	U		0.000888	0.00293	1	05/11/2020 23:36	WG1474179
trans-1,3-Dichloropropene	U		0.00134	0.00586	1	05/11/2020 23:36	WG1474179
trans-1,4-Dichloro-2-butene	U		0.00218	0.00586	1	05/11/2020 23:36	WG1474179
2,2-Dichloropropane	U		0.00162	0.00293	1	05/11/2020 23:36	WG1474179
Di-isopropyl ether	U		0.000481	0.00117	1	05/11/2020 23:36	WG1474179
Ethylbenzene	U		0.000864	0.00293	1	05/11/2020 23:36	WG1474179
Hexachloro-1,3-butadiene	U		0.00703	0.0293	1	05/11/2020 23:36	WG1474179
2-Hexanone	U		0.00394	0.0293	1	05/11/2020 23:36	WG1474179
n-Hexane	U		0.00265	0.00586	1	05/11/2020 23:36	WG1474179
Iodomethane	U		0.00272	0.0147	1	05/11/2020 23:36	WG1474179
Isopropylbenzene	U		0.000498	0.00293	1	05/11/2020 23:36	WG1474179
p-Isopropyltoluene	U		0.00299	0.00586	1	05/11/2020 23:36	WG1474179
2-Butanone (MEK)	U		0.0744	0.117	1	05/11/2020 23:36	WG1474179
Methylene Chloride	U		0.00778	0.0293	1	05/11/2020 23:36	WG1474179
4-Methyl-2-pentanone (MIBK)	U		0.00267	0.0293	1	05/11/2020 23:36	WG1474179

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1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.000410	0.00117	1	05/11/2020 23:36	WG1474179
Naphthalene	U		0.00572	0.0147	1	05/11/2020 23:36	WG1474179
n-Propylbenzene	U		0.00111	0.00586	1	05/11/2020 23:36	WG1474179
Styrene	U		0.000268	0.0147	1	05/11/2020 23:36	WG1474179
1,1,1,2-Tetrachloroethane	U		0.00111	0.00293	1	05/11/2020 23:36	WG1474179
1,1,2,2-Tetrachloroethane	U		0.000815	0.00293	1	05/11/2020 23:36	WG1474179
1,1,2-Trichlorotrifluoroethane	U		0.000884	0.00293	1	05/11/2020 23:36	WG1474179
Tetrachloroethene	U		0.00105	0.00293	1	05/11/2020 23:36	WG1474179
Toluene	U		0.00152	0.00586	1	05/11/2020 23:36	WG1474179
1,2,3-Trichlorobenzene	U		0.00859	0.0147	1	05/11/2020 23:36	WG1474179
1,2,4-Trichlorobenzene	U		0.00516	0.0147	1	05/11/2020 23:36	WG1474179
1,1,1-Trichloroethane	U		0.00108	0.00293	1	05/11/2020 23:36	WG1474179
1,1,2-Trichloroethane	U		0.000700	0.00293	1	05/11/2020 23:36	WG1474179
Trichloroethene	U		0.000685	0.00117	1	05/11/2020 23:36	WG1474179
Trichlorofluoromethane	U		0.000970	0.00293	1	05/11/2020 23:36	WG1474179
1,2,3-Trichloropropane	U		0.00190	0.0147	1	05/11/2020 23:36	WG1474179
1,2,4-Trimethylbenzene	U		0.00185	0.00586	1	05/11/2020 23:36	WG1474179
1,2,3-Trimethylbenzene	U		0.00185	0.00586	1	05/11/2020 23:36	WG1474179
1,3,5-Trimethylbenzene	U		0.00234	0.00586	1	05/11/2020 23:36	WG1474179
Vinyl acetate	U		0.00298	0.0147	1	05/11/2020 23:36	WG1474179
Vinyl chloride	U		0.00136	0.00293	1	05/11/2020 23:36	WG1474179
Xylenes, Total	U		0.00103	0.00762	1	05/11/2020 23:36	WG1474179
(S) Toluene-d8	*100*			*75.0-131*		*05/11/2020 23:36*	WG1474179
(S) 4-Bromofluorobenzene	*97.6*			*67.0-138*		*05/11/2020 23:36*	WG1474179
(S) 1,2-Dichloroethane-d4	*109*			*70.0-130*		*05/11/2020 23:36*	WG1474179

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1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	83.8		1	05/14/2020 13:41	WG1475034

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	U		0.0435	0.0596	1	05/11/2020 23:55	WG1474179
Acrylonitrile	U		0.00431	0.0149	1	05/11/2020 23:55	WG1474179
Benzene	0.0315		0.000557	0.00119	1	05/11/2020 23:55	WG1474179
Bromobenzene	U		0.00107	0.0149	1	05/11/2020 23:55	WG1474179
Bromodichloromethane	U		0.000865	0.00298	1	05/11/2020 23:55	WG1474179
Bromochloromethane	U	J4	0.000673	0.00596	1	05/11/2020 23:55	WG1474179
Bromoform	U		0.00140	0.0298	1	05/11/2020 23:55	WG1474179
Bromomethane	U		0.00235	0.0149	1	05/11/2020 23:55	WG1474179
n-Butylbenzene	U		0.00626	0.0149	1	05/11/2020 23:55	WG1474179
sec-Butylbenzene	U		0.00344	0.0149	1	05/11/2020 23:55	WG1474179
tert-Butylbenzene	U		0.00233	0.00596	1	05/11/2020 23:55	WG1474179
Carbon disulfide	U		0.000835	0.0149	1	05/11/2020 23:55	WG1474179
Carbon tetrachloride	U		0.00107	0.00596	1	05/11/2020 23:55	WG1474179
Chlorobenzene	U		0.000250	0.00298	1	05/11/2020 23:55	WG1474179
Chlorodibromomethane	U		0.000730	0.00298	1	05/11/2020 23:55	WG1474179
Chloroethane	U		0.00203	0.00596	1	05/11/2020 23:55	WG1474179
Chloroform	U		0.00123	0.00298	1	05/11/2020 23:55	WG1474179
Chloromethane	U		0.00519	0.0149	1	05/11/2020 23:55	WG1474179
2-Chlorotoluene	U		0.00103	0.00298	1	05/11/2020 23:55	WG1474179
4-Chlorotoluene	U		0.000537	0.00596	1	05/11/2020 23:55	WG1474179
1,2-Dibromo-3-Chloropropane	U		0.00465	0.0298	1	05/11/2020 23:55	WG1474179
1,2-Dibromoethane	U		0.000773	0.00298	1	05/11/2020 23:55	WG1474179
Dibromomethane	U		0.000895	0.00596	1	05/11/2020 23:55	WG1474179
1,2-Dichlorobenzene	U		0.000507	0.00596	1	05/11/2020 23:55	WG1474179
1,3-Dichlorobenzene	U		0.000716	0.00596	1	05/11/2020 23:55	WG1474179
1,4-Dichlorobenzene	U		0.000835	0.00596	1	05/11/2020 23:55	WG1474179
Dichlorodifluoromethane	U		0.00192	0.00298	1	05/11/2020 23:55	WG1474179
1,1-Dichloroethane	U		0.000586	0.00298	1	05/11/2020 23:55	WG1474179
1,2-Dichloroethane	U		0.000774	0.00298	1	05/11/2020 23:55	WG1474179
1,1-Dichloroethene	U		0.000723	0.00298	1	05/11/2020 23:55	WG1474179
cis-1,2-Dichloroethene	0.0514		0.000876	0.00298	1	05/11/2020 23:55	WG1474179
trans-1,2-Dichloroethene	U		0.00124	0.00596	1	05/11/2020 23:55	WG1474179
1,2-Dichloropropane	U		0.00169	0.00596	1	05/11/2020 23:55	WG1474179
1,1-Dichloropropene	U		0.000965	0.00298	1	05/11/2020 23:55	WG1474179
1,3-Dichloropropane	U		0.000598	0.00596	1	05/11/2020 23:55	WG1474179
cis-1,3-Dichloropropene	U		0.000903	0.00298	1	05/11/2020 23:55	WG1474179
trans-1,3-Dichloropropene	U		0.00136	0.00596	1	05/11/2020 23:55	WG1474179
trans-1,4-Dichloro-2-butene	U		0.00222	0.00596	1	05/11/2020 23:55	WG1474179
2,2-Dichloropropane	U		0.00165	0.00298	1	05/11/2020 23:55	WG1474179
Di-isopropyl ether	U		0.000489	0.00119	1	05/11/2020 23:55	WG1474179
Ethylbenzene	U		0.000879	0.00298	1	05/11/2020 23:55	WG1474179
Hexachloro-1,3-butadiene	U		0.00716	0.0298	1	05/11/2020 23:55	WG1474179
2-Hexanone	U		0.00401	0.0298	1	05/11/2020 23:55	WG1474179
n-Hexane	U		0.00270	0.00596	1	05/11/2020 23:55	WG1474179
Iodomethane	U		0.00277	0.0149	1	05/11/2020 23:55	WG1474179
Isopropylbenzene	U		0.000507	0.00298	1	05/11/2020 23:55	WG1474179
p-Isopropyltoluene	U		0.00304	0.00596	1	05/11/2020 23:55	WG1474179
2-Butanone (MEK)	U		0.0757	0.119	1	05/11/2020 23:55	WG1474179
Methylene Chloride	U		0.00792	0.0298	1	05/11/2020 23:55	WG1474179
4-Methyl-2-pentanone (MIBK)	U		0.00272	0.0298	1	05/11/2020 23:55	WG1474179

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Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.000417	0.00119	1	05/11/2020 23:55	WG1474179
Naphthalene	U		0.00582	0.0149	1	05/11/2020 23:55	WG1474179
n-Propylbenzene	U		0.00113	0.00596	1	05/11/2020 23:55	WG1474179
Styrene	U		0.000273	0.0149	1	05/11/2020 23:55	WG1474179
1,1,1,2-Tetrachloroethane	U		0.00113	0.00298	1	05/11/2020 23:55	WG1474179
1,1,2,2-Tetrachloroethane	U		0.000829	0.00298	1	05/11/2020 23:55	WG1474179
1,1,2-Trichlorotrifluoroethane	U		0.000899	0.00298	1	05/11/2020 23:55	WG1474179
Tetrachloroethene	U		0.00107	0.00298	1	05/11/2020 23:55	WG1474179
Toluene	U		0.00155	0.00596	1	05/11/2020 23:55	WG1474179
1,2,3-Trichlorobenzene	U		0.00874	0.0149	1	05/11/2020 23:55	WG1474179
1,2,4-Trichlorobenzene	U		0.00525	0.0149	1	05/11/2020 23:55	WG1474179
1,1,1-Trichloroethane	U		0.00110	0.00298	1	05/11/2020 23:55	WG1474179
1,1,2-Trichloroethane	U		0.000712	0.00298	1	05/11/2020 23:55	WG1474179
Trichloroethene	U		0.000697	0.00119	1	05/11/2020 23:55	WG1474179
Trichlorofluoromethane	U		0.000986	0.00298	1	05/11/2020 23:55	WG1474179
1,2,3-Trichloropropane	U		0.00193	0.0149	1	05/11/2020 23:55	WG1474179
1,2,4-Trimethylbenzene	U		0.00188	0.00596	1	05/11/2020 23:55	WG1474179
1,2,3-Trimethylbenzene	U		0.00188	0.00596	1	05/11/2020 23:55	WG1474179
1,3,5-Trimethylbenzene	U		0.00239	0.00596	1	05/11/2020 23:55	WG1474179
Vinyl acetate	U		0.00303	0.0149	1	05/11/2020 23:55	WG1474179
Vinyl chloride	U		0.00138	0.00298	1	05/11/2020 23:55	WG1474179
Xylenes, Total	U		0.00105	0.00775	1	05/11/2020 23:55	WG1474179
(S) Toluene-d8	*98.1*			*75.0-131*		*05/11/2020 23:55*	WG1474179
(S) 4-Bromofluorobenzene	*96.0*			*67.0-138*		*05/11/2020 23:55*	WG1474179
(S) 1,2-Dichloroethane-d4	*109*			*70.0-130*		*05/11/2020 23:55*	WG1474179

JC
5/28/2020

MEMORANDUM

TO:	Project File	**DATE:**	August 3, 2020

FROM: Jessie Compeau

SUBJECT: Laboratory Data Validation Review

PROJECT: American Linen Data Validation

PROJECT #: 1413.001.02.501G

TASK: EIM Data Validation Level EPA2A for 3rd Quarter Monitoring – Groundwater Samples – Group 1

LAB: Pace Sample Delivery Groups (SDGs): L1234588, L1237210, L1237219, L1237678, and L1238146

Thirty-four (34) groundwater samples and three trip blanks were collected as part of the 3rd Quarterly Monitoring Round for 2020 for the ongoing Remedial Investigation (RI) sampling at the Former American Linen Supply Site, in Seattle, Washington in late June and early July 2020. The samples were shipped and delivered to Pace Lab Sciences (Pace) of Mount Juliet, TN for laboratory analysis. Selected samples were analyzed for the following:

- Volatile organic compounds (VOCs) by United States Environmental Protection Agency (USEPA) Method 8260D;
- Total petroleum hydrocarbons as gasoline (TPH-Gx) by NWTPH-Gx per analytical method stipulated by Washington State Department of Ecology;
- VOCs (dissolved gases – methane, ethane, and ethene) by EPA SOP RSK 175;
- Alkalinity by Method 2320 B-2011;
- Anions (chloride, nitrate, and sulfate) by USEPA Method 9056A;
- Total Organic Carbon (TOC) by USEPA Method 9060A; and
- Metals (iron and manganese) by USEPA Method 6020B.

Results are reported in multiple SDGs from Pace. Pace SDGs are reviewed in small groups for each data validation report. Group 1 analytical results are reported in SDGs L1234588, L1237210, L1237219, L1237678, and L1238146. The quality assurance review of the laboratory data associated with Group 1 is summarized below.

DATA QUALIFICATIONS

Guidelines established by USEPA for a limited data validation review of analytical data along with Pace control limit criteria were used to validate the data. The comments presented in this memorandum refer to the laboratory's performance in meeting the quality control criteria outlined in the USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (USEPA, 2017) and USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Superfund Methods Data Review

(USEPA, 2017). Following Guidelines, non-project-specific laboratory duplicates and matrix spike results were not evaluated as part of this data validation.

DATA VALIDATION

Completeness

All samples were collected and analyzed as requested with the following exceptions:

- SDG L1237210: Dates of sample collection are not listed on the chain of custody for nine samples (drop down arrow was not included). No action is taken other than to note that the dates of collection are included within the sample identification.

- SDGs L1237678, and L1238146: Per PES's (via email on August 5, 2020) request detected gasoline range results were reviewed by Pace. SDGs were revised, where appropriate, to include requested footnote "no discernable petroleum pattern" on gasoline range organic results. Refer to Section on Compound Identification for further discussion.

Sample Collection and Preservation

Samples were collected in laboratory-supplied sample containers preserved as appropriate for the individual analyses conducted. The samples were packed on ice in coolers and delivered by courier to the analytical laboratory. The laboratory reported that the coolers were received at a cooler temperature less than the recommended temperature preservation of 6°C. Samples were received in good condition. No data were qualified based upon the sample collection and preservation information.

Holding Times

USEPA Method 8260D:
All samples were analyzed for VOCs within the EPA recommended holding time of fourteen days for preserved waters from the date of collection. All holding time criteria are met.

NWTPH-Gx Method:
All samples were analyzed within the WA State recommended holding time of fourteen days for preserved waters from the date of sample collection. All holding time criteria are met.

Dissolved Gases (Methane, Ethane, and Ethene) by RSK 175:
All samples were analyzed within the WA State recommended holding time of fourteen days for preserved waters from the date of sample collection. All holding time criteria are met.

USEPA Method 6020B:
All samples were analyzed within the USEPA recommended holding time for iron and manganese of 180 days for preserved waters from the date of sample collection. All holding time criteria are met.

General Chemistry (Alkalinity, Chloride, Sulfate, Nitrate, and TOC):

All samples were analyzed within the USEPA recommended holding time for alkalinity (14 days), chloride (28 days), sulfate (28 days), and nitrate (48 hours), and TOC (28 days) for preserved waters from the date of sample collection. All holding time criteria are met with the following exceptions:

- SDG L1237219: Samples MW-331-070620 and MW103-070620 were analyzed for nitrate a few hours past the 48-hour holding time. **Sample MW-331-070620 and MW103-070620 nitrate results are estimated (UJ) due to holding time exceedance.**

Initial and Continuing Calibration

Calibration data for this project are not required for this deliverable however Pace's notes indicate the following:

- Multiple SDGs - *USEPA Method 8260D:* Continuing calibration verification (CCV) issues were noted by Pace for multiple compounds associated with analytical batches in each SDG. These compounds are qualified by the laboratory "J0" to indicate that percent difference CCV is outside of laboratory acceptance criteria. **Associated sample results with laboratory qualified (J0) results are estimated and qualified (J/UJ).**

Method Blank Results

USEPA Method 8260D:
Laboratory method blanks were included with the analytical batches per method requirement. The target analytes were not detected in the method blanks at or above the reporting detection limits (RDLs) with the following exception:

- SDG L1234588 - Analytical batch WG1504320: A low level of methylene chloride is detected in the method blank. No action is required since methylene chloride is not detected in the associated sample (MW128-062920).

NWTPH-Gx Method:
Laboratory method blanks were included with the analytical batches per method requirement. The target analyte (gasoline) was not detected in the method blanks at or above the RDLs with the following exception:

- SDG L1237678 – Analytical batch WG1507596: A low level gasoline concentration is detected in the method blank and in the trip blank. **Low levels of gasoline, below the RDL, are detected in five samples (MW-183-070820, MW-188-070820, MW-185-070820, MW-186-070820, and MW-187-070820) and are laboratory qualified (BJ). Gasoline detections in these samples are qualified as not detected (U).**

Dissolved Gases (Methane, Ethane, and Ethene) by RSK 175:
Laboratory method blanks were included with the analytical batches per method requirement. The target analytes (dissolved gases) are not detected in the method blanks at or above the RDLs.

USEPA Method 6020B and General Chemistry (Alkalinity, Chloride, Sulfate, Nitrate, and TOC):

Laboratory method blanks were included with the analytical batches per method requirement. The target analytes were detected in the method blanks below the RDLs. Per Guidance, no action is taken for blank detections less than the RDL when associated sample detections are greater than the RDL. General chemistry and metal blank detections are shown below:

SDG	Batch	Method	Analyte	Method Blank Result	Qualifier	RDL	Units	Associated Result(s) Qualified
L1234588	WG1504356	9060A	TOC	340	J	1000	µg/L	NO
L1237210	WG1506939	9060A	TOC	301	J	1000	µg/L	NO
L1237219	WG1506939	9060A	TOC	301	J	1000	µg/L	NO
L1237678	WG1506941	9060A	TOC	268	J	1000	µg/L	NO
L1238146	WG1507486	9060A	TOC	368	J	1000	µg/L	NO

Target analytes were detected in method blanks at low levels with no impact to the associated samples with the following discussion:

- SDG L1237678: TOC was detected at 268 µg/L in the method blank and is detected in associated sample MW-188-070820 at 958 µg/L slightly below the RDL of 1000 µg/L. In this case no action is taken.

Trip Blank Results

USEPA Method 8260D and NWTPH-Gx:
Three trip blanks (TB-070620 (SDG L1237219), TB-070820 (SDG L1237678), and TB-070920 (SDG L1238146)) were collected and analyzed for VOCs only or both VOCs and gasoline. The target analytes were not detected in the associated samples with the following exceptions:

- SDG L1237678: A low level of gasoline was detected in the trip blank (TB-070820) and in the associated method blank. **Low levels of gasoline, below the RDL, are detected in samples MW-183-070820, MW-188-070820, MW-185-070820, MW-186-070820, and MW-187-070820 and laboratory qualified (BJ). Gasoline detections in these samples are qualified as not detected (U).**

Field, Rinsate, or Equipment Blank Results

All Analytical Methods:
Field, rinsate, and/or equipment blanks were not collected.

Field Duplicate Analyses

Field duplicate pairs were not collected. Refer to LCS/LCSD and laboratory duplicate results for precision data.

Laboratory Duplicate Analyses

USEPA Method 8260D:
Laboratory duplicate samples were not analyzed. Refer to laboratory control sample/sample duplicate (LCS/LCSD) or matrix spike/matrix spike duplicate (MS/MSD) results for precision data.

NWTPH-Gx Method:
Laboratory duplicate samples were not analyzed. Precision data are not provided for (SDGs L1237219 and L1237678). Refer to MS/MSD results associated with SDG L1238146 for precision data.

Dissolved Gases (Methane, Ethane, and Ethene) by RSK 175:
Laboratory duplicate sample analyses were performed on client and non-client samples within the analytical batches. The primary/duplicate RPDs for dissolved gas analyses are within the laboratory control limit of 20%.

USEPA Method 6020B:
Laboratory duplicate samples were not analyzed. Precision data are not available for Refer to MS/MSD results for precision data.

General Chemistry (Alkalinity, Chloride, Sulfate, Nitrate, and TOC):
Laboratory duplicate sample analyses were performed on client samples and/or on non-client samples. The primary/duplicate RPDs for general chemistry parameters are within the laboratory control RPD limits or ± 1x RDL for groundwater results <5X the RDL with one exception:

- SDG L1237678: A laboratory duplicate on sulfate was performed on a non-client sample. Sulfate RPD is high however no action is taken since the laboratory duplicate was performed on a nonclient sample.

Surrogate Recoveries

USEPA Method 8260D:
The surrogate recovery results for the samples, laboratory control samples, matrix spike samples, and the method blanks are within the laboratory surrogate control limits for all the analyses.

NWTPH-Gx Method:
The surrogate recovery results for the samples, laboratory control samples, matrix spike samples, and the method blanks are within the laboratory surrogate control limits for all analyses.

Laboratory Control Samples

USEPA Method 8260D:
Laboratory control sample/laboratory control sample duplicate (LCS/LCSD) or laboratory control sample (LCS) were analyzed by USEPA Method 8260D method. The LCS % Rs or LCS/LCSD % Rs and RPDs for the all target compounds are within the laboratory control criteria for waters with the following discussion:

- SDG L1234588 - Analytical batch WG1504320: LCS % recoveries for carbon tetrachloride and chlorodibromomethane, hexachloro-1,3-butadiene, and tetrahydrofuran are above laboratory acceptance criteria and laboratory qualified (J4). No action is needed for these compound as they are not detected in the associated sample.

- SDG L1237210 - Analytical batch WG1506638: LCS % recoveries for 1,2-dichlorobenzene and is below laboratory acceptance criteria and laboratory qualified (J4). **associated sample 1,2-dichlorobenzene results below the RDL are estimated and qualified (UJ).**

- SDG L1237210 - Analytical batch WG1507807: LCS % recovery for trans-1,2-dichloroethene recovery is greater than laboratory acceptance criteria and laboratory qualified (J4). No action is taken since the LCSD recovery for trans-1,2-dichloroethene is acceptable.

- SDG L1237210 - Analytical batch WG1507807: LCS tetrahydrofuran RPD is greater than laboratory acceptance criteria and laboratory qualified (J3). No action is taken since the recoveries are within criteria but are recovered wide.

- SDGs L1237219 and L1237678 - Analytical batch WG1508223: LCS tetrahydrofuran RPD is greater than laboratory acceptance criteria and laboratory qualified (J3). No action is taken since the recoveries are within criteria but are recovered wide.

- SDGs L1237219 and L1237678 - Analytical batch WG1508223: LCS % recovery for trans-1,2-dichloroethene recovery is greater than laboratory acceptance criteria and laboratory qualified (J4). No action is taken since the LCSD recovery for trans-1,2-dichloroethene is acceptable.

NWTPH-Gx Method:
The LCS % Rs for the target compound (gasoline) are within the laboratory control criteria for waters. In many cases, no measure of precision is provided with the analytical batch. No action is taken other than to note this.

Dissolved Gases (Methane, Ethane, and Ethene) by RSK 175:
The LCS/LCSD % Rs and RPDs for the target compound (dissolved gases) are within the laboratory control criteria for waters.

USEPA Method 6020B:
The LCS/LCSD % Rs and RPDs for the target compound (iron and manganese) are within the laboratory control criteria for waters.

General Chemistry (Alkalinity, Chloride, Sulfate, Nitrate, and TOC):
The LCS % Rs for general chemistry parameters are within the laboratory control criteria for waters.

Matrix Spike/Matrix Spike Duplicates

USEPA Method 8260D:
Matrix spike/matrix spike duplicate (MS/MSD) analyses were performed on client and on non-client samples within select analytical batches. The MS/MSD % Rs and RPD were acceptable and within laboratory control limit criteria for water samples.

NWTPH-Gx Method:
MS/MSD analyses were not performed. Refer to LCS results. No measure of precision was provided. No action was taken other than to note this.

Dissolved Gases (Methane, Ethane, and Ethene) by RSK 175:
MS/MSD analyses were not performed. Refer to LCS results and field duplicate sample for accuracy and precision data.

USEPA Method 6020B:
MS/MSD analyses were performed on client and on non-client samples within the analytical batches. The MS/MSD % Rs and RPD were acceptable and within laboratory control limit criteria for water samples with the following discussion:

- SDG L1234588: Matrix spike analysis was performed on client sample MW128-062920 and manganese spike results are laboratory qualified (V) to indicate that the sample concentration is greater than 4X the spike amount. Per Guidance no action is taken.

- SDGs L1237210 and L1237219: Matrix spike analysis was performed on client sample FMW-140-070720 (SDG L1237210) and manganese spike result is laboratory qualified (V) to indicate that the sample concentration is greater than 4X the spike amount. Per Guidance no action is taken.

General Chemistry (Alkalinity, Chloride, Sulfate, Nitrate, and TOC):
MS or MS/MSD analyses were performed on client and/or non-client samples within the analytical batches. In cases where MS/MSD spike analyses are not performed refer to LCS/LCSD or laboratory duplicate data for accuracy and precision data. The MS/MSD % Rs and RPDs are acceptable and within laboratory control limit criteria for water samples.

Other Quality Control Issues

No laboratory quality control issues were identified in the laboratory report with the following discussions:

- SDG L1234588: Sample MW128-062920 results for iron and manganese are laboratory qualified (O1) because serial dilution results are >10% D (results >50X MDL). **Sample MW128-062920 iron and manganese results are estimated and qualified (J).**

- Multiple SDGs: Selected sample narratives for alkalinity results indicate that several sample containers had some headspace and exposure to air may have impacted the reported results. No action was taken other than to note this.

- Electronic data deliverables (EDDs) for these SDGs were provided by the laboratory and data validator qualifiers were entered. In some cases, different chemical synonyms are used between the EDD and the hardcopy however associated Chemical Abstracts Service (CAS) numbers are provided in the EDD to confirm chemical identifications.

Compound Identification and Quantitation Limits

Results of the analyses were reported based on laboratory RDLs for all compounds. RDLs for selected compounds are elevated due to method-required dilutions. No action is taken other than to note this.

Gasoline and gasoline range organics are analyzed for via Volatile Organic Compounds (GC) by Washington State Method NWTPHGx (using a gas chromatograph/flame ionization detector (GC/FID)) and Pace reported gasoline range organic-NWTPH results. Several chlorinated VOC compounds (including cis-1,2-dichloroethene, trans-1,2-dichloroethene, trichloroethene, and tetrachloroethene) elute within the gasoline range organics (GRO) retention time range as specified by Washington State (detections falling between the toluene and dodecane range).

Non-petroleum organics (e.g. chlorinated VOC compounds) eluting within the gasoline range contribute to the GRO result and GRO results are likely biased high (J+). PES requested that Pace evaluate chromatograms associated with positive sample detections to confirm the potential presence of gasoline. Per PES's request Pace reviewed selected sample chromatograms against the gasoline standard chromatograms and assigned "no discernible petroleum pattern" to GRO results associated with this Task. PES assigned an additional project level qualifier (Z) to GRO results when the chromatogram for the sample does not match a discernible gasoline standard pattern. Associated chromatograms and qualified samples for this Task are as follows:

Sample ID	Laboratory Identification	Gasoline Range Organic Result (µg/L)	DV Qualifier	Data Validation Comments	Pace Chromatogram Review Notes
MW-181-070820	L1237678-02	15,400	Z, J+	Elevated chlorinated VOCs detected within the GRO elution range	No discernible petroleum pattern present.
MW-184-070820	L1237678-03	260	Z, J+	Elevated chlorinated VOCs detected within the GRO elution range	No discernible petroleum pattern present.
MW-182-070820	L1237678-05	1000	Z, J+	Elevated chlorinated VOCs detected within the GRO elution range	No discernible petroleum pattern present.
MW-172-070920	L1238146-02	4430	Z, J+	Elevated chlorinated VOCs detected within the GRO elution range	No discernible petroleum pattern present.
MW-170-070920	L1238146-03	24300	Z, J+	Elevated chlorinated VOCs detected within the GRO elution range	No discernible petroleum pattern present.

Project level qualifiers have been included to the PES's project database (Epiphany) as (ZJ+). Washington State EIM valid values were reviewed. In this case no Washington State EIM valid value descriptor is ideal, and the default estimated value (J) has been selected as the best match to qualify GRO (Z, J+) data.

Data Assessment

The laboratory data reported for this project were reviewed based on the criteria outlined in:

- USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (USEPA, 2017); and

- USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Superfund Methods Data Review (USEPA, 2017).

Data qualifiers are assigned and laboratory report pages with qualifiers are attached. All data, including qualified data, are judged to be acceptable for their intended use.

Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	515000		8450	20000	1	07/06/2020 20:03	WG1504015

Sample Narrative:

L1234588-01 WG1504015: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	18200		379	1000	1	06/30/2020 13:44	WG1501551
Nitrate	U		48.0	100	1	06/30/2020 13:44	WG1501551
Sulfate	U		594	5000	1	06/30/2020 13:44	WG1501551

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	4100		102	1000	1	07/06/2020 16:51	WG1504356

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	10400 J	O1	48.9	100	1	07/03/2020 18:50	WG1502304
Manganese	400 J	O1 V	1.32	5.00	1	07/03/2020 18:50	WG1502304

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	16900		2.87	6.78	10	07/09/2020 15:18	WG1506537
Ethane	8.59		0.296	1.29	1	07/07/2020 16:25	WG1504804
Ethene	69.8		0.422	1.27	1	07/07/2020 16:25	WG1504804

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	1.64		0.548	1.00	1	07/06/2020 19:25	WG1504320
Acrylonitrile	U		0.0760	0.500	1	07/06/2020 19:25	WG1504320
Benzene	16.9		0.0160	0.0400	1	07/06/2020 19:25	WG1504320
Bromobenzene	U		0.0420	0.500	1	07/06/2020 19:25	WG1504320
Bromodichloromethane	U		0.0315	0.100	1	07/06/2020 19:25	WG1504320
Bromoform	U		0.239	1.00	1	07/06/2020 19:25	WG1504320
Bromomethane	U		0.148	0.500	1	07/06/2020 19:25	WG1504320
n-Butylbenzene	U		0.153	0.500	1	07/06/2020 19:25	WG1504320
sec-Butylbenzene	U		0.101	0.500	1	07/06/2020 19:25	WG1504320
tert-Butylbenzene	U		0.0620	0.200	1	07/06/2020 19:25	WG1504320
Carbon tetrachloride	U	~~J4~~	0.0432	0.200	1	07/06/2020 19:25	WG1504320
Chlorobenzene	U		0.0229	0.100	1	07/06/2020 19:25	WG1504320
Chlorodibromomethane	U	~~J4~~	0.0180	0.100	1	07/06/2020 19:25	WG1504320
Chloroethane	U		0.0432	0.200	1	07/06/2020 19:25	WG1504320
Chloroform	U		0.0166	0.100	1	07/06/2020 19:25	WG1504320
Chloromethane	U		0.0556	0.500	1	07/06/2020 19:25	WG1504320
2-Chlorotoluene	U		0.0368	0.100	1	07/06/2020 19:25	WG1504320
4-Chlorotoluene	U		0.0452	0.200	1	07/06/2020 19:25	WG1504320
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	07/06/2020 19:25	WG1504320
1,2-Dibromoethane	U		0.0210	0.100	1	07/06/2020 19:25	WG1504320

JC 7/27/2020

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Dibromomethane	U		0.0400	0.200	1	07/06/2020 19:25	WG1504320
1,2-Dichlorobenzene	U		0.0580	0.200	1	07/06/2020 19:25	WG1504320
1,3-Dichlorobenzene	U		0.0680	0.200	1	07/06/2020 19:25	WG1504320
1,4-Dichlorobenzene	U		0.0788	0.200	1	07/06/2020 19:25	WG1504320
Dichlorodifluoromethane	U		0.0327	0.100	1	07/06/2020 19:25	WG1504320
1,1-Dichloroethane	0.0730	J	0.0230	0.100	1	07/06/2020 19:25	WG1504320
1,2-Dichloroethane	U		0.0190	0.100	1	07/06/2020 19:25	WG1504320
1,1-Dichloroethene	U		0.0200	0.100	1	07/06/2020 19:25	WG1504320
cis-1,2-Dichloroethene	0.618		0.0276	0.100	1	07/06/2020 19:25	WG1504320
trans-1,2-Dichloroethene	U		0.0572	0.200	1	07/06/2020 19:25	WG1504320
1,2-Dichloropropane	U		0.0508	0.200	1	07/06/2020 19:25	WG1504320
1,1-Dichloropropene	U		0.0280	0.100	1	07/06/2020 19:25	WG1504320
1,3-Dichloropropane	U		0.0700	0.200	1	07/06/2020 19:25	WG1504320
cis-1,3-Dichloropropene	U		0.0271	0.100	1	07/06/2020 19:25	WG1504320
trans-1,3-Dichloropropene	U		0.0612	0.200	1	07/06/2020 19:25	WG1504320
2,2-Dichloropropane	U		0.0317	0.100	1	07/06/2020 19:25	WG1504320
Di-isopropyl ether	0.0840		0.0140	0.0400	1	07/06/2020 19:25	WG1504320
Ethylbenzene	U		0.0212	0.100	1	07/06/2020 19:25	WG1504320
Hexachloro-1,3-butadiene	U	~~J4~~	0.508	1.00	1	07/06/2020 19:25	WG1504320
Isopropylbenzene	U		0.0345	0.100	1	07/06/2020 19:25	WG1504320
p-Isopropyltoluene	U		0.0932	0.200	1	07/06/2020 19:25	WG1504320
2-Butanone (MEK)	U		0.500	1.00	1	07/06/2020 19:25	WG1504320
Methylene Chloride	U		0.265	1.00	1	07/06/2020 19:25	WG1504320
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	07/06/2020 19:25	WG1504320
Methyl tert-butyl ether	U		0.0118	0.0400	1	07/06/2020 19:25	WG1504320
Naphthalene	U		0.124	0.500	1	07/06/2020 19:25	WG1504320
n-Propylbenzene	U		0.0472	0.200	1	07/06/2020 19:25	WG1504320
Styrene	U		0.109	0.500	1	07/06/2020 19:25	WG1504320
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	07/06/2020 19:25	WG1504320
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	07/06/2020 19:25	WG1504320
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	07/06/2020 19:25	WG1504320
Tetrachloroethene	U		0.0280	0.100	1	07/06/2020 19:25	WG1504320
Toluene	U		0.0500	0.200	1	07/06/2020 19:25	WG1504320
1,2,3-Trichlorobenzene	U		0.0250	0.500	1	07/06/2020 19:25	WG1504320
1,2,4-Trichlorobenzene	U		0.193	0.500	1	07/06/2020 19:25	WG1504320
1,1,1-Trichloroethane	U		0.0110	0.100	1	07/06/2020 19:25	WG1504320
1,1,2-Trichloroethane	U		0.0353	0.100	1	07/06/2020 19:25	WG1504320
Trichloroethene	U		0.0160	0.0400	1	07/06/2020 19:25	WG1504320
Trichlorofluoromethane	U		0.0200	0.100	1	07/06/2020 19:25	WG1504320
1,2,3-Trichloropropane	U		0.204	0.500	1	07/06/2020 19:25	WG1504320
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	07/06/2020 19:25	WG1504320
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	07/06/2020 19:25	WG1504320
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	07/06/2020 19:25	WG1504320
Vinyl chloride	31.3		0.0273	0.100	1	07/06/2020 19:25	WG1504320
Xylenes, Total	U		0.191	0.260	1	07/06/2020 19:25	WG1504320
Ethyl Ether	U		0.0170	0.100	1	07/06/2020 19:25	WG1504320
Tetrahydrofuran	U	~~J4~~	0.0900	0.500	1	07/06/2020 19:25	WG1504320
Iodomethane	U		0.242	0.500	1	07/06/2020 19:25	WG1504320
Allyl chloride	U		0.580	1.00	1	07/06/2020 19:25	WG1504320
Trans-1,4-Dichloro-2-butene	U		0.0560	0.200	1	07/06/2020 19:25	WG1504320
(S) Toluene-d8	*104*			*75.0-131*		*07/06/2020 19:25*	WG1504320
(S) 4-Bromofluorobenzene	*98.0*			*67.0-138*		*07/06/2020 19:25*	WG1504320
(S) 1,2-Dichloroethane-d4	*123*			*70.0-130*		*07/06/2020 19:25*	WG1504320

JC 7/27/2020

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	355000		8450	20000	1	07/13/2020 13:57	WG1507981

Sample Narrative:

L1237210-01 WG1507981: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	22500		379	1000	1	07/08/2020 15:21	WG1505664
Nitrate	U		48.0	100	1	07/08/2020 15:21	WG1505664
Sulfate	97000		594	5000	1	07/08/2020 15:21	WG1505664

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	3710		102	1000	1	07/10/2020 13:43	WG1506939

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	12800		48.9	100	1	07/10/2020 16:28	WG1506043
Manganese	1990		1.32	5.00	1	07/10/2020 16:28	WG1506043

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	2240		0.287	0.678	1	07/10/2020 13:31	WG1506874
Ethane	42.6		0.296	1.29	1	07/10/2020 13:31	WG1506874
Ethene	U		0.422	1.27	1	07/10/2020 13:31	WG1506874

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U		5.48	10.0	10	07/13/2020 22:27	WG1507807
Acrylonitrile	U		0.760	5.00	10	07/13/2020 22:27	WG1507807
Benzene	28.8		0.160	0.400	10	07/13/2020 22:27	WG1507807
Bromobenzene	U		0.420	5.00	10	07/13/2020 22:27	WG1507807
Bromodichloromethane	U		0.315	1.00	10	07/13/2020 22:27	WG1507807
Bromoform	U		2.39	10.0	10	07/13/2020 22:27	WG1507807
Bromomethane	U		1.48	5.00	10	07/13/2020 22:27	WG1507807
n-Butylbenzene	U		1.53	5.00	10	07/13/2020 22:27	WG1507807
sec-Butylbenzene	U		1.01	5.00	10	07/13/2020 22:27	WG1507807
tert-Butylbenzene	U		0.620	2.00	10	07/13/2020 22:27	WG1507807
Carbon tetrachloride	U		0.432	2.00	10	07/13/2020 22:27	WG1507807
Chlorobenzene	U		0.229	1.00	10	07/13/2020 22:27	WG1507807
Chlorodibromomethane	U		0.180	1.00	10	07/13/2020 22:27	WG1507807
Chloroethane	U		0.432	2.00	10	07/13/2020 22:27	WG1507807
Chloroform	0.600	J	0.166	1.00	10	07/13/2020 22:27	WG1507807
Chloromethane	U		0.556	5.00	10	07/13/2020 22:27	WG1507807
2-Chlorotoluene	U		0.368	1.00	10	07/13/2020 22:27	WG1507807
4-Chlorotoluene	U		0.452	2.00	10	07/13/2020 22:27	WG1507807
1,2-Dibromo-3-Chloropropane	U UJ	J0	2.04	10.0	10	07/13/2020 22:27	WG1507807
1,2-Dibromoethane	U		0.210	1.00	10	07/13/2020 22:27	WG1507807

JC 7/27/2020

MW-322-070720

Collected date/time: 07/07/20 09:20

SAMPLE RESULTS - 01

L1237210

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Dibromomethane	U		0.400	2.00	10	07/13/2020 22:27	WG1507807
1,2-Dichlorobenzene	U		0.580	2.00	10	07/13/2020 22:27	WG1507807
1,3-Dichlorobenzene	U		0.680	2.00	10	07/13/2020 22:27	WG1507807
1,4-Dichlorobenzene	U		0.788	2.00	10	07/13/2020 22:27	WG1507807
Dichlorodifluoromethane	U		0.327	1.00	10	07/13/2020 22:27	WG1507807
1,1-Dichloroethane	0.700	J	0.230	1.00	10	07/13/2020 22:27	WG1507807
1,2-Dichloroethane	0.720	J	0.190	1.00	10	07/13/2020 22:27	WG1507807
1,1-Dichloroethene	9.85		0.200	1.00	10	07/13/2020 22:27	WG1507807
cis-1,2-Dichloroethene	547		0.276	1.00	10	07/13/2020 22:27	WG1507807
trans-1,2-Dichloroethene	3.91	~~J4~~	0.572	2.00	10	07/13/2020 22:27	WG1507807
1,2-Dichloropropane	0.710	J	0.508	2.00	10	07/13/2020 22:27	WG1507807
1,1-Dichloropropene	U		0.280	1.00	10	07/13/2020 22:27	WG1507807
1,3-Dichloropropane	U		0.700	2.00	10	07/13/2020 22:27	WG1507807
cis-1,3-Dichloropropene	U		0.271	1.00	10	07/13/2020 22:27	WG1507807
trans-1,3-Dichloropropene	U		0.612	2.00	10	07/13/2020 22:27	WG1507807
2,2-Dichloropropane	U		0.317	1.00	10	07/13/2020 22:27	WG1507807
Di-isopropyl ether	0.250	J	0.140	0.400	10	07/13/2020 22:27	WG1507807
Ethylbenzene	U		0.212	1.00	10	07/13/2020 22:27	WG1507807
Hexachloro-1,3-butadiene	U		5.08	10.0	10	07/13/2020 22:27	WG1507807
Isopropylbenzene	U		0.345	1.00	10	07/13/2020 22:27	WG1507807
p-Isopropyltoluene	U		0.932	2.00	10	07/13/2020 22:27	WG1507807
2-Butanone (MEK)	U		5.00	10.0	10	07/13/2020 22:27	WG1507807
Methylene Chloride	U		2.65	10.0	10	07/13/2020 22:27	WG1507807
4-Methyl-2-pentanone (MIBK)	U		4.00	10.0	10	07/13/2020 22:27	WG1507807
Methyl tert-butyl ether	0.400	J	0.118	0.400	10	07/13/2020 22:27	WG1507807
Naphthalene	U		1.24	5.00	10	07/13/2020 22:27	WG1507807
n-Propylbenzene	U		0.472	2.00	10	07/13/2020 22:27	WG1507807
Styrene	U		1.09	5.00	10	07/13/2020 22:27	WG1507807
1,1,1,2-Tetrachloroethane	U		0.200	1.00	10	07/13/2020 22:27	WG1507807
1,1,2,2-Tetrachloroethane	U		0.156	1.00	10	07/13/2020 22:27	WG1507807
1,1,2-Trichlorotrifluoroethane	U		0.270	1.00	10	07/13/2020 22:27	WG1507807
Tetrachloroethene	117		0.280	1.00	10	07/13/2020 22:27	WG1507807
Toluene	0.970	J	0.500	2.00	10	07/13/2020 22:27	WG1507807
1,2,3-Trichlorobenzene	U		0.250	5.00	10	07/13/2020 22:27	WG1507807
1,2,4-Trichlorobenzene	U		1.93	5.00	10	07/13/2020 22:27	WG1507807
1,1,1-Trichloroethane	U		0.110	1.00	10	07/13/2020 22:27	WG1507807
1,1,2-Trichloroethane	U		0.353	1.00	10	07/13/2020 22:27	WG1507807
Trichloroethene	494		0.160	0.400	10	07/13/2020 22:27	WG1507807
Trichlorofluoromethane	U		0.200	1.00	10	07/13/2020 22:27	WG1507807
1,2,3-Trichloropropane	U		2.04	5.00	10	07/13/2020 22:27	WG1507807
1,2,4-Trimethylbenzene	U		0.464	2.00	10	07/13/2020 22:27	WG1507807
1,2,3-Trimethylbenzene	U		0.460	2.00	10	07/13/2020 22:27	WG1507807
1,3,5-Trimethylbenzene	U		0.432	2.00	10	07/13/2020 22:27	WG1507807
Vinyl chloride	123		0.273	1.00	10	07/13/2020 22:27	WG1507807
Xylenes, Total	U		1.91	2.60	10	07/13/2020 22:27	WG1507807
Ethyl Ether	0.400	J	0.170	1.00	10	07/13/2020 22:27	WG1507807
Tetrahydrofuran	U UJ	J0 ~~J3~~	0.900	5.00	10	07/13/2020 22:27	WG1507807
Iodomethane	U		2.42	5.00	10	07/13/2020 22:27	WG1507807
Allyl chloride	U		5.80	10.0	10	07/13/2020 22:27	WG1507807
Trans-1,4-Dichloro-2-butene	U UJ	J0	0.560	2.00	10	07/13/2020 22:27	WG1507807
(S) Toluene-d8	*95.4*			*75.0-131*		*07/13/2020 22:27*	WG1507807
(S) 4-Bromofluorobenzene	*97.8*			*67.0-138*		*07/13/2020 22:27*	WG1507807
(S) 1,2-Dichloroethane-d4	*111*			*70.0-130*		*07/13/2020 22:27*	WG1507807

JC 7/27/2020

Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	316000		8450	20000	1	07/13/2020 14:04	WG1507981

Sample Narrative:

L1237210-02 WG1507981: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	16600		379	1000	1	07/08/2020 15:32	WG1505664
Nitrate	U		48.0	100	1	07/08/2020 15:32	WG1505664
Sulfate	5590		594	5000	1	07/08/2020 15:32	WG1505664

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	3490		102	1000	1	07/10/2020 13:54	WG1506939

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	9510		48.9	100	1	07/10/2020 16:31	WG1506043
Manganese	900		1.32	5.00	1	07/10/2020 16:31	WG1506043

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	10100		2.87	6.78	10	07/14/2020 16:51	WG1506879
Ethane	U		0.296	1.29	1	07/10/2020 13:41	WG1506874
Ethene	U		0.422	1.27	1	07/10/2020 13:41	WG1506874

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l		Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch	
Acetone	U			0.548	1.00	1	07/10/2020 02:47	WG1506638	
Acrylonitrile	U	UJ	J0	0.0760	0.500	1	07/10/2020 02:47	WG1506638	
Benzene	U			0.0160	0.0400	1	07/10/2020 02:47	WG1506638	
Bromobenzene	U			0.0420	0.500	1	07/10/2020 02:47	WG1506638	
Bromodichloromethane	U			0.0315	0.100	1	07/10/2020 02:47	WG1506638	
Bromoform	U			0.239	1.00	1	07/10/2020 02:47	WG1506638	
Bromomethane	U			0.148	0.500	1	07/10/2020 02:47	WG1506638	
n-Butylbenzene	U			0.153	0.500	1	07/10/2020 02:47	WG1506638	
sec-Butylbenzene	U			0.101	0.500	1	07/10/2020 02:47	WG1506638	
tert-Butylbenzene	U			0.0620	0.200	1	07/10/2020 02:47	WG1506638	
Carbon tetrachloride	U			0.0432	0.200	1	07/10/2020 02:47	WG1506638	
Chlorobenzene	U			0.0229	0.100	1	07/10/2020 02:47	WG1506638	
Chlorodibromomethane	U			0.0180	0.100	1	07/10/2020 02:47	WG1506638	
Chloroethane	U			0.0432	0.200	1	07/10/2020 02:47	WG1506638	
Chloroform	U			0.0166	0.100	1	07/10/2020 02:47	WG1506638	
Chloromethane	U			0.0556	0.500	1	07/10/2020 02:47	WG1506638	
2-Chlorotoluene	U			0.0368	0.100	1	07/10/2020 02:47	WG1506638	
4-Chlorotoluene	U			0.0452	0.200	1	07/10/2020 02:47	WG1506638	
1,2-Dibromo-3-Chloropropane	U	UJ	J0	0.204	1.00	1	07/10/2020 02:47	WG1506638	JC 7/27/2020
1,2-Dibromoethane	U			0.0210	0.100	1	07/10/2020 02:47	WG1506638	

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Dibromomethane	U		0.0400	0.200	1	07/10/2020 02:47	WG1506638
1,2-Dichlorobenzene	U UJ	J4	0.0580	0.200	1	07/10/2020 02:47	WG1506638
1,3-Dichlorobenzene	U		0.0680	0.200	1	07/10/2020 02:47	WG1506638
1,4-Dichlorobenzene	U		0.0788	0.200	1	07/10/2020 02:47	WG1506638
Dichlorodifluoromethane	U		0.0327	0.100	1	07/10/2020 02:47	WG1506638
1,1-Dichloroethane	U		0.0230	0.100	1	07/10/2020 02:47	WG1506638
1,2-Dichloroethane	U		0.0190	0.100	1	07/10/2020 02:47	WG1506638
1,1-Dichloroethene	U		0.0200	0.100	1	07/10/2020 02:47	WG1506638
cis-1,2-Dichloroethene	0.0580	J	0.0276	0.100	1	07/10/2020 02:47	WG1506638
trans-1,2-Dichloroethene	U		0.0572	0.200	1	07/10/2020 02:47	WG1506638
1,2-Dichloropropane	U		0.0508	0.200	1	07/10/2020 02:47	WG1506638
1,1-Dichloropropene	U		0.0280	0.100	1	07/10/2020 02:47	WG1506638
1,3-Dichloropropane	U		0.0700	0.200	1	07/10/2020 02:47	WG1506638
cis-1,3-Dichloropropene	U		0.0271	0.100	1	07/10/2020 02:47	WG1506638
trans-1,3-Dichloropropene	U		0.0612	0.200	1	07/10/2020 02:47	WG1506638
2,2-Dichloropropane	U		0.0317	0.100	1	07/10/2020 02:47	WG1506638
Di-isopropyl ether	U		0.0140	0.0400	1	07/10/2020 02:47	WG1506638
Ethylbenzene	U		0.0212	0.100	1	07/10/2020 02:47	WG1506638
Hexachloro-1,3-butadiene	U		0.508	1.00	1	07/10/2020 02:47	WG1506638
Isopropylbenzene	U		0.0345	0.100	1	07/10/2020 02:47	WG1506638
p-Isopropyltoluene	U		0.0932	0.200	1	07/10/2020 02:47	WG1506638
2-Butanone (MEK)	U		0.500	1.00	1	07/10/2020 02:47	WG1506638
Methylene Chloride	U		0.265	1.00	1	07/10/2020 02:47	WG1506638
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	07/10/2020 02:47	WG1506638
Methyl tert-butyl ether	U		0.0118	0.0400	1	07/10/2020 02:47	WG1506638
Naphthalene	U		0.124	0.500	1	07/10/2020 02:47	WG1506638
n-Propylbenzene	U		0.0472	0.200	1	07/10/2020 02:47	WG1506638
Styrene	U		0.109	0.500	1	07/10/2020 02:47	WG1506638
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	07/10/2020 02:47	WG1506638
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	07/10/2020 02:47	WG1506638
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	07/10/2020 02:47	WG1506638
Tetrachloroethene	0.260		0.0280	0.100	1	07/10/2020 02:47	WG1506638
Toluene	0.351		0.0500	0.200	1	07/10/2020 02:47	WG1506638
1,2,3-Trichlorobenzene	U		0.0250	0.500	1	07/10/2020 02:47	WG1506638
1,2,4-Trichlorobenzene	U		0.193	0.500	1	07/10/2020 02:47	WG1506638
1,1,1-Trichloroethane	U		0.0110	0.100	1	07/10/2020 02:47	WG1506638
1,1,2-Trichloroethane	U		0.0353	0.100	1	07/10/2020 02:47	WG1506638
Trichloroethene	0.267		0.0160	0.0400	1	07/10/2020 02:47	WG1506638
Trichlorofluoromethane	U		0.0200	0.100	1	07/10/2020 02:47	WG1506638
1,2,3-Trichloropropane	U		0.204	0.500	1	07/10/2020 02:47	WG1506638
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	07/10/2020 02:47	WG1506638
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	07/10/2020 02:47	WG1506638
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	07/10/2020 02:47	WG1506638
Vinyl chloride	U		0.0273	0.100	1	07/10/2020 02:47	WG1506638
Xylenes, Total	U		0.191	0.260	1	07/10/2020 02:47	WG1506638
Ethyl Ether	U		0.0170	0.100	1	07/10/2020 02:47	WG1506638
Tetrahydrofuran	U		0.0900	0.500	1	07/10/2020 02:47	WG1506638
Iodomethane	U		0.242	0.500	1	07/10/2020 02:47	WG1506638
Allyl chloride	U		0.580	1.00	1	07/10/2020 02:47	WG1506638
Trans-1,4-Dichloro-2-butene	U		0.0560	0.200	1	07/10/2020 02:47	WG1506638
(S) Toluene-d8	*100*			*75.0-131*		*07/10/2020 02:47*	WG1506638
(S) 4-Bromofluorobenzene	*94.4*			*67.0-138*		*07/10/2020 02:47*	WG1506638
(S) 1,2-Dichloroethane-d4	*104*			*70.0-130*		*07/10/2020 02:47*	WG1506638

JC 7/27/2020

Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	574000		8450	20000	1	07/13/2020 14:12	WG1507981

Sample Narrative:

L1237210-03 WG1507981: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	15100		379	1000	1	07/08/2020 15:42	WG1505664
Nitrate	U		48.0	100	1	07/08/2020 15:42	WG1505664
Sulfate	U		594	5000	1	07/08/2020 15:42	WG1505664

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	3690		102	1000	1	07/10/2020 15:36	WG1506939

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	9970		48.9	100	1	07/10/2020 16:34	WG1506043
Manganese	243		1.32	5.00	1	07/10/2020 16:34	WG1506043

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	25300		2.87	6.78	10	07/14/2020 16:54	WG1506879
Ethane	12.6		0.296	1.29	1	07/10/2020 14:12	WG1506874
Ethene	U		0.422	1.27	1	07/10/2020 14:12	WG1506874

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U		0.548	1.00	1	07/10/2020 03:06	WG1506638
Acrylonitrile	U	UJ J0	0.0760	0.500	1	07/10/2020 03:06	WG1506638
Benzene	10.3		0.0160	0.0400	1	07/10/2020 03:06	WG1506638
Bromobenzene	U		0.0420	0.500	1	07/10/2020 03:06	WG1506638
Bromodichloromethane	U		0.0315	0.100	1	07/10/2020 03:06	WG1506638
Bromoform	U		0.239	1.00	1	07/10/2020 03:06	WG1506638
Bromomethane	U		0.148	0.500	1	07/10/2020 03:06	WG1506638
n-Butylbenzene	U		0.153	0.500	1	07/10/2020 03:06	WG1506638
sec-Butylbenzene	U		0.101	0.500	1	07/10/2020 03:06	WG1506638
tert-Butylbenzene	U		0.0620	0.200	1	07/10/2020 03:06	WG1506638
Carbon tetrachloride	U		0.0432	0.200	1	07/10/2020 03:06	WG1506638
Chlorobenzene	U		0.0229	0.100	1	07/10/2020 03:06	WG1506638
Chlorodibromomethane	U		0.0180	0.100	1	07/10/2020 03:06	WG1506638
Chloroethane	U		0.0432	0.200	1	07/10/2020 03:06	WG1506638
Chloroform	U		0.0166	0.100	1	07/10/2020 03:06	WG1506638
Chloromethane	U		0.0556	0.500	1	07/10/2020 03:06	WG1506638
2-Chlorotoluene	U		0.0368	0.100	1	07/10/2020 03:06	WG1506638
4-Chlorotoluene	U		0.0452	0.200	1	07/10/2020 03:06	WG1506638
1,2-Dibromo-3-Chloropropane	U	UJ J0	0.204	1.00	1	07/10/2020 03:06	WG1506638
1,2-Dibromoethane	U		0.0210	0.100	1	07/10/2020 03:06	WG1506638

JC 7/27/2020

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Dibromomethane	U		0.0400	0.200	1	07/10/2020 03:06	WG1506638
1,2-Dichlorobenzene	U UJ	J4	0.0580	0.200	1	07/10/2020 03:06	WG1506638
1,3-Dichlorobenzene	U		0.0680	0.200	1	07/10/2020 03:06	WG1506638
1,4-Dichlorobenzene	U		0.0788	0.200	1	07/10/2020 03:06	WG1506638
Dichlorodifluoromethane	U		0.0327	0.100	1	07/10/2020 03:06	WG1506638
1,1-Dichloroethane	U		0.0230	0.100	1	07/10/2020 03:06	WG1506638
1,2-Dichloroethane	U		0.0190	0.100	1	07/10/2020 03:06	WG1506638
1,1-Dichloroethene	U		0.0200	0.100	1	07/10/2020 03:06	WG1506638
cis-1,2-Dichloroethene	1.03		0.0276	0.100	1	07/10/2020 03:06	WG1506638
trans-1,2-Dichloroethene	U		0.0572	0.200	1	07/10/2020 03:06	WG1506638
1,2-Dichloropropane	U		0.0508	0.200	1	07/10/2020 03:06	WG1506638
1,1-Dichloropropene	U		0.0280	0.100	1	07/10/2020 03:06	WG1506638
1,3-Dichloropropane	U		0.0700	0.200	1	07/10/2020 03:06	WG1506638
cis-1,3-Dichloropropene	U		0.0271	0.100	1	07/10/2020 03:06	WG1506638
trans-1,3-Dichloropropene	U		0.0612	0.200	1	07/10/2020 03:06	WG1506638
2,2-Dichloropropane	U		0.0317	0.100	1	07/10/2020 03:06	WG1506638
Di-isopropyl ether	0.0570		0.0140	0.0400	1	07/10/2020 03:06	WG1506638
Ethylbenzene	U		0.0212	0.100	1	07/10/2020 03:06	WG1506638
Hexachloro-1,3-butadiene	U		0.508	1.00	1	07/10/2020 03:06	WG1506638
Isopropylbenzene	U		0.0345	0.100	1	07/10/2020 03:06	WG1506638
p-Isopropyltoluene	U		0.0932	0.200	1	07/10/2020 03:06	WG1506638
2-Butanone (MEK)	U		0.500	1.00	1	07/10/2020 03:06	WG1506638
Methylene Chloride	U		0.265	1.00	1	07/10/2020 03:06	WG1506638
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	07/10/2020 03:06	WG1506638
Methyl tert-butyl ether	U		0.0118	0.0400	1	07/10/2020 03:06	WG1506638
Naphthalene	U		0.124	0.500	1	07/10/2020 03:06	WG1506638
n-Propylbenzene	U		0.0472	0.200	1	07/10/2020 03:06	WG1506638
Styrene	U		0.109	0.500	1	07/10/2020 03:06	WG1506638
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	07/10/2020 03:06	WG1506638
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	07/10/2020 03:06	WG1506638
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	07/10/2020 03:06	WG1506638
Tetrachloroethene	U		0.0280	0.100	1	07/10/2020 03:06	WG1506638
Toluene	U		0.0500	0.200	1	07/10/2020 03:06	WG1506638
1,2,3-Trichlorobenzene	U		0.0250	0.500	1	07/10/2020 03:06	WG1506638
1,2,4-Trichlorobenzene	U		0.193	0.500	1	07/10/2020 03:06	WG1506638
1,1,1-Trichloroethane	U		0.0110	0.100	1	07/10/2020 03:06	WG1506638
1,1,2-Trichloroethane	U		0.0353	0.100	1	07/10/2020 03:06	WG1506638
Trichloroethene	U		0.0160	0.0400	1	07/10/2020 03:06	WG1506638
Trichlorofluoromethane	U		0.0200	0.100	1	07/10/2020 03:06	WG1506638
1,2,3-Trichloropropane	U		0.204	0.500	1	07/10/2020 03:06	WG1506638
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	07/10/2020 03:06	WG1506638
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	07/10/2020 03:06	WG1506638
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	07/10/2020 03:06	WG1506638
Vinyl chloride	20.7		0.0273	0.100	1	07/10/2020 03:06	WG1506638
Xylenes, Total	U		0.191	0.260	1	07/10/2020 03:06	WG1506638
Ethyl Ether	U		0.0170	0.100	1	07/10/2020 03:06	WG1506638
Tetrahydrofuran	U		0.0900	0.500	1	07/10/2020 03:06	WG1506638
Iodomethane	U		0.242	0.500	1	07/10/2020 03:06	WG1506638
Allyl chloride	U		0.580	1.00	1	07/10/2020 03:06	WG1506638
Trans-1,4-Dichloro-2-butene	U		0.0560	0.200	1	07/10/2020 03:06	WG1506638
(S) Toluene-d8	*102*			*75.0-131*		*07/10/2020 03:06*	WG1506638
(S) 4-Bromofluorobenzene	*91.8*			*67.0-138*		*07/10/2020 03:06*	WG1506638
(S) 1,2-Dichloroethane-d4	*102*			*70.0-130*		*07/10/2020 03:06*	WG1506638

JC 7/27/2020

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Wet Chemistry by Method 2320 B-2011

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Alkalinity	1280000		8450	20000	1	07/13/2020 14:20	WG1507981

Sample Narrative:

L1237210-04 WG1507981: Endpoint pH 4.5

Wet Chemistry by Method 9056A

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Chloride	23500		379	1000	1	07/08/2020 15:53	WG1505664
Nitrate	U		48.0	100	1	07/08/2020 15:53	WG1505664
Sulfate	1210	J	594	5000	1	07/08/2020 15:53	WG1505664

Wet Chemistry by Method 9060A

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
TOC (Total Organic Carbon)	9920		102	1000	1	07/10/2020 15:51	WG1506939

Metals (ICPMS) by Method 6020B

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Iron	16200		48.9	100	1	07/10/2020 16:37	WG1506043
Manganese	701		1.32	5.00	1	07/10/2020 16:37	WG1506043

Volatile Organic Compounds (GC) by Method RSK175

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Methane	32500		2.87	6.78	10	07/14/2020 17:00	WG1506879
Ethane	U		0.296	1.29	1	07/10/2020 14:15	WG1506874
Ethene	U		0.422	1.27	1	07/10/2020 14:15	WG1506874

Volatile Organic Compounds (GC/MS) by Method 8260D

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Acetone	U		0.548	1.00	1	07/10/2020 03:25	WG1506638
Acrylonitrile	U	UJ J0	0.0760	0.500	1	07/10/2020 03:25	WG1506638
Benzene	U		0.0160	0.0400	1	07/10/2020 03:25	WG1506638
Bromobenzene	U		0.0420	0.500	1	07/10/2020 03:25	WG1506638
Bromodichloromethane	U		0.0315	0.100	1	07/10/2020 03:25	WG1506638
Bromoform	U		0.239	1.00	1	07/10/2020 03:25	WG1506638
Bromomethane	U		0.148	0.500	1	07/10/2020 03:25	WG1506638
n-Butylbenzene	U		0.153	0.500	1	07/10/2020 03:25	WG1506638
sec-Butylbenzene	U		0.101	0.500	1	07/10/2020 03:25	WG1506638
tert-Butylbenzene	U		0.0620	0.200	1	07/10/2020 03:25	WG1506638
Carbon tetrachloride	U		0.0432	0.200	1	07/10/2020 03:25	WG1506638
Chlorobenzene	U		0.0229	0.100	1	07/10/2020 03:25	WG1506638
Chlorodibromomethane	U		0.0180	0.100	1	07/10/2020 03:25	WG1506638
Chloroethane	U		0.0432	0.200	1	07/10/2020 03:25	WG1506638
Chloroform	U		0.0166	0.100	1	07/10/2020 03:25	WG1506638
Chloromethane	U		0.0556	0.500	1	07/10/2020 03:25	WG1506638
2-Chlorotoluene	U		0.0368	0.100	1	07/10/2020 03:25	WG1506638
4-Chlorotoluene	U		0.0452	0.200	1	07/10/2020 03:25	WG1506638
1,2-Dibromo-3-Chloropropane	U	UJ J0	0.204	1.00	1	07/10/2020 03:25	WG1506638
1,2-Dibromoethane	U		0.0210	0.100	1	07/10/2020 03:25	WG1506638

JC 7/27/2020

MW-334-070720
Collected date/time: 07/07/20 11:55

SAMPLE RESULTS - 04

L1237210

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Dibromomethane	U		0.0400	0.200	1	07/10/2020 03:25	WG1506638
1,2-Dichlorobenzene	U UJ	J4	0.0580	0.200	1	07/10/2020 03:25	WG1506638
1,3-Dichlorobenzene	U		0.0680	0.200	1	07/10/2020 03:25	WG1506638
1,4-Dichlorobenzene	U		0.0788	0.200	1	07/10/2020 03:25	WG1506638
Dichlorodifluoromethane	U		0.0327	0.100	1	07/10/2020 03:25	WG1506638
1,1-Dichloroethane	U		0.0230	0.100	1	07/10/2020 03:25	WG1506638
1,2-Dichloroethane	U		0.0190	0.100	1	07/10/2020 03:25	WG1506638
1,1-Dichloroethene	U		0.0200	0.100	1	07/10/2020 03:25	WG1506638
cis-1,2-Dichloroethene	U		0.0276	0.100	1	07/10/2020 03:25	WG1506638
trans-1,2-Dichloroethene	U		0.0572	0.200	1	07/10/2020 03:25	WG1506638
1,2-Dichloropropane	U		0.0508	0.200	1	07/10/2020 03:25	WG1506638
1,1-Dichloropropene	U		0.0280	0.100	1	07/10/2020 03:25	WG1506638
1,3-Dichloropropane	U		0.0700	0.200	1	07/10/2020 03:25	WG1506638
cis-1,3-Dichloropropene	U		0.0271	0.100	1	07/10/2020 03:25	WG1506638
trans-1,3-Dichloropropene	U		0.0612	0.200	1	07/10/2020 03:25	WG1506638
2,2-Dichloropropane	U		0.0317	0.100	1	07/10/2020 03:25	WG1506638
Di-isopropyl ether	U		0.0140	0.0400	1	07/10/2020 03:25	WG1506638
Ethylbenzene	U		0.0212	0.100	1	07/10/2020 03:25	WG1506638
Hexachloro-1,3-butadiene	U		0.508	1.00	1	07/10/2020 03:25	WG1506638
Isopropylbenzene	U		0.0345	0.100	1	07/10/2020 03:25	WG1506638
p-Isopropyltoluene	U		0.0932	0.200	1	07/10/2020 03:25	WG1506638
2-Butanone (MEK)	U		0.500	1.00	1	07/10/2020 03:25	WG1506638
Methylene Chloride	U		0.265	1.00	1	07/10/2020 03:25	WG1506638
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	07/10/2020 03:25	WG1506638
Methyl tert-butyl ether	U		0.0118	0.0400	1	07/10/2020 03:25	WG1506638
Naphthalene	U		0.124	0.500	1	07/10/2020 03:25	WG1506638
n-Propylbenzene	U		0.0472	0.200	1	07/10/2020 03:25	WG1506638
Styrene	U		0.109	0.500	1	07/10/2020 03:25	WG1506638
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	07/10/2020 03:25	WG1506638
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	07/10/2020 03:25	WG1506638
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	07/10/2020 03:25	WG1506638
Tetrachloroethene	U		0.0280	0.100	1	07/10/2020 03:25	WG1506638
Toluene	1.61		0.0500	0.200	1	07/10/2020 03:25	WG1506638
1,2,3-Trichlorobenzene	U		0.0250	0.500	1	07/10/2020 03:25	WG1506638
1,2,4-Trichlorobenzene	U		0.193	0.500	1	07/10/2020 03:25	WG1506638
1,1,1-Trichloroethane	U		0.0110	0.100	1	07/10/2020 03:25	WG1506638
1,1,2-Trichloroethane	U		0.0353	0.100	1	07/10/2020 03:25	WG1506638
Trichloroethene	U		0.0160	0.0400	1	07/10/2020 03:25	WG1506638
Trichlorofluoromethane	U		0.0200	0.100	1	07/10/2020 03:25	WG1506638
1,2,3-Trichloropropane	U		0.204	0.500	1	07/10/2020 03:25	WG1506638
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	07/10/2020 03:25	WG1506638
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	07/10/2020 03:25	WG1506638
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	07/10/2020 03:25	WG1506638
Vinyl chloride	U		0.0273	0.100	1	07/10/2020 03:25	WG1506638
Xylenes, Total	U		0.191	0.260	1	07/10/2020 03:25	WG1506638
Ethyl Ether	U		0.0170	0.100	1	07/10/2020 03:25	WG1506638
Tetrahydrofuran	U		0.0900	0.500	1	07/10/2020 03:25	WG1506638
Iodomethane	U		0.242	0.500	1	07/10/2020 03:25	WG1506638
Allyl chloride	U		0.580	1.00	1	07/10/2020 03:25	WG1506638
Trans-1,4-Dichloro-2-butene	U		0.0560	0.200	1	07/10/2020 03:25	WG1506638
(S) Toluene-d8	*102*			*75.0-131*		*07/10/2020 03:25*	WG1506638
(S) 4-Bromofluorobenzene	*93.0*			*67.0-138*		*07/10/2020 03:25*	WG1506638
(S) 1,2-Dichloroethane-d4	*102*			*70.0-130*		*07/10/2020 03:25*	WG1506638

JC 7/27/2020

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

MW-341-070720

Collected date/time: 07/07/20 12:20

SAMPLE RESULTS - 05

L1237210

Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	404000		8450	20000	1	07/13/2020 14:28	WG1507981

Sample Narrative:

L1237210-05 WG1507981: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	19800		379	1000	1	07/08/2020 16:15	WG1505664
Nitrate	U		48.0	100	1	07/08/2020 16:15	WG1505664
Sulfate	7300		594	5000	1	07/08/2020 16:15	WG1505664

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	3910		102	1000	1	07/10/2020 16:03	WG1506939

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	6950		48.9	100	1	07/10/2020 16:41	WG1506043
Manganese	889		1.32	5.00	1	07/10/2020 16:41	WG1506043

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	2790		0.287	0.678	1	07/10/2020 14:18	WG1506874
Ethane	6.33		0.296	1.29	1	07/10/2020 14:18	WG1506874
Ethene	U		0.422	1.27	1	07/10/2020 14:18	WG1506874

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U		0.548	1.00	1	07/10/2020 03:44	WG1506638
Acrylonitrile	U	UJ J0	0.0760	0.500	1	07/10/2020 03:44	WG1506638
Benzene	15.6		0.0160	0.0400	1	07/10/2020 03:44	WG1506638
Bromobenzene	U		0.0420	0.500	1	07/10/2020 03:44	WG1506638
Bromodichloromethane	U		0.0315	0.100	1	07/10/2020 03:44	WG1506638
Bromoform	U		0.239	1.00	1	07/10/2020 03:44	WG1506638
Bromomethane	U		0.148	0.500	1	07/10/2020 03:44	WG1506638
n-Butylbenzene	U		0.153	0.500	1	07/10/2020 03:44	WG1506638
sec-Butylbenzene	U		0.101	0.500	1	07/10/2020 03:44	WG1506638
tert-Butylbenzene	U		0.0620	0.200	1	07/10/2020 03:44	WG1506638
Carbon tetrachloride	U		0.0432	0.200	1	07/10/2020 03:44	WG1506638
Chlorobenzene	U		0.0229	0.100	1	07/10/2020 03:44	WG1506638
Chlorodibromomethane	U		0.0180	0.100	1	07/10/2020 03:44	WG1506638
Chloroethane	U		0.0432	0.200	1	07/10/2020 03:44	WG1506638
Chloroform	U		0.0166	0.100	1	07/10/2020 03:44	WG1506638
Chloromethane	U		0.0556	0.500	1	07/10/2020 03:44	WG1506638
2-Chlorotoluene	U		0.0368	0.100	1	07/10/2020 03:44	WG1506638
4-Chlorotoluene	U		0.0452	0.200	1	07/10/2020 03:44	WG1506638
1,2-Dibromo-3-Chloropropane	U	UJ J0	0.204	1.00	1	07/10/2020 03:44	WG1506638
1,2-Dibromoethane	U		0.0210	0.100	1	07/10/2020 03:44	WG1506638

JC 7/27/2020

Volatile Organic Compounds (GC/MS) by Method 8260D

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Dibromomethane	U		0.0400	0.200	1	07/10/2020 03:44	WG1506638
1,2-Dichlorobenzene	U UJ	J4	0.0580	0.200	1	07/10/2020 03:44	WG1506638
1,3-Dichlorobenzene	U		0.0680	0.200	1	07/10/2020 03:44	WG1506638
1,4-Dichlorobenzene	U		0.0788	0.200	1	07/10/2020 03:44	WG1506638
Dichlorodifluoromethane	U		0.0327	0.100	1	07/10/2020 03:44	WG1506638
1,1-Dichloroethane	U		0.0230	0.100	1	07/10/2020 03:44	WG1506638
1,2-Dichloroethane	U		0.0190	0.100	1	07/10/2020 03:44	WG1506638
1,1-Dichloroethene	0.0840	J	0.0200	0.100	1	07/10/2020 03:44	WG1506638
cis-1,2-Dichloroethene	32.9		0.0276	0.100	1	07/10/2020 03:44	WG1506638
trans-1,2-Dichloroethene	U		0.0572	0.200	1	07/10/2020 03:44	WG1506638
1,2-Dichloropropane	U		0.0508	0.200	1	07/10/2020 03:44	WG1506638
1,1-Dichloropropene	U		0.0280	0.100	1	07/10/2020 03:44	WG1506638
1,3-Dichloropropane	U		0.0700	0.200	1	07/10/2020 03:44	WG1506638
cis-1,3-Dichloropropene	U		0.0271	0.100	1	07/10/2020 03:44	WG1506638
trans-1,3-Dichloropropene	U		0.0612	0.200	1	07/10/2020 03:44	WG1506638
2,2-Dichloropropane	U		0.0317	0.100	1	07/10/2020 03:44	WG1506638
Di-isopropyl ether	0.146		0.0140	0.0400	1	07/10/2020 03:44	WG1506638
Ethylbenzene	U		0.0212	0.100	1	07/10/2020 03:44	WG1506638
Hexachloro-1,3-butadiene	U		0.508	1.00	1	07/10/2020 03:44	WG1506638
Isopropylbenzene	U		0.0345	0.100	1	07/10/2020 03:44	WG1506638
p-Isopropyltoluene	U		0.0932	0.200	1	07/10/2020 03:44	WG1506638
2-Butanone (MEK)	U		0.500	1.00	1	07/10/2020 03:44	WG1506638
Methylene Chloride	U		0.265	1.00	1	07/10/2020 03:44	WG1506638
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	07/10/2020 03:44	WG1506638
Methyl tert-butyl ether	U		0.0118	0.0400	1	07/10/2020 03:44	WG1506638
Naphthalene	U		0.124	0.500	1	07/10/2020 03:44	WG1506638
n-Propylbenzene	U		0.0472	0.200	1	07/10/2020 03:44	WG1506638
Styrene	U		0.109	0.500	1	07/10/2020 03:44	WG1506638
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	07/10/2020 03:44	WG1506638
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	07/10/2020 03:44	WG1506638
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	07/10/2020 03:44	WG1506638
Tetrachloroethene	U		0.0280	0.100	1	07/10/2020 03:44	WG1506638
Toluene	U		0.0500	0.200	1	07/10/2020 03:44	WG1506638
1,2,3-Trichlorobenzene	U		0.0250	0.500	1	07/10/2020 03:44	WG1506638
1,2,4-Trichlorobenzene	U		0.193	0.500	1	07/10/2020 03:44	WG1506638
1,1,1-Trichloroethane	U		0.0110	0.100	1	07/10/2020 03:44	WG1506638
1,1,2-Trichloroethane	U		0.0353	0.100	1	07/10/2020 03:44	WG1506638
Trichloroethene	0.0500		0.0160	0.0400	1	07/10/2020 03:44	WG1506638
Trichlorofluoromethane	U		0.0200	0.100	1	07/10/2020 03:44	WG1506638
1,2,3-Trichloropropane	U		0.204	0.500	1	07/10/2020 03:44	WG1506638
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	07/10/2020 03:44	WG1506638
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	07/10/2020 03:44	WG1506638
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	07/10/2020 03:44	WG1506638
Vinyl chloride	9.86		0.0273	0.100	1	07/10/2020 03:44	WG1506638
Xylenes, Total	U		0.191	0.260	1	07/10/2020 03:44	WG1506638
Ethyl Ether	U		0.0170	0.100	1	07/10/2020 03:44	WG1506638
Tetrahydrofuran	U		0.0900	0.500	1	07/10/2020 03:44	WG1506638
Iodomethane	U		0.242	0.500	1	07/10/2020 03:44	WG1506638
Allyl chloride	U		0.580	1.00	1	07/10/2020 03:44	WG1506638
Trans-1,4-Dichloro-2-butene	U		0.0560	0.200	1	07/10/2020 03:44	WG1506638
(S) Toluene-d8	*97.2*			*75.0-131*		*07/10/2020 03:44*	WG1506638
(S) 4-Bromofluorobenzene	*93.0*			*67.0-138*		*07/10/2020 03:44*	WG1506638
(S) 1,2-Dichloroethane-d4	*104*			*70.0-130*		*07/10/2020 03:44*	WG1506638

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Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	330000		8450	20000	1	07/13/2020 14:36	WG1507981

Sample Narrative:

L1237210-06 WG1507981: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	25000		379	1000	1	07/08/2020 17:09	WG1505664
Nitrate	63.6	J	48.0	100	1	07/08/2020 17:09	WG1505664
Sulfate	22100		594	5000	1	07/08/2020 17:09	WG1505664

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	1590	~~B~~	102	1000	1	07/10/2020 16:28	WG1506939

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	7840		48.9	100	1	07/10/2020 16:44	WG1506043
Manganese	668		1.32	5.00	1	07/10/2020 16:44	WG1506043

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	192		0.287	0.678	1	07/10/2020 14:22	WG1506874
Ethane	7.56		0.296	1.29	1	07/10/2020 14:22	WG1506874
Ethene	U		0.422	1.27	1	07/10/2020 14:22	WG1506874

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U		0.548	1.00	1	07/10/2020 04:03	WG1506638
Acrylonitrile	U	UJ J0	0.0760	0.500	1	07/10/2020 04:03	WG1506638
Benzene	U		0.0160	0.0400	1	07/10/2020 04:03	WG1506638
Bromobenzene	U		0.0420	0.500	1	07/10/2020 04:03	WG1506638
Bromodichloromethane	U		0.0315	0.100	1	07/10/2020 04:03	WG1506638
Bromoform	U		0.239	1.00	1	07/10/2020 04:03	WG1506638
Bromomethane	U		0.148	0.500	1	07/10/2020 04:03	WG1506638
n-Butylbenzene	U		0.153	0.500	1	07/10/2020 04:03	WG1506638
sec-Butylbenzene	U		0.101	0.500	1	07/10/2020 04:03	WG1506638
tert-Butylbenzene	U		0.0620	0.200	1	07/10/2020 04:03	WG1506638
Carbon tetrachloride	U		0.0432	0.200	1	07/10/2020 04:03	WG1506638
Chlorobenzene	U		0.0229	0.100	1	07/10/2020 04:03	WG1506638
Chlorodibromomethane	U		0.0180	0.100	1	07/10/2020 04:03	WG1506638
Chloroethane	U		0.0432	0.200	1	07/10/2020 04:03	WG1506638
Chloroform	U		0.0166	0.100	1	07/10/2020 04:03	WG1506638
Chloromethane	U		0.0556	0.500	1	07/10/2020 04:03	WG1506638
2-Chlorotoluene	U		0.0368	0.100	1	07/10/2020 04:03	WG1506638
4-Chlorotoluene	U		0.0452	0.200	1	07/10/2020 04:03	WG1506638
1,2-Dibromo-3-Chloropropane	U	UJ J0	0.204	1.00	1	07/10/2020 04:03	WG1506638
1,2-Dibromoethane	U		0.0210	0.100	1	07/10/2020 04:03	WG1506638

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Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Dibromomethane	U		0.0400	0.200	1	07/10/2020 04:03	WG1506638
1,2-Dichlorobenzene	U UJ	J4	0.0580	0.200	1	07/10/2020 04:03	WG1506638
1,3-Dichlorobenzene	U		0.0680	0.200	1	07/10/2020 04:03	WG1506638
1,4-Dichlorobenzene	U		0.0788	0.200	1	07/10/2020 04:03	WG1506638
Dichlorodifluoromethane	U		0.0327	0.100	1	07/10/2020 04:03	WG1506638
1,1-Dichloroethane	U		0.0230	0.100	1	07/10/2020 04:03	WG1506638
1,2-Dichloroethane	U		0.0190	0.100	1	07/10/2020 04:03	WG1506638
1,1-Dichloroethene	0.0670	J	0.0200	0.100	1	07/10/2020 04:03	WG1506638
cis-1,2-Dichloroethene	2.55		0.0276	0.100	1	07/10/2020 04:03	WG1506638
trans-1,2-Dichloroethene	U		0.0572	0.200	1	07/10/2020 04:03	WG1506638
1,2-Dichloropropane	U		0.0508	0.200	1	07/10/2020 04:03	WG1506638
1,1-Dichloropropene	U		0.0280	0.100	1	07/10/2020 04:03	WG1506638
1,3-Dichloropropane	U		0.0700	0.200	1	07/10/2020 04:03	WG1506638
cis-1,3-Dichloropropene	U		0.0271	0.100	1	07/10/2020 04:03	WG1506638
trans-1,3-Dichloropropene	U		0.0612	0.200	1	07/10/2020 04:03	WG1506638
2,2-Dichloropropane	U		0.0317	0.100	1	07/10/2020 04:03	WG1506638
Di-isopropyl ether	U		0.0140	0.0400	1	07/10/2020 04:03	WG1506638
Ethylbenzene	U		0.0212	0.100	1	07/10/2020 04:03	WG1506638
Hexachloro-1,3-butadiene	U		0.508	1.00	1	07/10/2020 04:03	WG1506638
Isopropylbenzene	U		0.0345	0.100	1	07/10/2020 04:03	WG1506638
p-Isopropyltoluene	U		0.0932	0.200	1	07/10/2020 04:03	WG1506638
2-Butanone (MEK)	U		0.500	1.00	1	07/10/2020 04:03	WG1506638
Methylene Chloride	U		0.265	1.00	1	07/10/2020 04:03	WG1506638
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	07/10/2020 04:03	WG1506638
Methyl tert-butyl ether	U		0.0118	0.0400	1	07/10/2020 04:03	WG1506638
Naphthalene	U		0.124	0.500	1	07/10/2020 04:03	WG1506638
n-Propylbenzene	U		0.0472	0.200	1	07/10/2020 04:03	WG1506638
Styrene	U		0.109	0.500	1	07/10/2020 04:03	WG1506638
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	07/10/2020 04:03	WG1506638
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	07/10/2020 04:03	WG1506638
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	07/10/2020 04:03	WG1506638
Tetrachloroethene	U		0.0280	0.100	1	07/10/2020 04:03	WG1506638
Toluene	1.76		0.0500	0.200	1	07/10/2020 04:03	WG1506638
1,2,3-Trichlorobenzene	U		0.0250	0.500	1	07/10/2020 04:03	WG1506638
1,2,4-Trichlorobenzene	U		0.193	0.500	1	07/10/2020 04:03	WG1506638
1,1,1-Trichloroethane	U		0.0110	0.100	1	07/10/2020 04:03	WG1506638
1,1,2-Trichloroethane	U		0.0353	0.100	1	07/10/2020 04:03	WG1506638
Trichloroethene	0.0300	J	0.0160	0.0400	1	07/10/2020 04:03	WG1506638
Trichlorofluoromethane	U		0.0200	0.100	1	07/10/2020 04:03	WG1506638
1,2,3-Trichloropropane	U		0.204	0.500	1	07/10/2020 04:03	WG1506638
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	07/10/2020 04:03	WG1506638
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	07/10/2020 04:03	WG1506638
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	07/10/2020 04:03	WG1506638
Vinyl chloride	4.58		0.0273	0.100	1	07/10/2020 04:03	WG1506638
Xylenes, Total	U		0.191	0.260	1	07/10/2020 04:03	WG1506638
Ethyl Ether	U		0.0170	0.100	1	07/10/2020 04:03	WG1506638
Tetrahydrofuran	U		0.0900	0.500	1	07/10/2020 04:03	WG1506638
Iodomethane	U		0.242	0.500	1	07/10/2020 04:03	WG1506638
Allyl chloride	U		0.580	1.00	1	07/10/2020 04:03	WG1506638
Trans-1,4-Dichloro-2-butene	U		0.0560	0.200	1	07/10/2020 04:03	WG1506638
(S) Toluene-d8	*99.4*			*75.0-131*		*07/10/2020 04:03*	WG1506638
(S) 4-Bromofluorobenzene	*93.8*			*67.0-138*		*07/10/2020 04:03*	WG1506638
(S) 1,2-Dichloroethane-d4	*105*			*70.0-130*		*07/10/2020 04:03*	WG1506638

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SMW-3-070720

Collected date/time: 07/07/20 14:15

SAMPLE RESULTS - 07

L1237210

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U		0.548	1.00	1	07/10/2020 04:22	WG1506638
Acrylonitrile	U	UJ J0	0.0760	0.500	1	07/10/2020 04:22	WG1506638
Benzene	U		0.0160	0.0400	1	07/10/2020 04:22	WG1506638
Bromobenzene	U		0.0420	0.500	1	07/10/2020 04:22	WG1506638
Bromodichloromethane	U		0.0315	0.100	1	07/10/2020 04:22	WG1506638
Bromoform	U		0.239	1.00	1	07/10/2020 04:22	WG1506638
Bromomethane	U		0.148	0.500	1	07/10/2020 04:22	WG1506638
n-Butylbenzene	U		0.153	0.500	1	07/10/2020 04:22	WG1506638
sec-Butylbenzene	U		0.101	0.500	1	07/10/2020 04:22	WG1506638
tert-Butylbenzene	U		0.0620	0.200	1	07/10/2020 04:22	WG1506638
Carbon tetrachloride	U		0.0432	0.200	1	07/10/2020 04:22	WG1506638
Chlorobenzene	U		0.0229	0.100	1	07/10/2020 04:22	WG1506638
Chlorodibromomethane	U		0.0180	0.100	1	07/10/2020 04:22	WG1506638
Chloroethane	U		0.0432	0.200	1	07/10/2020 04:22	WG1506638
Chloroform	U		0.0166	0.100	1	07/10/2020 04:22	WG1506638
Chloromethane	U		0.0556	0.500	1	07/10/2020 04:22	WG1506638
2-Chlorotoluene	U		0.0368	0.100	1	07/10/2020 04:22	WG1506638
4-Chlorotoluene	U		0.0452	0.200	1	07/10/2020 04:22	WG1506638
1,2-Dibromo-3-Chloropropane	U	UJ J0	0.204	1.00	1	07/10/2020 04:22	WG1506638
1,2-Dibromoethane	U		0.0210	0.100	1	07/10/2020 04:22	WG1506638
Dibromomethane	U		0.0400	0.200	1	07/10/2020 04:22	WG1506638
1,2-Dichlorobenzene	U	UJ ~~J4~~	0.0580	0.200	1	07/10/2020 04:22	WG1506638
1,3-Dichlorobenzene	U		0.0680	0.200	1	07/10/2020 04:22	WG1506638
1,4-Dichlorobenzene	U		0.0788	0.200	1	07/10/2020 04:22	WG1506638
Dichlorodifluoromethane	U		0.0327	0.100	1	07/10/2020 04:22	WG1506638
1,1-Dichloroethane	U		0.0230	0.100	1	07/10/2020 04:22	WG1506638
1,2-Dichloroethane	U		0.0190	0.100	1	07/10/2020 04:22	WG1506638
1,1-Dichloroethene	U		0.0200	0.100	1	07/10/2020 04:22	WG1506638
cis-1,2-Dichloroethene	U		0.0276	0.100	1	07/10/2020 04:22	WG1506638
trans-1,2-Dichloroethene	U		0.0572	0.200	1	07/10/2020 04:22	WG1506638
1,2-Dichloropropane	U		0.0508	0.200	1	07/10/2020 04:22	WG1506638
1,1-Dichloropropene	U		0.0280	0.100	1	07/10/2020 04:22	WG1506638
1,3-Dichloropropane	U		0.0700	0.200	1	07/10/2020 04:22	WG1506638
cis-1,3-Dichloropropene	U		0.0271	0.100	1	07/10/2020 04:22	WG1506638
trans-1,3-Dichloropropene	U		0.0612	0.200	1	07/10/2020 04:22	WG1506638
2,2-Dichloropropane	U		0.0317	0.100	1	07/10/2020 04:22	WG1506638
Di-isopropyl ether	U		0.0140	0.0400	1	07/10/2020 04:22	WG1506638
Ethylbenzene	U		0.0212	0.100	1	07/10/2020 04:22	WG1506638
Hexachloro-1,3-butadiene	U		0.508	1.00	1	07/10/2020 04:22	WG1506638
Isopropylbenzene	U		0.0345	0.100	1	07/10/2020 04:22	WG1506638
p-Isopropyltoluene	U		0.0932	0.200	1	07/10/2020 04:22	WG1506638
2-Butanone (MEK)	U		0.500	1.00	1	07/10/2020 04:22	WG1506638
Methylene Chloride	U		0.265	1.00	1	07/10/2020 04:22	WG1506638
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	07/10/2020 04:22	WG1506638
Methyl tert-butyl ether	U		0.0118	0.0400	1	07/10/2020 04:22	WG1506638
Naphthalene	U		0.124	0.500	1	07/10/2020 04:22	WG1506638
n-Propylbenzene	U		0.0472	0.200	1	07/10/2020 04:22	WG1506638
Styrene	U		0.109	0.500	1	07/10/2020 04:22	WG1506638
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	07/10/2020 04:22	WG1506638
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	07/10/2020 04:22	WG1506638
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	07/10/2020 04:22	WG1506638
Tetrachloroethene	U		0.0280	0.100	1	07/10/2020 04:22	WG1506638
Toluene	U		0.0500	0.200	1	07/10/2020 04:22	WG1506638
1,2,3-Trichlorobenzene	U		0.0250	0.500	1	07/10/2020 04:22	WG1506638
1,2,4-Trichlorobenzene	U		0.193	0.500	1	07/10/2020 04:22	WG1506638
1,1,1-Trichloroethane	U		0.0110	0.100	1	07/10/2020 04:22	WG1506638

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Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,1,2-Trichloroethane	U		0.0353	0.100	1	07/10/2020 04:22	WG1506638
Trichloroethene	U		0.0160	0.0400	1	07/10/2020 04:22	WG1506638
Trichlorofluoromethane	U		0.0200	0.100	1	07/10/2020 04:22	WG1506638
1,2,3-Trichloropropane	U		0.204	0.500	1	07/10/2020 04:22	WG1506638
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	07/10/2020 04:22	WG1506638
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	07/10/2020 04:22	WG1506638
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	07/10/2020 04:22	WG1506638
Vinyl chloride	U		0.0273	0.100	1	07/10/2020 04:22	WG1506638
Xylenes, Total	U		0.191	0.260	1	07/10/2020 04:22	WG1506638
Ethyl Ether	U		0.0170	0.100	1	07/10/2020 04:22	WG1506638
Tetrahydrofuran	U		0.0900	0.500	1	07/10/2020 04:22	WG1506638
Iodomethane	U		0.242	0.500	1	07/10/2020 04:22	WG1506638
Allyl chloride	U		0.580	1.00	1	07/10/2020 04:22	WG1506638
Trans-1,4-Dichloro-2-butene	U		0.0560	0.200	1	07/10/2020 04:22	WG1506638
(S) Toluene-d8	*97.5*			*75.0-131*		*07/10/2020 04:22*	WG1506638
(S) 4-Bromofluorobenzene	*95.6*			*67.0-138*		*07/10/2020 04:22*	WG1506638
(S) 1,2-Dichloroethane-d4	*104*			*70.0-130*		*07/10/2020 04:22*	WG1506638

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Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	560000		8450	20000	1	07/13/2020 14:53	WG1507981

Sample Narrative:

L1237210-08 WG1507981: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	29200		379	1000	1	07/08/2020 17:20	WG1505664
Nitrate	U		48.0	100	1	07/08/2020 17:20	WG1505664
Sulfate	70500		594	5000	1	07/08/2020 17:20	WG1505664

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	6720		102	1000	1	07/10/2020 16:41	WG1506939

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	17700		48.9	100	1	07/10/2020 15:45	WG1506043
Manganese	2610	~~V~~	1.32	5.00	1	07/10/2020 15:45	WG1506043

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	5150		0.287	0.678	1	07/10/2020 14:24	WG1506874
Ethane	81.6		0.296	1.29	1	07/10/2020 14:24	WG1506874
Ethene	33.0		0.422	1.27	1	07/10/2020 14:24	WG1506874

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U		0.548	1.00	1	07/10/2020 04:41	WG1506638
Acrylonitrile	U	UJ J0	0.0760	0.500	1	07/10/2020 04:41	WG1506638
Benzene	37.6		0.0160	0.0400	1	07/10/2020 04:41	WG1506638
Bromobenzene	U		0.0420	0.500	1	07/10/2020 04:41	WG1506638
Bromodichloromethane	U		0.0315	0.100	1	07/10/2020 04:41	WG1506638
Bromoform	U		0.239	1.00	1	07/10/2020 04:41	WG1506638
Bromomethane	U		0.148	0.500	1	07/10/2020 04:41	WG1506638
n-Butylbenzene	U		0.153	0.500	1	07/10/2020 04:41	WG1506638
sec-Butylbenzene	U		0.101	0.500	1	07/10/2020 04:41	WG1506638
tert-Butylbenzene	U		0.0620	0.200	1	07/10/2020 04:41	WG1506638
Carbon tetrachloride	U		0.0432	0.200	1	07/10/2020 04:41	WG1506638
Chlorobenzene	U		0.0229	0.100	1	07/10/2020 04:41	WG1506638
Chlorodibromomethane	U		0.0180	0.100	1	07/10/2020 04:41	WG1506638
Chloroethane	U		0.0432	0.200	1	07/10/2020 04:41	WG1506638
Chloroform	U		0.0166	0.100	1	07/10/2020 04:41	WG1506638
Chloromethane	U		0.0556	0.500	1	07/10/2020 04:41	WG1506638
2-Chlorotoluene	U		0.0368	0.100	1	07/10/2020 04:41	WG1506638
4-Chlorotoluene	U		0.0452	0.200	1	07/10/2020 04:41	WG1506638
1,2-Dibromo-3-Chloropropane	U	UJ J0	0.204	1.00	1	07/10/2020 04:41	WG1506638
1,2-Dibromoethane	U		0.0210	0.100	1	07/10/2020 04:41	WG1506638

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Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Dibromomethane	U		0.0400	0.200	1	07/10/2020 04:41	WG1506638
1,2-Dichlorobenzene	U	UJ ~~J4~~	0.0580	0.200	1	07/10/2020 04:41	WG1506638
1,3-Dichlorobenzene	U		0.0680	0.200	1	07/10/2020 04:41	WG1506638
1,4-Dichlorobenzene	U		0.0788	0.200	1	07/10/2020 04:41	WG1506638
Dichlorodifluoromethane	U		0.0327	0.100	1	07/10/2020 04:41	WG1506638
1,1-Dichloroethane	0.703		0.0230	0.100	1	07/10/2020 04:41	WG1506638
1,2-Dichloroethane	0.445		0.0190	0.100	1	07/10/2020 04:41	WG1506638
1,1-Dichloroethene	0.0780	J	0.0200	0.100	1	07/10/2020 04:41	WG1506638
cis-1,2-Dichloroethene	8.76		0.0276	0.100	1	07/10/2020 04:41	WG1506638
trans-1,2-Dichloroethene	0.202		0.0572	0.200	1	07/10/2020 04:41	WG1506638
1,2-Dichloropropane	U		0.0508	0.200	1	07/10/2020 04:41	WG1506638
1,1-Dichloropropene	U		0.0280	0.100	1	07/10/2020 04:41	WG1506638
1,3-Dichloropropane	U		0.0700	0.200	1	07/10/2020 04:41	WG1506638
cis-1,3-Dichloropropene	U		0.0271	0.100	1	07/10/2020 04:41	WG1506638
trans-1,3-Dichloropropene	U		0.0612	0.200	1	07/10/2020 04:41	WG1506638
2,2-Dichloropropane	U		0.0317	0.100	1	07/10/2020 04:41	WG1506638
Di-isopropyl ether	0.507		0.0140	0.0400	1	07/10/2020 04:41	WG1506638
Ethylbenzene	U		0.0212	0.100	1	07/10/2020 04:41	WG1506638
Hexachloro-1,3-butadiene	U		0.508	1.00	1	07/10/2020 04:41	WG1506638
Isopropylbenzene	U		0.0345	0.100	1	07/10/2020 04:41	WG1506638
p-Isopropyltoluene	U		0.0932	0.200	1	07/10/2020 04:41	WG1506638
2-Butanone (MEK)	U		0.500	1.00	1	07/10/2020 04:41	WG1506638
Methylene Chloride	U		0.265	1.00	1	07/10/2020 04:41	WG1506638
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	07/10/2020 04:41	WG1506638
Methyl tert-butyl ether	0.685		0.0118	0.0400	1	07/10/2020 04:41	WG1506638
Naphthalene	U		0.124	0.500	1	07/10/2020 04:41	WG1506638
n-Propylbenzene	U		0.0472	0.200	1	07/10/2020 04:41	WG1506638
Styrene	U		0.109	0.500	1	07/10/2020 04:41	WG1506638
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	07/10/2020 04:41	WG1506638
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	07/10/2020 04:41	WG1506638
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	07/10/2020 04:41	WG1506638
Tetrachloroethene	U		0.0280	0.100	1	07/10/2020 04:41	WG1506638
Toluene	2.79		0.0500	0.200	1	07/10/2020 04:41	WG1506638
1,2,3-Trichlorobenzene	U		0.0250	0.500	1	07/10/2020 04:41	WG1506638
1,2,4-Trichlorobenzene	U		0.193	0.500	1	07/10/2020 04:41	WG1506638
1,1,1-Trichloroethane	U		0.0110	0.100	1	07/10/2020 04:41	WG1506638
1,1,2-Trichloroethane	U		0.0353	0.100	1	07/10/2020 04:41	WG1506638
Trichloroethene	U		0.0160	0.0400	1	07/10/2020 04:41	WG1506638
Trichlorofluoromethane	U		0.0200	0.100	1	07/10/2020 04:41	WG1506638
1,2,3-Trichloropropane	U		0.204	0.500	1	07/10/2020 04:41	WG1506638
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	07/10/2020 04:41	WG1506638
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	07/10/2020 04:41	WG1506638
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	07/10/2020 04:41	WG1506638
Vinyl chloride	188		0.273	1.00	10	07/12/2020 14:32	WG1507757
Xylenes, Total	U		0.191	0.260	1	07/10/2020 04:41	WG1506638
Ethyl Ether	0.458		0.0170	0.100	1	07/10/2020 04:41	WG1506638
Tetrahydrofuran	U		0.0900	0.500	1	07/10/2020 04:41	WG1506638
Iodomethane	U		0.242	0.500	1	07/10/2020 04:41	WG1506638
Allyl chloride	U		0.580	1.00	1	07/10/2020 04:41	WG1506638
Trans-1,4-Dichloro-2-butene	U		0.0560	0.200	1	07/10/2020 04:41	WG1506638
(S) Toluene-d8	*97.5*			*75.0-131*		*07/10/2020 04:41*	WG1506638
(S) Toluene-d8	*95.8*			*75.0-131*		*07/12/2020 14:32*	WG1507757
(S) 4-Bromofluorobenzene	*97.9*			*67.0-138*		*07/10/2020 04:41*	WG1506638
(S) 4-Bromofluorobenzene	*107*			*67.0-138*		*07/12/2020 14:32*	WG1507757
(S) 1,2-Dichloroethane-d4	*107*			*70.0-130*		*07/10/2020 04:41*	WG1506638
(S) 1,2-Dichloroethane-d4	*97.6*			*70.0-130*		*07/12/2020 14:32*	WG1507757

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Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	618000		8450	20000	1	07/13/2020 15:00	WG1507981

Sample Narrative:

L1237210-09 WG1507981: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	54100		379	1000	1	07/08/2020 17:31	WG1505664
Nitrate	U		48.0	100	1	07/08/2020 17:31	WG1505664
Sulfate	45800		594	5000	1	07/08/2020 17:31	WG1505664

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	14800		102	1000	1	07/10/2020 17:25	WG1506939

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	8690		48.9	100	1	07/10/2020 16:47	WG1506043
Manganese	1640		1.32	5.00	1	07/10/2020 16:47	WG1506043

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	5880		0.287	0.678	1	07/10/2020 14:29	WG1506874
Ethane	73.4		0.296	1.29	1	07/10/2020 14:29	WG1506874
Ethene	93.7		0.422	1.27	1	07/10/2020 14:29	WG1506874

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U		27.4	50.0	50	07/10/2020 05:56	WG1506638
Acrylonitrile	U	UJ J0	3.80	25.0	50	07/10/2020 05:56	WG1506638
Benzene	1.25	J	0.800	2.00	50	07/10/2020 05:56	WG1506638
Bromobenzene	U		2.10	25.0	50	07/10/2020 05:56	WG1506638
Bromodichloromethane	U		1.58	5.00	50	07/10/2020 05:56	WG1506638
Bromoform	U		12.0	50.0	50	07/10/2020 05:56	WG1506638
Bromomethane	U		7.40	25.0	50	07/10/2020 05:56	WG1506638
n-Butylbenzene	U		7.65	25.0	50	07/10/2020 05:56	WG1506638
sec-Butylbenzene	U		5.05	25.0	50	07/10/2020 05:56	WG1506638
tert-Butylbenzene	U		3.10	10.0	50	07/10/2020 05:56	WG1506638
Carbon tetrachloride	U		2.16	10.0	50	07/10/2020 05:56	WG1506638
Chlorobenzene	U		1.15	5.00	50	07/10/2020 05:56	WG1506638
Chlorodibromomethane	U		0.900	5.00	50	07/10/2020 05:56	WG1506638
Chloroethane	U		2.16	10.0	50	07/10/2020 05:56	WG1506638
Chloroform	U		0.830	5.00	50	07/10/2020 05:56	WG1506638
Chloromethane	U		2.78	25.0	50	07/10/2020 05:56	WG1506638
2-Chlorotoluene	U		1.84	5.00	50	07/10/2020 05:56	WG1506638
4-Chlorotoluene	U		2.26	10.0	50	07/10/2020 05:56	WG1506638
1,2-Dibromo-3-Chloropropane	U	UJ J0	10.2	50.0	50	07/10/2020 05:56	WG1506638
1,2-Dibromoethane	U		1.05	5.00	50	07/10/2020 05:56	WG1506638

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Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Dibromomethane	U		2.00	10.0	50	07/10/2020 05:56	WG1506638
1,2-Dichlorobenzene	U	UJ ~~J4~~	2.90	10.0	50	07/10/2020 05:56	WG1506638
1,3-Dichlorobenzene	U		3.40	10.0	50	07/10/2020 05:56	WG1506638
1,4-Dichlorobenzene	U		3.94	10.0	50	07/10/2020 05:56	WG1506638
Dichlorodifluoromethane	U		1.64	5.00	50	07/10/2020 05:56	WG1506638
1,1-Dichloroethane	U		1.15	5.00	50	07/10/2020 05:56	WG1506638
1,2-Dichloroethane	U		0.950	5.00	50	07/10/2020 05:56	WG1506638
1,1-Dichloroethene	6.60		1.00	5.00	50	07/10/2020 05:56	WG1506638
cis-1,2-Dichloroethene	8410		13.8	50.0	500	07/12/2020 14:53	WG1507757
trans-1,2-Dichloroethene	13.6		2.86	10.0	50	07/10/2020 05:56	WG1506638
1,2-Dichloropropane	U		2.54	10.0	50	07/10/2020 05:56	WG1506638
1,1-Dichloropropene	U		1.40	5.00	50	07/10/2020 05:56	WG1506638
1,3-Dichloropropane	U		3.50	10.0	50	07/10/2020 05:56	WG1506638
cis-1,3-Dichloropropene	U		1.36	5.00	50	07/10/2020 05:56	WG1506638
trans-1,3-Dichloropropene	U		3.06	10.0	50	07/10/2020 05:56	WG1506638
2,2-Dichloropropane	U		1.59	5.00	50	07/10/2020 05:56	WG1506638
Di-isopropyl ether	U		0.700	2.00	50	07/10/2020 05:56	WG1506638
Ethylbenzene	U		1.06	5.00	50	07/10/2020 05:56	WG1506638
Hexachloro-1,3-butadiene	U		25.4	50.0	50	07/10/2020 05:56	WG1506638
Isopropylbenzene	U		1.73	5.00	50	07/10/2020 05:56	WG1506638
p-Isopropyltoluene	U		4.66	10.0	50	07/10/2020 05:56	WG1506638
2-Butanone (MEK)	U		25.0	50.0	50	07/10/2020 05:56	WG1506638
Methylene Chloride	U		13.3	50.0	50	07/10/2020 05:56	WG1506638
4-Methyl-2-pentanone (MIBK)	U		20.0	50.0	50	07/10/2020 05:56	WG1506638
Methyl tert-butyl ether	U		0.590	2.00	50	07/10/2020 05:56	WG1506638
Naphthalene	U		6.20	25.0	50	07/10/2020 05:56	WG1506638
n-Propylbenzene	U		2.36	10.0	50	07/10/2020 05:56	WG1506638
Styrene	U		5.45	25.0	50	07/10/2020 05:56	WG1506638
1,1,1,2-Tetrachloroethane	U		1.00	5.00	50	07/10/2020 05:56	WG1506638
1,1,2,2-Tetrachloroethane	U		0.780	5.00	50	07/10/2020 05:56	WG1506638
1,1,2-Trichlorotrifluoroethane	U		1.35	5.00	50	07/10/2020 05:56	WG1506638
Tetrachloroethene	U		1.40	5.00	50	07/10/2020 05:56	WG1506638
Toluene	U		2.50	10.0	50	07/10/2020 05:56	WG1506638
1,2,3-Trichlorobenzene	U		1.25	25.0	50	07/10/2020 05:56	WG1506638
1,2,4-Trichlorobenzene	U		9.65	25.0	50	07/10/2020 05:56	WG1506638
1,1,1-Trichloroethane	U		0.550	5.00	50	07/10/2020 05:56	WG1506638
1,1,2-Trichloroethane	U		1.77	5.00	50	07/10/2020 05:56	WG1506638
Trichloroethene	U		0.800	2.00	50	07/10/2020 05:56	WG1506638
Trichlorofluoromethane	U		1.00	5.00	50	07/10/2020 05:56	WG1506638
1,2,3-Trichloropropane	U		10.2	25.0	50	07/10/2020 05:56	WG1506638
1,2,4-Trimethylbenzene	U		2.32	10.0	50	07/10/2020 05:56	WG1506638
1,2,3-Trimethylbenzene	U		2.30	10.0	50	07/10/2020 05:56	WG1506638
1,3,5-Trimethylbenzene	U		2.16	10.0	50	07/10/2020 05:56	WG1506638
Vinyl chloride	244		1.36	5.00	50	07/10/2020 05:56	WG1506638
Xylenes, Total	U		9.55	13.0	50	07/10/2020 05:56	WG1506638
Ethyl Ether	U		0.850	5.00	50	07/10/2020 05:56	WG1506638
Tetrahydrofuran	U		4.50	25.0	50	07/10/2020 05:56	WG1506638
Iodomethane	U		12.1	25.0	50	07/10/2020 05:56	WG1506638
Allyl chloride	U		29.0	50.0	50	07/10/2020 05:56	WG1506638
Trans-1,4-Dichloro-2-butene	U		2.80	10.0	50	07/10/2020 05:56	WG1506638
(S) Toluene-d8	*97.1*			*75.0-131*		*07/10/2020 05:56*	WG1506638
(S) Toluene-d8	*95.6*			*75.0-131*		*07/12/2020 14:53*	WG1507757
(S) 4-Bromofluorobenzene	*98.8*			*67.0-138*		*07/10/2020 05:56*	WG1506638
(S) 4-Bromofluorobenzene	*106*			*67.0-138*		*07/12/2020 14:53*	WG1507757
(S) 1,2-Dichloroethane-d4	*108*			*70.0-130*		*07/10/2020 05:56*	WG1506638
(S) 1,2-Dichloroethane-d4	*97.0*			*70.0-130*		*07/12/2020 14:53*	WG1507757

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Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	351000		8450	20000	1	07/13/2020 16:44	WG1507982

Sample Narrative:

L1237219-01 WG1507982: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	32900		379	1000	1	07/08/2020 13:43	WG1505580
Nitrate	U UJ	~~T8~~	48.0	100	1	07/08/2020 13:43	WG1505580
Sulfate	228000		2970	25000	5	07/08/2020 14:01	WG1505580

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	3060		102	1000	1	07/10/2020 18:34	WG1506939

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	17700		48.9	100	1	07/10/2020 16:59	WG1506043
Manganese	752		1.32	5.00	1	07/10/2020 16:59	WG1506043

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	83.6		0.287	0.678	1	07/10/2020 14:56	WG1506878
Ethane	U		0.296	1.29	1	07/10/2020 14:56	WG1506878
Ethene	U		0.422	1.27	1	07/10/2020 14:56	WG1506878

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U		0.548	1.00	1	07/13/2020 22:46	WG1508223
Acrylonitrile	U		0.0760	0.500	1	07/13/2020 22:46	WG1508223
Benzene	0.0610		0.0160	0.0400	1	07/13/2020 22:46	WG1508223
Bromobenzene	U		0.0420	0.500	1	07/13/2020 22:46	WG1508223
Bromodichloromethane	U		0.0315	0.100	1	07/13/2020 22:46	WG1508223
Bromoform	U		0.239	1.00	1	07/13/2020 22:46	WG1508223
Bromomethane	U		0.148	0.500	1	07/13/2020 22:46	WG1508223
n-Butylbenzene	U		0.153	0.500	1	07/13/2020 22:46	WG1508223
sec-Butylbenzene	U		0.101	0.500	1	07/13/2020 22:46	WG1508223
tert-Butylbenzene	U		0.0620	0.200	1	07/13/2020 22:46	WG1508223
Carbon tetrachloride	U		0.0432	0.200	1	07/13/2020 22:46	WG1508223
Chlorobenzene	U		0.0229	0.100	1	07/13/2020 22:46	WG1508223
Chlorodibromomethane	U		0.0180	0.100	1	07/13/2020 22:46	WG1508223
Chloroethane	U		0.0432	0.200	1	07/13/2020 22:46	WG1508223
Chloroform	U		0.0166	0.100	1	07/13/2020 22:46	WG1508223
Chloromethane	U		0.0556	0.500	1	07/13/2020 22:46	WG1508223
2-Chlorotoluene	U		0.0368	0.100	1	07/13/2020 22:46	WG1508223
4-Chlorotoluene	U		0.0452	0.200	1	07/13/2020 22:46	WG1508223
1,2-Dibromo-3-Chloropropane	U UJ	J0	0.204	1.00	1	07/13/2020 22:46	WG1508223
1,2-Dibromoethane	U		0.0210	0.100	1	07/13/2020 22:46	WG1508223

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Dibromomethane	U		0.0400	0.200	1	07/13/2020 22:46	WG1508223
1,2-Dichlorobenzene	U		0.0580	0.200	1	07/13/2020 22:46	WG1508223
1,3-Dichlorobenzene	U		0.0680	0.200	1	07/13/2020 22:46	WG1508223
1,4-Dichlorobenzene	U		0.0788	0.200	1	07/13/2020 22:46	WG1508223
Dichlorodifluoromethane	U		0.0327	0.100	1	07/13/2020 22:46	WG1508223
1,1-Dichloroethane	0.916		0.0230	0.100	1	07/13/2020 22:46	WG1508223
1,2-Dichloroethane	0.0380	J	0.0190	0.100	1	07/13/2020 22:46	WG1508223
1,1-Dichloroethene	U		0.0200	0.100	1	07/13/2020 22:46	WG1508223
cis-1,2-Dichloroethene	0.0460	J	0.0276	0.100	1	07/13/2020 22:46	WG1508223
trans-1,2-Dichloroethene	U UJ	~~J4~~	0.0572	0.200	1	07/13/2020 22:46	WG1508223
1,2-Dichloropropane	U		0.0508	0.200	1	07/13/2020 22:46	WG1508223
1,1-Dichloropropene	U		0.0280	0.100	1	07/13/2020 22:46	WG1508223
1,3-Dichloropropane	U		0.0700	0.200	1	07/13/2020 22:46	WG1508223
cis-1,3-Dichloropropene	U		0.0271	0.100	1	07/13/2020 22:46	WG1508223
trans-1,3-Dichloropropene	U		0.0612	0.200	1	07/13/2020 22:46	WG1508223
2,2-Dichloropropane	U		0.0317	0.100	1	07/13/2020 22:46	WG1508223
Di-isopropyl ether	U		0.0140	0.0400	1	07/13/2020 22:46	WG1508223
Ethylbenzene	0.0340	J	0.0212	0.100	1	07/13/2020 22:46	WG1508223
Hexachloro-1,3-butadiene	U		0.508	1.00	1	07/13/2020 22:46	WG1508223
Isopropylbenzene	0.0770	J	0.0345	0.100	1	07/13/2020 22:46	WG1508223
p-Isopropyltoluene	U		0.0932	0.200	1	07/13/2020 22:46	WG1508223
2-Butanone (MEK)	U		0.500	1.00	1	07/13/2020 22:46	WG1508223
Methylene Chloride	U		0.265	1.00	1	07/13/2020 22:46	WG1508223
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	07/13/2020 22:46	WG1508223
Methyl tert-butyl ether	U		0.0118	0.0400	1	07/13/2020 22:46	WG1508223
Naphthalene	U		0.124	0.500	1	07/13/2020 22:46	WG1508223
n-Propylbenzene	0.196	J	0.0472	0.200	1	07/13/2020 22:46	WG1508223
Styrene	U		0.109	0.500	1	07/13/2020 22:46	WG1508223
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	07/13/2020 22:46	WG1508223
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	07/13/2020 22:46	WG1508223
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	07/13/2020 22:46	WG1508223
Tetrachloroethene	U		0.0280	0.100	1	07/13/2020 22:46	WG1508223
Toluene	U		0.0500	0.200	1	07/13/2020 22:46	WG1508223
1,2,3-Trichlorobenzene	U		0.0250	0.500	1	07/13/2020 22:46	WG1508223
1,2,4-Trichlorobenzene	U		0.193	0.500	1	07/13/2020 22:46	WG1508223
1,1,1-Trichloroethane	U		0.0110	0.100	1	07/13/2020 22:46	WG1508223
1,1,2-Trichloroethane	U		0.0353	0.100	1	07/13/2020 22:46	WG1508223
Trichloroethene	U		0.0160	0.0400	1	07/13/2020 22:46	WG1508223
Trichlorofluoromethane	U		0.0200	0.100	1	07/13/2020 22:46	WG1508223
1,2,3-Trichloropropane	U		0.204	0.500	1	07/13/2020 22:46	WG1508223
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	07/13/2020 22:46	WG1508223
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	07/13/2020 22:46	WG1508223
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	07/13/2020 22:46	WG1508223
Vinyl chloride	0.306		0.0273	0.100	1	07/13/2020 22:46	WG1508223
Xylenes, Total	U		0.191	0.260	1	07/13/2020 22:46	WG1508223
Ethyl Ether	U		0.0170	0.100	1	07/13/2020 22:46	WG1508223
Tetrahydrofuran	U UJ	J0 ~~J3~~	0.0900	0.500	1	07/13/2020 22:46	WG1508223
Iodomethane	U		0.242	0.500	1	07/13/2020 22:46	WG1508223
Allyl chloride	U		0.580	1.00	1	07/13/2020 22:46	WG1508223
Trans-1,4-Dichloro-2-butene	U UJ	J0	0.0560	0.200	1	07/13/2020 22:46	WG1508223
(S) Toluene-d8	*96.1*			*75.0-131*		*07/13/2020 22:46*	WG1508223
(S) 4-Bromofluorobenzene	*98.2*			*67.0-138*		*07/13/2020 22:46*	WG1508223
(S) 1,2-Dichloroethane-d4	*109*			*70.0-130*		*07/13/2020 22:46*	WG1508223

Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	229000		8450	20000	1	07/13/2020 16:51	WG1507982

Sample Narrative:

L1237219-02 WG1507982: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	11100		379	1000	1	07/08/2020 14:20	WG1505580
Nitrate	U	UJ ~~T8~~	48.0	100	1	07/08/2020 14:20	WG1505580
Sulfate	8300		594	5000	1	07/08/2020 14:20	WG1505580

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	2100	~~B~~	102	1000	1	07/10/2020 18:47	WG1506939

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	24400		48.9	100	1	07/10/2020 17:03	WG1506043
Manganese	864		1.32	5.00	1	07/10/2020 17:03	WG1506043

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	246		0.287	0.678	1	07/10/2020 14:58	WG1506878
Ethane	U		0.296	1.29	1	07/10/2020 14:58	WG1506878
Ethene	U		0.422	1.27	1	07/10/2020 14:58	WG1506878

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U		0.548	1.00	1	07/13/2020 23:05	WG1508223
Acrylonitrile	U		0.0760	0.500	1	07/13/2020 23:05	WG1508223
Benzene	0.0210	J	0.0160	0.0400	1	07/13/2020 23:05	WG1508223
Bromobenzene	U		0.0420	0.500	1	07/13/2020 23:05	WG1508223
Bromodichloromethane	U		0.0315	0.100	1	07/13/2020 23:05	WG1508223
Bromoform	U		0.239	1.00	1	07/13/2020 23:05	WG1508223
Bromomethane	U		0.148	0.500	1	07/13/2020 23:05	WG1508223
n-Butylbenzene	U		0.153	0.500	1	07/13/2020 23:05	WG1508223
sec-Butylbenzene	U		0.101	0.500	1	07/13/2020 23:05	WG1508223
tert-Butylbenzene	U		0.0620	0.200	1	07/13/2020 23:05	WG1508223
Carbon tetrachloride	U		0.0432	0.200	1	07/13/2020 23:05	WG1508223
Chlorobenzene	U		0.0229	0.100	1	07/13/2020 23:05	WG1508223
Chlorodibromomethane	U		0.0180	0.100	1	07/13/2020 23:05	WG1508223
Chloroethane	U		0.0432	0.200	1	07/13/2020 23:05	WG1508223
Chloroform	U		0.0166	0.100	1	07/13/2020 23:05	WG1508223
Chloromethane	U		0.0556	0.500	1	07/13/2020 23:05	WG1508223
2-Chlorotoluene	U		0.0368	0.100	1	07/13/2020 23:05	WG1508223
4-Chlorotoluene	U		0.0452	0.200	1	07/13/2020 23:05	WG1508223
1,2-Dibromo-3-Chloropropane	U	UJ J0	0.204	1.00	1	07/13/2020 23:05	WG1508223
1,2-Dibromoethane	U		0.0210	0.100	1	07/13/2020 23:05	WG1508223

Volatile Organic Compounds (GC/MS) by Method 8260D

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Dibromomethane	U		0.0400	0.200	1	07/13/2020 23:05	WG1508223
1,2-Dichlorobenzene	U		0.0580	0.200	1	07/13/2020 23:05	WG1508223
1,3-Dichlorobenzene	U		0.0680	0.200	1	07/13/2020 23:05	WG1508223
1,4-Dichlorobenzene	U		0.0788	0.200	1	07/13/2020 23:05	WG1508223
Dichlorodifluoromethane	U		0.0327	0.100	1	07/13/2020 23:05	WG1508223
1,1-Dichloroethane	U		0.0230	0.100	1	07/13/2020 23:05	WG1508223
1,2-Dichloroethane	0.0370	J	0.0190	0.100	1	07/13/2020 23:05	WG1508223
1,1-Dichloroethene	0.169		0.0200	0.100	1	07/13/2020 23:05	WG1508223
cis-1,2-Dichloroethene	4.21		0.0276	0.100	1	07/13/2020 23:05	WG1508223
trans-1,2-Dichloroethene	U	~~J4~~	0.0572	0.200	1	07/13/2020 23:05	WG1508223
1,2-Dichloropropane	U		0.0508	0.200	1	07/13/2020 23:05	WG1508223
1,1-Dichloropropene	U		0.0280	0.100	1	07/13/2020 23:05	WG1508223
1,3-Dichloropropane	U		0.0700	0.200	1	07/13/2020 23:05	WG1508223
cis-1,3-Dichloropropene	U		0.0271	0.100	1	07/13/2020 23:05	WG1508223
trans-1,3-Dichloropropene	U		0.0612	0.200	1	07/13/2020 23:05	WG1508223
2,2-Dichloropropane	U		0.0317	0.100	1	07/13/2020 23:05	WG1508223
Di-isopropyl ether	U		0.0140	0.0400	1	07/13/2020 23:05	WG1508223
Ethylbenzene	U		0.0212	0.100	1	07/13/2020 23:05	WG1508223
Hexachloro-1,3-butadiene	U		0.508	1.00	1	07/13/2020 23:05	WG1508223
Isopropylbenzene	U		0.0345	0.100	1	07/13/2020 23:05	WG1508223
p-Isopropyltoluene	U		0.0932	0.200	1	07/13/2020 23:05	WG1508223
2-Butanone (MEK)	U		0.500	1.00	1	07/13/2020 23:05	WG1508223
Methylene Chloride	U		0.265	1.00	1	07/13/2020 23:05	WG1508223
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	07/13/2020 23:05	WG1508223
Methyl tert-butyl ether	U		0.0118	0.0400	1	07/13/2020 23:05	WG1508223
Naphthalene	U		0.124	0.500	1	07/13/2020 23:05	WG1508223
n-Propylbenzene	U		0.0472	0.200	1	07/13/2020 23:05	WG1508223
Styrene	U		0.109	0.500	1	07/13/2020 23:05	WG1508223
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	07/13/2020 23:05	WG1508223
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	07/13/2020 23:05	WG1508223
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	07/13/2020 23:05	WG1508223
Tetrachloroethene	U		0.0280	0.100	1	07/13/2020 23:05	WG1508223
Toluene	2.12		0.0500	0.200	1	07/13/2020 23:05	WG1508223
1,2,3-Trichlorobenzene	U		0.0250	0.500	1	07/13/2020 23:05	WG1508223
1,2,4-Trichlorobenzene	U		0.193	0.500	1	07/13/2020 23:05	WG1508223
1,1,1-Trichloroethane	U		0.0110	0.100	1	07/13/2020 23:05	WG1508223
1,1,2-Trichloroethane	U		0.0353	0.100	1	07/13/2020 23:05	WG1508223
Trichloroethene	0.185		0.0160	0.0400	1	07/13/2020 23:05	WG1508223
Trichlorofluoromethane	U		0.0200	0.100	1	07/13/2020 23:05	WG1508223
1,2,3-Trichloropropane	U		0.204	0.500	1	07/13/2020 23:05	WG1508223
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	07/13/2020 23:05	WG1508223
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	07/13/2020 23:05	WG1508223
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	07/13/2020 23:05	WG1508223
Vinyl chloride	2.18		0.0273	0.100	1	07/13/2020 23:05	WG1508223
Xylenes, Total	U		0.191	0.260	1	07/13/2020 23:05	WG1508223
Ethyl Ether	U		0.0170	0.100	1	07/13/2020 23:05	WG1508223
Tetrahydrofuran	U UJ	J0 ~~J3~~	0.0900	0.500	1	07/13/2020 23:05	WG1508223
Iodomethane	U		0.242	0.500	1	07/13/2020 23:05	WG1508223
Allyl chloride	U		0.580	1.00	1	07/13/2020 23:05	WG1508223
Trans-1,4-Dichloro-2-butene	U UJ	J0	0.0560	0.200	1	07/13/2020 23:05	WG1508223
(S) Toluene-d8	*96.5*			*75.0-131*		*07/13/2020 23:05*	WG1508223
(S) 4-Bromofluorobenzene	*99.0*			*67.0-138*		*07/13/2020 23:05*	WG1508223
(S) 1,2-Dichloroethane-d4	*113*			*70.0-130*		*07/13/2020 23:05*	WG1508223

Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	670000		8450	20000	1	07/13/2020 17:00	WG1507982

Sample Narrative:

L1237219-03 WG1507982: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	12300		379	1000	1	07/08/2020 12:11	WG1505580
Nitrate	U		48.0	100	1	07/08/2020 12:11	WG1505580
Sulfate	68600		594	5000	1	07/08/2020 12:11	WG1505580

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	7400		102	1000	1	07/10/2020 19:05	WG1506939

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	16900		48.9	100	1	07/10/2020 17:06	WG1506043
Manganese	3080		1.32	5.00	1	07/10/2020 17:06	WG1506043

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	2630		0.287	0.678	1	07/10/2020 15:24	WG1506878
Ethane	18.9		0.296	1.29	1	07/10/2020 15:24	WG1506878
Ethene	U		0.422	1.27	1	07/10/2020 15:24	WG1506878

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U		0.548	1.00	1	07/13/2020 23:24	WG1508223
Acrylonitrile	U		0.0760	0.500	1	07/13/2020 23:24	WG1508223
Benzene	15.4		0.0160	0.0400	1	07/13/2020 23:24	WG1508223
Bromobenzene	U		0.0420	0.500	1	07/13/2020 23:24	WG1508223
Bromodichloromethane	U		0.0315	0.100	1	07/13/2020 23:24	WG1508223
Bromoform	U		0.239	1.00	1	07/13/2020 23:24	WG1508223
Bromomethane	U		0.148	0.500	1	07/13/2020 23:24	WG1508223
n-Butylbenzene	U		0.153	0.500	1	07/13/2020 23:24	WG1508223
sec-Butylbenzene	U		0.101	0.500	1	07/13/2020 23:24	WG1508223
tert-Butylbenzene	U		0.0620	0.200	1	07/13/2020 23:24	WG1508223
Carbon tetrachloride	U		0.0432	0.200	1	07/13/2020 23:24	WG1508223
Chlorobenzene	U		0.0229	0.100	1	07/13/2020 23:24	WG1508223
Chlorodibromomethane	U		0.0180	0.100	1	07/13/2020 23:24	WG1508223
Chloroethane	U		0.0432	0.200	1	07/13/2020 23:24	WG1508223
Chloroform	U		0.0166	0.100	1	07/13/2020 23:24	WG1508223
Chloromethane	U		0.0556	0.500	1	07/13/2020 23:24	WG1508223
2-Chlorotoluene	U		0.0368	0.100	1	07/13/2020 23:24	WG1508223
4-Chlorotoluene	U		0.0452	0.200	1	07/13/2020 23:24	WG1508223
1,2-Dibromo-3-Chloropropane	U UJ	J0	0.204	1.00	1	07/13/2020 23:24	WG1508223
1,2-Dibromoethane	U		0.0210	0.100	1	07/13/2020 23:24	WG1508223

MW-308-070620

Collected date/time: 07/06/20 12:35

SAMPLE RESULTS - 03

L1237219

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l		Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Dibromomethane	U			0.0400	0.200	1	07/13/2020 23:24	WG1508223
1,2-Dichlorobenzene	U			0.0580	0.200	1	07/13/2020 23:24	WG1508223
1,3-Dichlorobenzene	U			0.0680	0.200	1	07/13/2020 23:24	WG1508223
1,4-Dichlorobenzene	U			0.0788	0.200	1	07/13/2020 23:24	WG1508223
Dichlorodifluoromethane	U			0.0327	0.100	1	07/13/2020 23:24	WG1508223
1,1-Dichloroethane	U			0.0230	0.100	1	07/13/2020 23:24	WG1508223
1,2-Dichloroethane	U			0.0190	0.100	1	07/13/2020 23:24	WG1508223
1,1-Dichloroethene	0.0710		J	0.0200	0.100	1	07/13/2020 23:24	WG1508223
cis-1,2-Dichloroethene	16.0			0.0276	0.100	1	07/13/2020 23:24	WG1508223
trans-1,2-Dichloroethene	0.608		~~J4~~	0.0572	0.200	1	07/13/2020 23:24	WG1508223
1,2-Dichloropropane	U			0.0508	0.200	1	07/13/2020 23:24	WG1508223
1,1-Dichloropropene	U			0.0280	0.100	1	07/13/2020 23:24	WG1508223
1,3-Dichloropropane	U			0.0700	0.200	1	07/13/2020 23:24	WG1508223
cis-1,3-Dichloropropene	U			0.0271	0.100	1	07/13/2020 23:24	WG1508223
trans-1,3-Dichloropropene	U			0.0612	0.200	1	07/13/2020 23:24	WG1508223
2,2-Dichloropropane	U			0.0317	0.100	1	07/13/2020 23:24	WG1508223
Di-isopropyl ether	0.105			0.0140	0.0400	1	07/13/2020 23:24	WG1508223
Ethylbenzene	0.0620		J	0.0212	0.100	1	07/13/2020 23:24	WG1508223
Hexachloro-1,3-butadiene	U			0.508	1.00	1	07/13/2020 23:24	WG1508223
Isopropylbenzene	1.83			0.0345	0.100	1	07/13/2020 23:24	WG1508223
p-Isopropyltoluene	U			0.0932	0.200	1	07/13/2020 23:24	WG1508223
2-Butanone (MEK)	U			0.500	1.00	1	07/13/2020 23:24	WG1508223
Methylene Chloride	U			0.265	1.00	1	07/13/2020 23:24	WG1508223
4-Methyl-2-pentanone (MIBK)	U			0.400	1.00	1	07/13/2020 23:24	WG1508223
Methyl tert-butyl ether	U			0.0118	0.0400	1	07/13/2020 23:24	WG1508223
Naphthalene	U			0.124	0.500	1	07/13/2020 23:24	WG1508223
n-Propylbenzene	0.229			0.0472	0.200	1	07/13/2020 23:24	WG1508223
Styrene	U			0.109	0.500	1	07/13/2020 23:24	WG1508223
1,1,1,2-Tetrachloroethane	U			0.0200	0.100	1	07/13/2020 23:24	WG1508223
1,1,2,2-Tetrachloroethane	U			0.0156	0.100	1	07/13/2020 23:24	WG1508223
1,1,2-Trichlorotrifluoroethane	U			0.0270	0.100	1	07/13/2020 23:24	WG1508223
Tetrachloroethene	U			0.0280	0.100	1	07/13/2020 23:24	WG1508223
Toluene	0.174		J	0.0500	0.200	1	07/13/2020 23:24	WG1508223
1,2,3-Trichlorobenzene	U			0.0250	0.500	1	07/13/2020 23:24	WG1508223
1,2,4-Trichlorobenzene	U			0.193	0.500	1	07/13/2020 23:24	WG1508223
1,1,1-Trichloroethane	U			0.0110	0.100	1	07/13/2020 23:24	WG1508223
1,1,2-Trichloroethane	U			0.0353	0.100	1	07/13/2020 23:24	WG1508223
Trichloroethene	U			0.0160	0.0400	1	07/13/2020 23:24	WG1508223
Trichlorofluoromethane	U			0.0200	0.100	1	07/13/2020 23:24	WG1508223
1,2,3-Trichloropropane	U			0.204	0.500	1	07/13/2020 23:24	WG1508223
1,2,4-Trimethylbenzene	U			0.0464	0.200	1	07/13/2020 23:24	WG1508223
1,2,3-Trimethylbenzene	U			0.0460	0.200	1	07/13/2020 23:24	WG1508223
1,3,5-Trimethylbenzene	U			0.0432	0.200	1	07/13/2020 23:24	WG1508223
Vinyl chloride	6.98			0.0273	0.100	1	07/13/2020 23:24	WG1508223
Xylenes, Total	U			0.191	0.260	1	07/13/2020 23:24	WG1508223
Ethyl Ether	0.253			0.0170	0.100	1	07/13/2020 23:24	WG1508223
Tetrahydrofuran	0.304	J	J J0 ~~J3~~	0.0900	0.500	1	07/13/2020 23:24	WG1508223
Iodomethane	U			0.242	0.500	1	07/13/2020 23:24	WG1508223
Allyl chloride	U			0.580	1.00	1	07/13/2020 23:24	WG1508223
Trans-1,4-Dichloro-2-butene	U	UJ	J0	0.0560	0.200	1	07/13/2020 23:24	WG1508223
(S) Toluene-d8	*95.8*				*75.0-131*		*07/13/2020 23:24*	WG1508223
(S) 4-Bromofluorobenzene	*97.9*				*67.0-138*		*07/13/2020 23:24*	WG1508223
(S) 1,2-Dichloroethane-d4	*109*				*70.0-130*		*07/13/2020 23:24*	WG1508223

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	290000		8450	20000	1	07/13/2020 17:08	WG1507982

Sample Narrative:

L1237219-04 WG1507982: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	41400		379	1000	1	07/08/2020 12:29	WG1505580
Nitrate	U		48.0	100	1	07/08/2020 12:29	WG1505580
Sulfate	32800		594	5000	1	07/08/2020 12:29	WG1505580

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	1650	~~B~~	102	1000	1	07/10/2020 19:18	WG1506939

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	22100		48.9	100	1	07/10/2020 17:09	WG1506043
Manganese	668		1.32	5.00	1	07/10/2020 17:09	WG1506043

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	625		0.287	0.678	1	07/10/2020 15:26	WG1506878
Ethane	51.6		0.296	1.29	1	07/10/2020 15:26	WG1506878
Ethene	25.9		0.422	1.27	1	07/10/2020 15:26	WG1506878

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U		0.548	1.00	1	07/13/2020 23:42	WG1508223
Acrylonitrile	U		0.0760	0.500	1	07/13/2020 23:42	WG1508223
Benzene	0.0210	J	0.0160	0.0400	1	07/13/2020 23:42	WG1508223
Bromobenzene	U		0.0420	0.500	1	07/13/2020 23:42	WG1508223
Bromodichloromethane	U		0.0315	0.100	1	07/13/2020 23:42	WG1508223
Bromoform	U		0.239	1.00	1	07/13/2020 23:42	WG1508223
Bromomethane	U		0.148	0.500	1	07/13/2020 23:42	WG1508223
n-Butylbenzene	U		0.153	0.500	1	07/13/2020 23:42	WG1508223
sec-Butylbenzene	U		0.101	0.500	1	07/13/2020 23:42	WG1508223
tert-Butylbenzene	U		0.0620	0.200	1	07/13/2020 23:42	WG1508223
Carbon tetrachloride	U		0.0432	0.200	1	07/13/2020 23:42	WG1508223
Chlorobenzene	U		0.0229	0.100	1	07/13/2020 23:42	WG1508223
Chlorodibromomethane	U		0.0180	0.100	1	07/13/2020 23:42	WG1508223
Chloroethane	U		0.0432	0.200	1	07/13/2020 23:42	WG1508223
Chloroform	U		0.0166	0.100	1	07/13/2020 23:42	WG1508223
Chloromethane	U		0.0556	0.500	1	07/13/2020 23:42	WG1508223
2-Chlorotoluene	U		0.0368	0.100	1	07/13/2020 23:42	WG1508223
4-Chlorotoluene	U		0.0452	0.200	1	07/13/2020 23:42	WG1508223
1,2-Dibromo-3-Chloropropane	U UJ	J0	0.204	1.00	1	07/13/2020 23:42	WG1508223
1,2-Dibromoethane	U		0.0210	0.100	1	07/13/2020 23:42	WG1508223

MW111-070620

Collected date/time: 07/06/20 13:40

SAMPLE RESULTS - 04

L1237219

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Dibromomethane	U		0.0400	0.200	1	07/13/2020 23:42	WG1508223
1,2-Dichlorobenzene	U		0.0580	0.200	1	07/13/2020 23:42	WG1508223
1,3-Dichlorobenzene	U		0.0680	0.200	1	07/13/2020 23:42	WG1508223
1,4-Dichlorobenzene	U		0.0788	0.200	1	07/13/2020 23:42	WG1508223
Dichlorodifluoromethane	U		0.0327	0.100	1	07/13/2020 23:42	WG1508223
1,1-Dichloroethane	U		0.0230	0.100	1	07/13/2020 23:42	WG1508223
1,2-Dichloroethane	U		0.0190	0.100	1	07/13/2020 23:42	WG1508223
1,1-Dichloroethene	0.232		0.0200	0.100	1	07/13/2020 23:42	WG1508223
cis-1,2-Dichloroethene	27.1		0.0276	0.100	1	07/13/2020 23:42	WG1508223
trans-1,2-Dichloroethene	U	~~J4~~	0.0572	0.200	1	07/13/2020 23:42	WG1508223
1,2-Dichloropropane	U		0.0508	0.200	1	07/13/2020 23:42	WG1508223
1,1-Dichloropropene	U		0.0280	0.100	1	07/13/2020 23:42	WG1508223
1,3-Dichloropropane	U		0.0700	0.200	1	07/13/2020 23:42	WG1508223
cis-1,3-Dichloropropene	U		0.0271	0.100	1	07/13/2020 23:42	WG1508223
trans-1,3-Dichloropropene	U		0.0612	0.200	1	07/13/2020 23:42	WG1508223
2,2-Dichloropropane	U		0.0317	0.100	1	07/13/2020 23:42	WG1508223
Di-isopropyl ether	U		0.0140	0.0400	1	07/13/2020 23:42	WG1508223
Ethylbenzene	U		0.0212	0.100	1	07/13/2020 23:42	WG1508223
Hexachloro-1,3-butadiene	U		0.508	1.00	1	07/13/2020 23:42	WG1508223
Isopropylbenzene	U		0.0345	0.100	1	07/13/2020 23:42	WG1508223
p-Isopropyltoluene	U		0.0932	0.200	1	07/13/2020 23:42	WG1508223
2-Butanone (MEK)	U		0.500	1.00	1	07/13/2020 23:42	WG1508223
Methylene Chloride	U		0.265	1.00	1	07/13/2020 23:42	WG1508223
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	07/13/2020 23:42	WG1508223
Methyl tert-butyl ether	U		0.0118	0.0400	1	07/13/2020 23:42	WG1508223
Naphthalene	U		0.124	0.500	1	07/13/2020 23:42	WG1508223
n-Propylbenzene	U		0.0472	0.200	1	07/13/2020 23:42	WG1508223
Styrene	U		0.109	0.500	1	07/13/2020 23:42	WG1508223
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	07/13/2020 23:42	WG1508223
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	07/13/2020 23:42	WG1508223
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	07/13/2020 23:42	WG1508223
Tetrachloroethene	U		0.0280	0.100	1	07/13/2020 23:42	WG1508223
Toluene	2.63		0.0500	0.200	1	07/13/2020 23:42	WG1508223
1,2,3-Trichlorobenzene	U		0.0250	0.500	1	07/13/2020 23:42	WG1508223
1,2,4-Trichlorobenzene	U		0.193	0.500	1	07/13/2020 23:42	WG1508223
1,1,1-Trichloroethane	U		0.0110	0.100	1	07/13/2020 23:42	WG1508223
1,1,2-Trichloroethane	U		0.0353	0.100	1	07/13/2020 23:42	WG1508223
Trichloroethene	0.140		0.0160	0.0400	1	07/13/2020 23:42	WG1508223
Trichlorofluoromethane	U		0.0200	0.100	1	07/13/2020 23:42	WG1508223
1,2,3-Trichloropropane	U		0.204	0.500	1	07/13/2020 23:42	WG1508223
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	07/13/2020 23:42	WG1508223
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	07/13/2020 23:42	WG1508223
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	07/13/2020 23:42	WG1508223
Vinyl chloride	116		0.137	0.500	5	07/15/2020 21:46	WG1509627
Xylenes, Total	U		0.191	0.260	1	07/13/2020 23:42	WG1508223
Ethyl Ether	0.0990	J	0.0170	0.100	1	07/13/2020 23:42	WG1508223
Tetrahydrofuran	U UJ	J0 ~~J3~~	0.0900	0.500	1	07/13/2020 23:42	WG1508223
Iodomethane	U		0.242	0.500	1	07/13/2020 23:42	WG1508223
Allyl chloride	U		0.580	1.00	1	07/13/2020 23:42	WG1508223
Trans-1,4-Dichloro-2-butene	U	J0	0.0560	0.200	1	07/13/2020 23:42	WG1508223
(S) Toluene-d8	*94.4*			*75.0-131*		*07/13/2020 23:42*	WG1508223
(S) Toluene-d8	*96.5*			*75.0-131*		*07/15/2020 21:46*	WG1509627
(S) 4-Bromofluorobenzene	*98.6*			*67.0-138*		*07/13/2020 23:42*	WG1508223
(S) 4-Bromofluorobenzene	*102*			*67.0-138*		*07/15/2020 21:46*	WG1509627
(S) 1,2-Dichloroethane-d4	*111*			*70.0-130*		*07/13/2020 23:42*	WG1508223
(S) 1,2-Dichloroethane-d4	*111*			*70.0-130*		*07/15/2020 21:46*	WG1509627

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

MW-309-070620

Collected date/time: 07/06/20 13:45

SAMPLE RESULTS - 05

L1237219

Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	283000		8450	20000	1	07/13/2020 17:26	WG1507982

Sample Narrative:

L1237219-05 WG1507982: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	18900		379	1000	1	07/08/2020 12:48	WG1505580
Nitrate	U		48.0	100	1	07/08/2020 12:48	WG1505580
Sulfate	70900		594	5000	1	07/08/2020 12:48	WG1505580

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	1670	~~B~~	102	1000	1	07/10/2020 19:29	WG1506939

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	938		48.9	100	1	07/10/2020 17:12	WG1506043
Manganese	683		1.32	5.00	1	07/10/2020 17:12	WG1506043

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	233		0.287	0.678	1	07/10/2020 15:29	WG1506878
Ethane	U		0.296	1.29	1	07/10/2020 15:29	WG1506878
Ethene	U		0.422	1.27	1	07/10/2020 15:29	WG1506878

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U		0.548	1.00	1	07/14/2020 00:01	WG1508223
Acrylonitrile	U		0.0760	0.500	1	07/14/2020 00:01	WG1508223
Benzene	0.524		0.0160	0.0400	1	07/14/2020 00:01	WG1508223
Bromobenzene	U		0.0420	0.500	1	07/14/2020 00:01	WG1508223
Bromodichloromethane	U		0.0315	0.100	1	07/14/2020 00:01	WG1508223
Bromoform	U		0.239	1.00	1	07/14/2020 00:01	WG1508223
Bromomethane	U		0.148	0.500	1	07/14/2020 00:01	WG1508223
n-Butylbenzene	U		0.153	0.500	1	07/14/2020 00:01	WG1508223
sec-Butylbenzene	U		0.101	0.500	1	07/14/2020 00:01	WG1508223
tert-Butylbenzene	U		0.0620	0.200	1	07/14/2020 00:01	WG1508223
Carbon tetrachloride	U		0.0432	0.200	1	07/14/2020 00:01	WG1508223
Chlorobenzene	U		0.0229	0.100	1	07/14/2020 00:01	WG1508223
Chlorodibromomethane	U		0.0180	0.100	1	07/14/2020 00:01	WG1508223
Chloroethane	U		0.0432	0.200	1	07/14/2020 00:01	WG1508223
Chloroform	U		0.0166	0.100	1	07/14/2020 00:01	WG1508223
Chloromethane	U		0.0556	0.500	1	07/14/2020 00:01	WG1508223
2-Chlorotoluene	U		0.0368	0.100	1	07/14/2020 00:01	WG1508223
4-Chlorotoluene	U		0.0452	0.200	1	07/14/2020 00:01	WG1508223
1,2-Dibromo-3-Chloropropane	U	UJ J0	0.204	1.00	1	07/14/2020 00:01	WG1508223
1,2-Dibromoethane	U		0.0210	0.100	1	07/14/2020 00:01	WG1508223

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Dibromomethane	U		0.0400	0.200	1	07/14/2020 00:01	WG1508223
1,2-Dichlorobenzene	U		0.0580	0.200	1	07/14/2020 00:01	WG1508223
1,3-Dichlorobenzene	U		0.0680	0.200	1	07/14/2020 00:01	WG1508223
1,4-Dichlorobenzene	U		0.0788	0.200	1	07/14/2020 00:01	WG1508223
Dichlorodifluoromethane	U		0.0327	0.100	1	07/14/2020 00:01	WG1508223
1,1-Dichloroethane	0.0430	J	0.0230	0.100	1	07/14/2020 00:01	WG1508223
1,2-Dichloroethane	U		0.0190	0.100	1	07/14/2020 00:01	WG1508223
1,1-Dichloroethene	U		0.0200	0.100	1	07/14/2020 00:01	WG1508223
cis-1,2-Dichloroethene	0.170		0.0276	0.100	1	07/14/2020 00:01	WG1508223
trans-1,2-Dichloroethene	U	~~J4~~	0.0572	0.200	1	07/14/2020 00:01	WG1508223
1,2-Dichloropropane	U		0.0508	0.200	1	07/14/2020 00:01	WG1508223
1,1-Dichloropropene	U		0.0280	0.100	1	07/14/2020 00:01	WG1508223
1,3-Dichloropropane	U		0.0700	0.200	1	07/14/2020 00:01	WG1508223
cis-1,3-Dichloropropene	U		0.0271	0.100	1	07/14/2020 00:01	WG1508223
trans-1,3-Dichloropropene	U		0.0612	0.200	1	07/14/2020 00:01	WG1508223
2,2-Dichloropropane	U		0.0317	0.100	1	07/14/2020 00:01	WG1508223
Di-isopropyl ether	U		0.0140	0.0400	1	07/14/2020 00:01	WG1508223
Ethylbenzene	0.0640	J	0.0212	0.100	1	07/14/2020 00:01	WG1508223
Hexachloro-1,3-butadiene	U		0.508	1.00	1	07/14/2020 00:01	WG1508223
Isopropylbenzene	0.0490	J	0.0345	0.100	1	07/14/2020 00:01	WG1508223
p-Isopropyltoluene	U		0.0932	0.200	1	07/14/2020 00:01	WG1508223
2-Butanone (MEK)	U		0.500	1.00	1	07/14/2020 00:01	WG1508223
Methylene Chloride	U		0.265	1.00	1	07/14/2020 00:01	WG1508223
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	07/14/2020 00:01	WG1508223
Methyl tert-butyl ether	U		0.0118	0.0400	1	07/14/2020 00:01	WG1508223
Naphthalene	U		0.124	0.500	1	07/14/2020 00:01	WG1508223
n-Propylbenzene	U		0.0472	0.200	1	07/14/2020 00:01	WG1508223
Styrene	U		0.109	0.500	1	07/14/2020 00:01	WG1508223
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	07/14/2020 00:01	WG1508223
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	07/14/2020 00:01	WG1508223
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	07/14/2020 00:01	WG1508223
Tetrachloroethene	0.0930	J	0.0280	0.100	1	07/14/2020 00:01	WG1508223
Toluene	U		0.0500	0.200	1	07/14/2020 00:01	WG1508223
1,2,3-Trichlorobenzene	U		0.0250	0.500	1	07/14/2020 00:01	WG1508223
1,2,4-Trichlorobenzene	U		0.193	0.500	1	07/14/2020 00:01	WG1508223
1,1,1-Trichloroethane	U		0.0110	0.100	1	07/14/2020 00:01	WG1508223
1,1,2-Trichloroethane	U		0.0353	0.100	1	07/14/2020 00:01	WG1508223
Trichloroethene	U		0.0160	0.0400	1	07/14/2020 00:01	WG1508223
Trichlorofluoromethane	U		0.0200	0.100	1	07/14/2020 00:01	WG1508223
1,2,3-Trichloropropane	U		0.204	0.500	1	07/14/2020 00:01	WG1508223
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	07/14/2020 00:01	WG1508223
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	07/14/2020 00:01	WG1508223
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	07/14/2020 00:01	WG1508223
Vinyl chloride	16.0		0.0273	0.100	1	07/14/2020 00:01	WG1508223
Xylenes, Total	U		0.191	0.260	1	07/14/2020 00:01	WG1508223
Ethyl Ether	U		0.0170	0.100	1	07/14/2020 00:01	WG1508223
Tetrahydrofuran	U UJ	J0 ~~J3~~	0.0900	0.500	1	07/14/2020 00:01	WG1508223
Iodomethane	U		0.242	0.500	1	07/14/2020 00:01	WG1508223
Allyl chloride	U		0.580	1.00	1	07/14/2020 00:01	WG1508223
Trans-1,4-Dichloro-2-butene	U UJ	J0	0.0560	0.200	1	07/14/2020 00:01	WG1508223
(S) Toluene-d8	*95.3*			*75.0-131*		*07/14/2020 00:01*	WG1508223
(S) 4-Bromofluorobenzene	*100*			*67.0-138*		*07/14/2020 00:01*	WG1508223
(S) 1,2-Dichloroethane-d4	*108*			*70.0-130*		*07/14/2020 00:01*	WG1508223

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U		0.548	1.00	1	07/14/2020 00:20	WG1508223
Acrylonitrile	U		0.0760	0.500	1	07/14/2020 00:20	WG1508223
Benzene	U		0.0160	0.0400	1	07/14/2020 00:20	WG1508223
Bromobenzene	U		0.0420	0.500	1	07/14/2020 00:20	WG1508223
Bromodichloromethane	U		0.0315	0.100	1	07/14/2020 00:20	WG1508223
Bromoform	U		0.239	1.00	1	07/14/2020 00:20	WG1508223
Bromomethane	U		0.148	0.500	1	07/14/2020 00:20	WG1508223
n-Butylbenzene	U		0.153	0.500	1	07/14/2020 00:20	WG1508223
sec-Butylbenzene	U		0.101	0.500	1	07/14/2020 00:20	WG1508223
tert-Butylbenzene	U		0.0620	0.200	1	07/14/2020 00:20	WG1508223
Carbon tetrachloride	U		0.0432	0.200	1	07/14/2020 00:20	WG1508223
Chlorobenzene	U		0.0229	0.100	1	07/14/2020 00:20	WG1508223
Chlorodibromomethane	U		0.0180	0.100	1	07/14/2020 00:20	WG1508223
Chloroethane	U		0.0432	0.200	1	07/14/2020 00:20	WG1508223
Chloroform	U		0.0166	0.100	1	07/14/2020 00:20	WG1508223
Chloromethane	U		0.0556	0.500	1	07/14/2020 00:20	WG1508223
2-Chlorotoluene	U		0.0368	0.100	1	07/14/2020 00:20	WG1508223
4-Chlorotoluene	U		0.0452	0.200	1	07/14/2020 00:20	WG1508223
1,2-Dibromo-3-Chloropropane	U	UJ J0	0.204	1.00	1	07/14/2020 00:20	WG1508223
1,2-Dibromoethane	U		0.0210	0.100	1	07/14/2020 00:20	WG1508223
Dibromomethane	U		0.0400	0.200	1	07/14/2020 00:20	WG1508223
1,2-Dichlorobenzene	U		0.0580	0.200	1	07/14/2020 00:20	WG1508223
1,3-Dichlorobenzene	U		0.0680	0.200	1	07/14/2020 00:20	WG1508223
1,4-Dichlorobenzene	U		0.0788	0.200	1	07/14/2020 00:20	WG1508223
Dichlorodifluoromethane	U		0.0327	0.100	1	07/14/2020 00:20	WG1508223
1,1-Dichloroethane	U		0.0230	0.100	1	07/14/2020 00:20	WG1508223
1,2-Dichloroethane	0.0440	J	0.0190	0.100	1	07/14/2020 00:20	WG1508223
1,1-Dichloroethene	U		0.0200	0.100	1	07/14/2020 00:20	WG1508223
cis-1,2-Dichloroethene	U		0.0276	0.100	1	07/14/2020 00:20	WG1508223
trans-1,2-Dichloroethene	U	~~J4~~	0.0572	0.200	1	07/14/2020 00:20	WG1508223
1,2-Dichloropropane	U		0.0508	0.200	1	07/14/2020 00:20	WG1508223
1,1-Dichloropropene	U		0.0280	0.100	1	07/14/2020 00:20	WG1508223
1,3-Dichloropropane	U		0.0700	0.200	1	07/14/2020 00:20	WG1508223
cis-1,3-Dichloropropene	U		0.0271	0.100	1	07/14/2020 00:20	WG1508223
trans-1,3-Dichloropropene	U		0.0612	0.200	1	07/14/2020 00:20	WG1508223
2,2-Dichloropropane	U		0.0317	0.100	1	07/14/2020 00:20	WG1508223
Di-isopropyl ether	U		0.0140	0.0400	1	07/14/2020 00:20	WG1508223
Ethylbenzene	U		0.0212	0.100	1	07/14/2020 00:20	WG1508223
Hexachloro-1,3-butadiene	U		0.508	1.00	1	07/14/2020 00:20	WG1508223
Isopropylbenzene	U		0.0345	0.100	1	07/14/2020 00:20	WG1508223
p-Isopropyltoluene	U		0.0932	0.200	1	07/14/2020 00:20	WG1508223
2-Butanone (MEK)	U		0.500	1.00	1	07/14/2020 00:20	WG1508223
Methylene Chloride	U		0.265	1.00	1	07/14/2020 00:20	WG1508223
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	07/14/2020 00:20	WG1508223
Methyl tert-butyl ether	U		0.0118	0.0400	1	07/14/2020 00:20	WG1508223
Naphthalene	U		0.124	0.500	1	07/14/2020 00:20	WG1508223
n-Propylbenzene	U		0.0472	0.200	1	07/14/2020 00:20	WG1508223
Styrene	U		0.109	0.500	1	07/14/2020 00:20	WG1508223
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	07/14/2020 00:20	WG1508223
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	07/14/2020 00:20	WG1508223
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	07/14/2020 00:20	WG1508223
Tetrachloroethene	U		0.0280	0.100	1	07/14/2020 00:20	WG1508223
Toluene	U		0.0500	0.200	1	07/14/2020 00:20	WG1508223
1,2,3-Trichlorobenzene	U		0.0250	0.500	1	07/14/2020 00:20	WG1508223
1,2,4-Trichlorobenzene	U		0.193	0.500	1	07/14/2020 00:20	WG1508223
1,1,1-Trichloroethane	U		0.0110	0.100	1	07/14/2020 00:20	WG1508223

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,1,2-Trichloroethane	U		0.0353	0.100	1	07/14/2020 00:20	WG1508223
Trichloroethene	U		0.0160	0.0400	1	07/14/2020 00:20	WG1508223
Trichlorofluoromethane	U		0.0200	0.100	1	07/14/2020 00:20	WG1508223
1,2,3-Trichloropropane	U		0.204	0.500	1	07/14/2020 00:20	WG1508223
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	07/14/2020 00:20	WG1508223
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	07/14/2020 00:20	WG1508223
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	07/14/2020 00:20	WG1508223
Vinyl chloride	U		0.0273	0.100	1	07/14/2020 00:20	WG1508223
Xylenes, Total	U		0.191	0.260	1	07/14/2020 00:20	WG1508223
Ethyl Ether	U		0.0170	0.100	1	07/14/2020 00:20	WG1508223
Tetrahydrofuran	U UJ	J0 ~~J3~~	0.0900	0.500	1	07/14/2020 00:20	WG1508223
Iodomethane	U		0.242	0.500	1	07/14/2020 00:20	WG1508223
Allyl chloride	U		0.580	1.00	1	07/14/2020 00:20	WG1508223
Trans-1,4-Dichloro-2-butene	U UJ	J0	0.0560	0.200	1	07/14/2020 00:20	WG1508223
(S) Toluene-d8	*96.3*			*75.0-131*		*07/14/2020 00:20*	WG1508223
(S) 4-Bromofluorobenzene	*97.1*			*67.0-138*		*07/14/2020 00:20*	WG1508223
(S) 1,2-Dichloroethane-d4	*109*			*70.0-130*		*07/14/2020 00:20*	WG1508223

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	588000		8450	20000	1	07/13/2020 17:35	WG1507982

Sample Narrative:

L1237219-07 WG1507982: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	5920		379	1000	1	07/08/2020 13:06	WG1505580
Nitrate	61.3	J ~~PT~~	48.0	100	1	07/08/2020 13:06	WG1505580
Sulfate	3740	J	594	5000	1	07/08/2020 13:06	WG1505580

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	8410		102	1000	1	07/10/2020 19:43	WG1506939

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	12600		48.9	100	1	07/10/2020 17:16	WG1506043
Manganese	3810		1.32	5.00	1	07/10/2020 17:16	WG1506043

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	3790		0.287	0.678	1	07/10/2020 15:34	WG1506878
Ethane	22.1		0.296	1.29	1	07/10/2020 15:34	WG1506878
Ethene	U		0.422	1.27	1	07/10/2020 15:34	WG1506878

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U		0.548	1.00	1	07/14/2020 00:39	WG1508223
Acrylonitrile	U		0.0760	0.500	1	07/14/2020 00:39	WG1508223
Benzene	0.0340	J	0.0160	0.0400	1	07/14/2020 00:39	WG1508223
Bromobenzene	U		0.0420	0.500	1	07/14/2020 00:39	WG1508223
Bromodichloromethane	U		0.0315	0.100	1	07/14/2020 00:39	WG1508223
Bromoform	U		0.239	1.00	1	07/14/2020 00:39	WG1508223
Bromomethane	U		0.148	0.500	1	07/14/2020 00:39	WG1508223
n-Butylbenzene	U		0.153	0.500	1	07/14/2020 00:39	WG1508223
sec-Butylbenzene	U		0.101	0.500	1	07/14/2020 00:39	WG1508223
tert-Butylbenzene	U		0.0620	0.200	1	07/14/2020 00:39	WG1508223
Carbon tetrachloride	U		0.0432	0.200	1	07/14/2020 00:39	WG1508223
Chlorobenzene	U		0.0229	0.100	1	07/14/2020 00:39	WG1508223
Chlorodibromomethane	U		0.0180	0.100	1	07/14/2020 00:39	WG1508223
Chloroethane	U		0.0432	0.200	1	07/14/2020 00:39	WG1508223
Chloroform	U		0.0166	0.100	1	07/14/2020 00:39	WG1508223
Chloromethane	U		0.0556	0.500	1	07/14/2020 00:39	WG1508223
2-Chlorotoluene	U		0.0368	0.100	1	07/14/2020 00:39	WG1508223
4-Chlorotoluene	U		0.0452	0.200	1	07/14/2020 00:39	WG1508223
1,2-Dibromo-3-Chloropropane	U UJ	J0	0.204	1.00	1	07/14/2020 00:39	WG1508223
1,2-Dibromoethane	U		0.0210	0.100	1	07/14/2020 00:39	WG1508223

MW109-070620

Collected date/time: 07/06/20 15:35

SAMPLE RESULTS - 07

L1237219

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Dibromomethane	U		0.0400	0.200	1	07/14/2020 00:39	WG1508223
1,2-Dichlorobenzene	U		0.0580	0.200	1	07/14/2020 00:39	WG1508223
1,3-Dichlorobenzene	U		0.0680	0.200	1	07/14/2020 00:39	WG1508223
1,4-Dichlorobenzene	U		0.0788	0.200	1	07/14/2020 00:39	WG1508223
Dichlorodifluoromethane	U		0.0327	0.100	1	07/14/2020 00:39	WG1508223
1,1-Dichloroethane	0.0230	J	0.0230	0.100	1	07/14/2020 00:39	WG1508223
1,2-Dichloroethane	U		0.0190	0.100	1	07/14/2020 00:39	WG1508223
1,1-Dichloroethene	0.116		0.0200	0.100	1	07/14/2020 00:39	WG1508223
cis-1,2-Dichloroethene	45.4		0.0276	0.100	1	07/14/2020 00:39	WG1508223
trans-1,2-Dichloroethene	0.293	~~J4~~	0.0572	0.200	1	07/14/2020 00:39	WG1508223
1,2-Dichloropropane	U		0.0508	0.200	1	07/14/2020 00:39	WG1508223
1,1-Dichloropropene	U		0.0280	0.100	1	07/14/2020 00:39	WG1508223
1,3-Dichloropropane	U		0.0700	0.200	1	07/14/2020 00:39	WG1508223
cis-1,3-Dichloropropene	U		0.0271	0.100	1	07/14/2020 00:39	WG1508223
trans-1,3-Dichloropropene	U		0.0612	0.200	1	07/14/2020 00:39	WG1508223
2,2-Dichloropropane	U		0.0317	0.100	1	07/14/2020 00:39	WG1508223
Di-isopropyl ether	0.0230	J	0.0140	0.0400	1	07/14/2020 00:39	WG1508223
Ethylbenzene	U		0.0212	0.100	1	07/14/2020 00:39	WG1508223
Hexachloro-1,3-butadiene	U		0.508	1.00	1	07/14/2020 00:39	WG1508223
Isopropylbenzene	U		0.0345	0.100	1	07/14/2020 00:39	WG1508223
p-Isopropyltoluene	U		0.0932	0.200	1	07/14/2020 00:39	WG1508223
2-Butanone (MEK)	U		0.500	1.00	1	07/14/2020 00:39	WG1508223
Methylene Chloride	U		0.265	1.00	1	07/14/2020 00:39	WG1508223
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	07/14/2020 00:39	WG1508223
Methyl tert-butyl ether	U		0.0118	0.0400	1	07/14/2020 00:39	WG1508223
Naphthalene	U		0.124	0.500	1	07/14/2020 00:39	WG1508223
n-Propylbenzene	U		0.0472	0.200	1	07/14/2020 00:39	WG1508223
Styrene	U		0.109	0.500	1	07/14/2020 00:39	WG1508223
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	07/14/2020 00:39	WG1508223
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	07/14/2020 00:39	WG1508223
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	07/14/2020 00:39	WG1508223
Tetrachloroethene	U		0.0280	0.100	1	07/14/2020 00:39	WG1508223
Toluene	0.967		0.0500	0.200	1	07/14/2020 00:39	WG1508223
1,2,3-Trichlorobenzene	U		0.0250	0.500	1	07/14/2020 00:39	WG1508223
1,2,4-Trichlorobenzene	U		0.193	0.500	1	07/14/2020 00:39	WG1508223
1,1,1-Trichloroethane	U		0.0110	0.100	1	07/14/2020 00:39	WG1508223
1,1,2-Trichloroethane	U		0.0353	0.100	1	07/14/2020 00:39	WG1508223
Trichloroethene	0.162		0.0160	0.0400	1	07/14/2020 00:39	WG1508223
Trichlorofluoromethane	U		0.0200	0.100	1	07/14/2020 00:39	WG1508223
1,2,3-Trichloropropane	U		0.204	0.500	1	07/14/2020 00:39	WG1508223
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	07/14/2020 00:39	WG1508223
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	07/14/2020 00:39	WG1508223
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	07/14/2020 00:39	WG1508223
Vinyl chloride	12.4		0.0273	0.100	1	07/14/2020 00:39	WG1508223
Xylenes, Total	U		0.191	0.260	1	07/14/2020 00:39	WG1508223
Ethyl Ether	0.217		0.0170	0.100	1	07/14/2020 00:39	WG1508223
Tetrahydrofuran	U UJ	J0 ~~J3~~	0.0900	0.500	1	07/14/2020 00:39	WG1508223
Iodomethane	U		0.242	0.500	1	07/14/2020 00:39	WG1508223
Allyl chloride	U		0.580	1.00	1	07/14/2020 00:39	WG1508223
Trans-1,4-Dichloro-2-butene	U UJ	J0	0.0560	0.200	1	07/14/2020 00:39	WG1508223
(S) Toluene-d8	*97.9*			*75.0-131*		*07/14/2020 00:39*	WG1508223
(S) 4-Bromofluorobenzene	*98.1*			*67.0-138*		*07/14/2020 00:39*	WG1508223
(S) 1,2-Dichloroethane-d4	*109*			*70.0-130*		*07/14/2020 00:39*	WG1508223

TB-070620
Collected date/time: 07/06/20 16:00

SAMPLE RESULTS - 08

L1237219

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U		0.548	1.00	1	07/13/2020 22:08	WG1508223
Acrylonitrile	U		0.0760	0.500	1	07/13/2020 22:08	WG1508223
Benzene	U		0.0160	0.0400	1	07/13/2020 22:08	WG1508223
Bromobenzene	U		0.0420	0.500	1	07/13/2020 22:08	WG1508223
Bromodichloromethane	U		0.0315	0.100	1	07/13/2020 22:08	WG1508223
Bromoform	U		0.239	1.00	1	07/13/2020 22:08	WG1508223
Bromomethane	U		0.148	0.500	1	07/13/2020 22:08	WG1508223
n-Butylbenzene	U		0.153	0.500	1	07/13/2020 22:08	WG1508223
sec-Butylbenzene	U		0.101	0.500	1	07/13/2020 22:08	WG1508223
tert-Butylbenzene	U		0.0620	0.200	1	07/13/2020 22:08	WG1508223
Carbon tetrachloride	U		0.0432	0.200	1	07/13/2020 22:08	WG1508223
Chlorobenzene	U		0.0229	0.100	1	07/13/2020 22:08	WG1508223
Chlorodibromomethane	U		0.0180	0.100	1	07/13/2020 22:08	WG1508223
Chloroethane	U		0.0432	0.200	1	07/13/2020 22:08	WG1508223
Chloroform	U		0.0166	0.100	1	07/13/2020 22:08	WG1508223
Chloromethane	U		0.0556	0.500	1	07/13/2020 22:08	WG1508223
2-Chlorotoluene	U		0.0368	0.100	1	07/13/2020 22:08	WG1508223
4-Chlorotoluene	U		0.0452	0.200	1	07/13/2020 22:08	WG1508223
1,2-Dibromo-3-Chloropropane	U	UJ J0	0.204	1.00	1	07/13/2020 22:08	WG1508223
1,2-Dibromoethane	U		0.0210	0.100	1	07/13/2020 22:08	WG1508223
Dibromomethane	U		0.0400	0.200	1	07/13/2020 22:08	WG1508223
1,2-Dichlorobenzene	U		0.0580	0.200	1	07/13/2020 22:08	WG1508223
1,3-Dichlorobenzene	U		0.0680	0.200	1	07/13/2020 22:08	WG1508223
1,4-Dichlorobenzene	U		0.0788	0.200	1	07/13/2020 22:08	WG1508223
Dichlorodifluoromethane	U		0.0327	0.100	1	07/13/2020 22:08	WG1508223
1,1-Dichloroethane	U		0.0230	0.100	1	07/13/2020 22:08	WG1508223
1,2-Dichloroethane	U		0.0190	0.100	1	07/13/2020 22:08	WG1508223
1,1-Dichloroethene	U		0.0200	0.100	1	07/13/2020 22:08	WG1508223
cis-1,2-Dichloroethene	U		0.0276	0.100	1	07/13/2020 22:08	WG1508223
trans-1,2-Dichloroethene	U	~~J4~~	0.0572	0.200	1	07/13/2020 22:08	WG1508223
1,2-Dichloropropane	U		0.0508	0.200	1	07/13/2020 22:08	WG1508223
1,1-Dichloropropene	U		0.0280	0.100	1	07/13/2020 22:08	WG1508223
1,3-Dichloropropane	U		0.0700	0.200	1	07/13/2020 22:08	WG1508223
cis-1,3-Dichloropropene	U		0.0271	0.100	1	07/13/2020 22:08	WG1508223
trans-1,3-Dichloropropene	U		0.0612	0.200	1	07/13/2020 22:08	WG1508223
2,2-Dichloropropane	U		0.0317	0.100	1	07/13/2020 22:08	WG1508223
Di-isopropyl ether	U		0.0140	0.0400	1	07/13/2020 22:08	WG1508223
Ethylbenzene	U		0.0212	0.100	1	07/13/2020 22:08	WG1508223
Hexachloro-1,3-butadiene	U		0.508	1.00	1	07/13/2020 22:08	WG1508223
Isopropylbenzene	U		0.0345	0.100	1	07/13/2020 22:08	WG1508223
p-Isopropyltoluene	U		0.0932	0.200	1	07/13/2020 22:08	WG1508223
2-Butanone (MEK)	U		0.500	1.00	1	07/13/2020 22:08	WG1508223
Methylene Chloride	U		0.265	1.00	1	07/13/2020 22:08	WG1508223
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	07/13/2020 22:08	WG1508223
Methyl tert-butyl ether	U		0.0118	0.0400	1	07/13/2020 22:08	WG1508223
Naphthalene	U		0.124	0.500	1	07/13/2020 22:08	WG1508223
n-Propylbenzene	U		0.0472	0.200	1	07/13/2020 22:08	WG1508223
Styrene	U		0.109	0.500	1	07/13/2020 22:08	WG1508223
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	07/13/2020 22:08	WG1508223
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	07/13/2020 22:08	WG1508223
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	07/13/2020 22:08	WG1508223
Tetrachloroethene	U		0.0280	0.100	1	07/13/2020 22:08	WG1508223
Toluene	U		0.0500	0.200	1	07/13/2020 22:08	WG1508223
1,2,3-Trichlorobenzene	U		0.0250	0.500	1	07/13/2020 22:08	WG1508223
1,2,4-Trichlorobenzene	U		0.193	0.500	1	07/13/2020 22:08	WG1508223
1,1,1-Trichloroethane	U		0.0110	0.100	1	07/13/2020 22:08	WG1508223

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,1,2-Trichloroethane	U		0.0353	0.100	1	07/13/2020 22:08	WG1508223
Trichloroethene	U		0.0160	0.0400	1	07/13/2020 22:08	WG1508223
Trichlorofluoromethane	U		0.0200	0.100	1	07/13/2020 22:08	WG1508223
1,2,3-Trichloropropane	U		0.204	0.500	1	07/13/2020 22:08	WG1508223
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	07/13/2020 22:08	WG1508223
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	07/13/2020 22:08	WG1508223
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	07/13/2020 22:08	WG1508223
Vinyl chloride	U		0.0273	0.100	1	07/13/2020 22:08	WG1508223
Xylenes, Total	U		0.191	0.260	1	07/13/2020 22:08	WG1508223
Ethyl Ether	U		0.0170	0.100	1	07/13/2020 22:08	WG1508223
Tetrahydrofuran	U UJ	J0 ~~J3~~	0.0900	0.500	1	07/13/2020 22:08	WG1508223
Iodomethane	U		0.242	0.500	1	07/13/2020 22:08	WG1508223
Allyl chloride	U		0.580	1.00	1	07/13/2020 22:08	WG1508223
Trans-1,4-Dichloro-2-butene	U UJ	J0	0.0560	0.200	1	07/13/2020 22:08	WG1508223
(S) Toluene-d8	*97.1*			*75.0-131*		*07/13/2020 22:08*	WG1508223
(S) 4-Bromofluorobenzene	*102*			*67.0-138*		*07/13/2020 22:08*	WG1508223
(S) 1,2-Dichloroethane-d4	*111*			*70.0-130*		*07/13/2020 22:08*	WG1508223

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	373000		8450	20000	1	07/14/2020 15:28	WG1508212

Sample Narrative:

L1237678-01 WG1508212: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	25400		379	1000	1	07/09/2020 13:53	WG1506275
Nitrate	78.9	J	48.0	100	1	07/09/2020 13:53	WG1506275
Sulfate	5360		594	5000	1	07/09/2020 13:53	WG1506275

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	5800		102	1000	1	07/10/2020 16:18	WG1506941

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	5630		48.9	100	1	07/10/2020 22:17	WG1506425
Manganese	305		1.32	5.00	1	07/10/2020 22:17	WG1506425

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	8540		2.87	6.78	10	07/15/2020 13:38	WG1509488
Ethane	U		0.296	1.29	1	07/10/2020 15:48	WG1506878
Ethene	U		0.422	1.27	1	07/10/2020 15:48	WG1506878

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch	
Acetone	U		0.548	1.00	1	07/14/2020 00:58	WG1508223	
Acrylonitrile	U		0.0760	0.500	1	07/14/2020 00:58	WG1508223	
Benzene	U		0.0160	0.0400	1	07/14/2020 00:58	WG1508223	
Bromobenzene	U		0.0420	0.500	1	07/14/2020 00:58	WG1508223	
Bromodichloromethane	U		0.0315	0.100	1	07/14/2020 00:58	WG1508223	
Bromoform	U		0.239	1.00	1	07/14/2020 00:58	WG1508223	
Bromomethane	U		0.148	0.500	1	07/14/2020 00:58	WG1508223	
n-Butylbenzene	U		0.153	0.500	1	07/14/2020 00:58	WG1508223	
sec-Butylbenzene	U		0.101	0.500	1	07/14/2020 00:58	WG1508223	
tert-Butylbenzene	U		0.0620	0.200	1	07/14/2020 00:58	WG1508223	
Carbon tetrachloride	U		0.0432	0.200	1	07/14/2020 00:58	WG1508223	
Chlorobenzene	U		0.0229	0.100	1	07/14/2020 00:58	WG1508223	
Chlorodibromomethane	U		0.0180	0.100	1	07/14/2020 00:58	WG1508223	
Chloroethane	U		0.0432	0.200	1	07/14/2020 00:58	WG1508223	
Chloroform	U		0.0166	0.100	1	07/14/2020 00:58	WG1508223	
Chloromethane	U		0.0556	0.500	1	07/14/2020 00:58	WG1508223	
2-Chlorotoluene	U		0.0368	0.100	1	07/14/2020 00:58	WG1508223	
4-Chlorotoluene	U		0.0452	0.200	1	07/14/2020 00:58	WG1508223	
1,2-Dibromo-3-Chloropropane	U UJ	J0	0.204	1.00	1	07/14/2020 00:58	WG1508223	JC 8/11/2020
1,2-Dibromoethane	U		0.0210	0.100	1	07/14/2020 00:58	WG1508223	

Volatile Organic Compounds (GC/MS) by Method 8260D

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Dibromomethane	U		0.0400	0.200	1	07/14/2020 00:58	WG1508223
1,2-Dichlorobenzene	U		0.0580	0.200	1	07/14/2020 00:58	WG1508223
1,3-Dichlorobenzene	U		0.0680	0.200	1	07/14/2020 00:58	WG1508223
1,4-Dichlorobenzene	U		0.0788	0.200	1	07/14/2020 00:58	WG1508223
Dichlorodifluoromethane	U		0.0327	0.100	1	07/14/2020 00:58	WG1508223
1,1-Dichloroethane	U		0.0230	0.100	1	07/14/2020 00:58	WG1508223
1,2-Dichloroethane	U		0.0190	0.100	1	07/14/2020 00:58	WG1508223
1,1-Dichloroethene	U		0.0200	0.100	1	07/14/2020 00:58	WG1508223
cis-1,2-Dichloroethene	0.0320	J	0.0276	0.100	1	07/14/2020 00:58	WG1508223
trans-1,2-Dichloroethene	U	~~J4~~	0.0572	0.200	1	07/14/2020 00:58	WG1508223
1,2-Dichloropropane	U		0.0508	0.200	1	07/14/2020 00:58	WG1508223
1,1-Dichloropropene	U		0.0280	0.100	1	07/14/2020 00:58	WG1508223
1,3-Dichloropropane	U		0.0700	0.200	1	07/14/2020 00:58	WG1508223
cis-1,3-Dichloropropene	U		0.0271	0.100	1	07/14/2020 00:58	WG1508223
trans-1,3-Dichloropropene	U		0.0612	0.200	1	07/14/2020 00:58	WG1508223
2,2-Dichloropropane	U		0.0317	0.100	1	07/14/2020 00:58	WG1508223
Di-isopropyl ether	U		0.0140	0.0400	1	07/14/2020 00:58	WG1508223
Ethylbenzene	U		0.0212	0.100	1	07/14/2020 00:58	WG1508223
Hexachloro-1,3-butadiene	U		0.508	1.00	1	07/14/2020 00:58	WG1508223
Isopropylbenzene	U		0.0345	0.100	1	07/14/2020 00:58	WG1508223
p-Isopropyltoluene	U		0.0932	0.200	1	07/14/2020 00:58	WG1508223
2-Butanone (MEK)	U		0.500	1.00	1	07/14/2020 00:58	WG1508223
Methylene Chloride	U		0.265	1.00	1	07/14/2020 00:58	WG1508223
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	07/14/2020 00:58	WG1508223
Methyl tert-butyl ether	U		0.0118	0.0400	1	07/14/2020 00:58	WG1508223
Naphthalene	U		0.124	0.500	1	07/14/2020 00:58	WG1508223
n-Propylbenzene	U		0.0472	0.200	1	07/14/2020 00:58	WG1508223
Styrene	U		0.109	0.500	1	07/14/2020 00:58	WG1508223
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	07/14/2020 00:58	WG1508223
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	07/14/2020 00:58	WG1508223
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	07/14/2020 00:58	WG1508223
Tetrachloroethene	U		0.0280	0.100	1	07/14/2020 00:58	WG1508223
Toluene	1.37		0.0500	0.200	1	07/14/2020 00:58	WG1508223
1,2,3-Trichlorobenzene	U		0.0250	0.500	1	07/14/2020 00:58	WG1508223
1,2,4-Trichlorobenzene	U		0.193	0.500	1	07/14/2020 00:58	WG1508223
1,1,1-Trichloroethane	U		0.0110	0.100	1	07/14/2020 00:58	WG1508223
1,1,2-Trichloroethane	U		0.0353	0.100	1	07/14/2020 00:58	WG1508223
Trichloroethene	U		0.0160	0.0400	1	07/14/2020 00:58	WG1508223
Trichlorofluoromethane	U		0.0200	0.100	1	07/14/2020 00:58	WG1508223
1,2,3-Trichloropropane	U		0.204	0.500	1	07/14/2020 00:58	WG1508223
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	07/14/2020 00:58	WG1508223
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	07/14/2020 00:58	WG1508223
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	07/14/2020 00:58	WG1508223
Vinyl chloride	U		0.0273	0.100	1	07/14/2020 00:58	WG1508223
Xylenes, Total	U		0.191	0.260	1	07/14/2020 00:58	WG1508223
Ethyl Ether	0.0510	J	0.0170	0.100	1	07/14/2020 00:58	WG1508223
Tetrahydrofuran	U UJ	J0 ~~J3~~	0.0900	0.500	1	07/14/2020 00:58	WG1508223
Iodomethane	U		0.242	0.500	1	07/14/2020 00:58	WG1508223
Allyl chloride	U		0.580	1.00	1	07/14/2020 00:58	WG1508223
Trans-1,4-Dichloro-2-butene	U UJ	J0	0.0560	0.200	1	07/14/2020 00:58	WG1508223
(S) Toluene-d8	*95.8*			*75.0-131*		*07/14/2020 00:58*	WG1508223
(S) 4-Bromofluorobenzene	*98.5*			*67.0-138*		*07/14/2020 00:58*	WG1508223
(S) 1,2-Dichloroethane-d4	*109*			*70.0-130*		*07/14/2020 00:58*	WG1508223

JC 8/11/2020

Wet Chemistry by Method 2320 B-2011

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Alkalinity	581000		8450	20000	1	07/14/2020 15:36	WG1508212

Sample Narrative:

L1237678-02 WG1508212: Endpoint pH 4.5

Wet Chemistry by Method 9056A

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Chloride	161000		1900	5000	5	07/09/2020 15:03	WG1506275
Nitrate	U		48.0	100	1	07/09/2020 14:46	WG1506275
Sulfate	U		594	5000	1	07/09/2020 14:46	WG1506275

Wet Chemistry by Method 9060A

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
TOC (Total Organic Carbon)	21800		102	1000	1	07/10/2020 17:51	WG1506941

Metals (ICPMS) by Method 6020B

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Iron	10100		48.9	100	1	07/10/2020 22:20	WG1506425
Manganese	1360		1.32	5.00	1	07/10/2020 22:20	WG1506425

Volatile Organic Compounds (GC) by Method NWTPHGX

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Gasoline Range Organics-NWTPH	15400	Z, J+	790	2500	25	07/12/2020 05:56	WG1507596
(S) a,a,a-Trifluorotoluene(FID)	*112*			*78.0-120*		*07/12/2020 05:56*	WG1507596

Sample Narrative:

L1237678-02 WG1507596: No discernable petroleum pattern

Volatile Organic Compounds (GC) by Method RSK175

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Methane	22700		2.87	6.78	10	07/15/2020 13:40	WG1509488
Ethane	29.4		0.296	1.29	1	07/10/2020 15:53	WG1506878
Ethene	2140		0.422	1.27	1	07/10/2020 15:53	WG1506878

Volatile Organic Compounds (GC/MS) by Method 8260D

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Acetone	U		274	500	500	07/14/2020 03:49	WG1508223
Acrylonitrile	U		38.0	250	500	07/14/2020 03:49	WG1508223
Benzene	U		8.00	20.0	500	07/14/2020 03:49	WG1508223
Bromobenzene	U		21.0	250	500	07/14/2020 03:49	WG1508223
Bromodichloromethane	U		15.8	50.0	500	07/14/2020 03:49	WG1508223
Bromoform	U		120	500	500	07/14/2020 03:49	WG1508223
Bromomethane	U		74.0	250	500	07/14/2020 03:49	WG1508223
n-Butylbenzene	U		76.5	250	500	07/14/2020 03:49	WG1508223
sec-Butylbenzene	U		50.5	250	500	07/14/2020 03:49	WG1508223
tert-Butylbenzene	U		31.0	100	500	07/14/2020 03:49	WG1508223

JC 8/11/2020

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	581000		8450	20000	1	07/14/2020 15:36	WG1508212

Sample Narrative:

L1237678-02 WG1508212: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	161000		1900	5000	5	07/09/2020 15:03	WG1506275
Nitrate	U		48.0	100	1	07/09/2020 14:46	WG1506275
Sulfate	U		594	5000	1	07/09/2020 14:46	WG1506275

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	21800		102	1000	1	07/10/2020 17:51	WG1506941

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	10100		48.9	100	1	07/10/2020 22:20	WG1506425
Manganese	1360		1.32	5.00	1	07/10/2020 22:20	WG1506425

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	15400		790	2500	25	07/12/2020 05:56	WG1507596
(S) a,a,a-Trifluorotoluene(FID)	*112*			*78.0-120*		*07/12/2020 05:56*	WG1507596

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	22700		2.87	6.78	10	07/15/2020 13:40	WG1509488
Ethane	29.4		0.296	1.29	1	07/10/2020 15:53	WG1506878
Ethene	2140		0.422	1.27	1	07/10/2020 15:53	WG1506878

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U		274	500	500	07/14/2020 03:49	WG1508223
Acrylonitrile	U		38.0	250	500	07/14/2020 03:49	WG1508223
Benzene	U		8.00	20.0	500	07/14/2020 03:49	WG1508223
Bromobenzene	U		21.0	250	500	07/14/2020 03:49	WG1508223
Bromodichloromethane	U		15.8	50.0	500	07/14/2020 03:49	WG1508223
Bromoform	U		120	500	500	07/14/2020 03:49	WG1508223
Bromomethane	U		74.0	250	500	07/14/2020 03:49	WG1508223
n-Butylbenzene	U		76.5	250	500	07/14/2020 03:49	WG1508223
sec-Butylbenzene	U		50.5	250	500	07/14/2020 03:49	WG1508223
tert-Butylbenzene	U		31.0	100	500	07/14/2020 03:49	WG1508223
Carbon tetrachloride	U		21.6	100	500	07/14/2020 03:49	WG1508223
Chlorobenzene	U		11.5	50.0	500	07/14/2020 03:49	WG1508223
Chlorodibromomethane	U		9.00	50.0	500	07/14/2020 03:49	WG1508223

JC 8/11/2020

Volatile Organic Compounds (GC/MS) by Method 8260D

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Chloroethane	U		21.6	100	500	07/14/2020 03:49	WG1508223
Chloroform	U		8.30	50.0	500	07/14/2020 03:49	WG1508223
Chloromethane	U		27.8	250	500	07/14/2020 03:49	WG1508223
2-Chlorotoluene	U		18.4	50.0	500	07/14/2020 03:49	WG1508223
4-Chlorotoluene	U		22.6	100	500	07/14/2020 03:49	WG1508223
1,2-Dibromo-3-Chloropropane	U	UJ J0	102	500	500	07/14/2020 03:49	WG1508223
1,2-Dibromoethane	U		10.5	50.0	500	07/14/2020 03:49	WG1508223
Dibromomethane	U		20.0	100	500	07/14/2020 03:49	WG1508223
1,2-Dichlorobenzene	U		29.0	100	500	07/14/2020 03:49	WG1508223
1,3-Dichlorobenzene	U		34.0	100	500	07/14/2020 03:49	WG1508223
1,4-Dichlorobenzene	U		39.4	100	500	07/14/2020 03:49	WG1508223
Dichlorodifluoromethane	U		16.4	50.0	500	07/14/2020 03:49	WG1508223
1,1-Dichloroethane	U		11.5	50.0	500	07/14/2020 03:49	WG1508223
1,2-Dichloroethane	U		9.50	50.0	500	07/14/2020 03:49	WG1508223
1,1-Dichloroethene	31.0	J	10.0	50.0	500	07/14/2020 03:49	WG1508223
cis-1,2-Dichloroethene	11100		13.8	50.0	500	07/14/2020 03:49	WG1508223
trans-1,2-Dichloroethene	121	~~J4~~	28.6	100	500	07/14/2020 03:49	WG1508223
1,2-Dichloropropane	U		25.4	100	500	07/14/2020 03:49	WG1508223
1,1-Dichloropropene	U		14.0	50.0	500	07/14/2020 03:49	WG1508223
1,3-Dichloropropane	U		35.0	100	500	07/14/2020 03:49	WG1508223
cis-1,3-Dichloropropene	U		13.6	50.0	500	07/14/2020 03:49	WG1508223
trans-1,3-Dichloropropene	U		30.6	100	500	07/14/2020 03:49	WG1508223
2,2-Dichloropropane	U		15.9	50.0	500	07/14/2020 03:49	WG1508223
Di-isopropyl ether	U		7.00	20.0	500	07/14/2020 03:49	WG1508223
Ethylbenzene	U		10.6	50.0	500	07/14/2020 03:49	WG1508223
Hexachloro-1,3-butadiene	U		254	500	500	07/14/2020 03:49	WG1508223
Isopropylbenzene	U		17.2	50.0	500	07/14/2020 03:49	WG1508223
p-Isopropyltoluene	U		46.6	100	500	07/14/2020 03:49	WG1508223
2-Butanone (MEK)	U		250	500	500	07/14/2020 03:49	WG1508223
Methylene Chloride	U		133	500	500	07/14/2020 03:49	WG1508223
4-Methyl-2-pentanone (MIBK)	U		200	500	500	07/14/2020 03:49	WG1508223
Methyl tert-butyl ether	U		5.90	20.0	500	07/14/2020 03:49	WG1508223
Naphthalene	U		62.0	250	500	07/14/2020 03:49	WG1508223
n-Propylbenzene	U		23.6	100	500	07/14/2020 03:49	WG1508223
Styrene	U		54.5	250	500	07/14/2020 03:49	WG1508223
1,1,1,2-Tetrachloroethane	U		10.0	50.0	500	07/14/2020 03:49	WG1508223
1,1,2,2-Tetrachloroethane	U		7.80	50.0	500	07/14/2020 03:49	WG1508223
1,1,2-Trichlorotrifluoroethane	U		13.5	50.0	500	07/14/2020 03:49	WG1508223
Tetrachloroethene	U		14.0	50.0	500	07/14/2020 03:49	WG1508223
Toluene	U		25.0	100	500	07/14/2020 03:49	WG1508223
1,2,3-Trichlorobenzene	U		12.5	250	500	07/14/2020 03:49	WG1508223
1,2,4-Trichlorobenzene	U		96.5	250	500	07/14/2020 03:49	WG1508223
1,1,1-Trichloroethane	U		5.50	50.0	500	07/14/2020 03:49	WG1508223
1,1,2-Trichloroethane	U		17.7	50.0	500	07/14/2020 03:49	WG1508223
Trichloroethene	U		8.00	20.0	500	07/14/2020 03:49	WG1508223
Trichlorofluoromethane	U		10.0	50.0	500	07/14/2020 03:49	WG1508223
1,2,3-Trichloropropane	U		102	250	500	07/14/2020 03:49	WG1508223
1,2,4-Trimethylbenzene	U		23.2	100	500	07/14/2020 03:49	WG1508223
1,2,3-Trimethylbenzene	U		23.0	100	500	07/14/2020 03:49	WG1508223
1,3,5-Trimethylbenzene	U		21.6	100	500	07/14/2020 03:49	WG1508223
Vinyl chloride	6150		13.6	50.0	500	07/14/2020 03:49	WG1508223
Xylenes, Total	U		95.5	130	500	07/14/2020 03:49	WG1508223
Ethyl Ether	U		8.50	50.0	500	07/14/2020 03:49	WG1508223
Tetrahydrofuran	U	UJ J0 J3	45.0	250	500	07/14/2020 03:49	WG1508223
Iodomethane	U		121	250	500	07/14/2020 03:49	WG1508223
Allyl chloride	U		290	500	500	07/14/2020 03:49	WG1508223

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Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l		Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Trans-1,4-Dichloro-2-butene	U	UJ	J0	28.0	100	500	07/14/2020 03:49	WG1508223
(S) Toluene-d8	*101*				*75.0-131*		*07/14/2020 03:49*	WG1508223
(S) 4-Bromofluorobenzene	*94.8*				*67.0-138*		*07/14/2020 03:49*	WG1508223
(S) 1,2-Dichloroethane-d4	*110*				*70.0-130*		*07/14/2020 03:49*	WG1508223

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Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	160000		8450	20000	1	07/14/2020 15:44	WG1508212

Sample Narrative:

L1237678-03 WG1508212: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	10900		379	1000	1	07/09/2020 15:55	WG1506275
Nitrate	U		48.0	100	1	07/09/2020 15:55	WG1506275
Sulfate	18400		594	5000	1	07/09/2020 15:55	WG1506275

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	1940	~~B~~	102	1000	1	07/10/2020 18:06	WG1506941

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	392		48.9	100	1	07/10/2020 22:24	WG1506425
Manganese	581		1.32	5.00	1	07/10/2020 22:24	WG1506425

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	260	Z, J+ ~~B~~	31.6	100	1	07/12/2020 00:37	WG1507596
(S) a,a,a-Trifluorotoluene(FID)	*113*			*78.0-120*		*07/12/2020 00:37*	WG1507596

Sample Narrative:

L1237678-03 WG1507596: No discernable petroleum pattern

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	1310		0.287	0.678	1	07/10/2020 15:56	WG1506878
Ethane	U		0.296	1.29	1	07/10/2020 15:56	WG1506878
Ethene	U		0.422	1.27	1	07/10/2020 15:56	WG1506878

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U		0.548	1.00	1	07/16/2020 03:46	WG1509453
Acrylonitrile	U		0.0760	0.500	1	07/16/2020 03:46	WG1509453
Benzene	U		0.0160	0.0400	1	07/16/2020 03:46	WG1509453
Bromobenzene	U		0.0420	0.500	1	07/16/2020 03:46	WG1509453
Bromodichloromethane	U		0.0315	0.100	1	07/16/2020 03:46	WG1509453
Bromoform	U		0.239	1.00	1	07/16/2020 03:46	WG1509453
Bromomethane	U		0.148	0.500	1	07/16/2020 03:46	WG1509453
n-Butylbenzene	U		0.153	0.500	1	07/16/2020 03:46	WG1509453
sec-Butylbenzene	U		0.101	0.500	1	07/16/2020 03:46	WG1509453
tert-Butylbenzene	U		0.0620	0.200	1	07/16/2020 03:46	WG1509453

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Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Alkalinity	160000		8450	20000	1	07/14/2020 15:44	WG1508212

Sample Narrative:

L1237678-03 WG1508212: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chloride	10900		379	1000	1	07/09/2020 15:55	WG1506275
Nitrate	U		48.0	100	1	07/09/2020 15:55	WG1506275
Sulfate	18400		594	5000	1	07/09/2020 15:55	WG1506275

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
TOC (Total Organic Carbon)	1940	B	102	1000	1	07/10/2020 18:06	WG1506941

Metals (ICPMS) by Method 6020B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Iron	392		48.9	100	1	07/10/2020 22:24	WG1506425
Manganese	581		1.32	5.00	1	07/10/2020 22:24	WG1506425

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Gasoline Range Organics-NWTPH	260	B	31.6	100	1	07/12/2020 00:37	WG1507596
(S) a,a,a-Trifluorotoluene(FID)	*113*			*78.0-120*		*07/12/2020 00:37*	WG1507596

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Methane	1310		0.287	0.678	1	07/10/2020 15:56	WG1506878
Ethane	U		0.296	1.29	1	07/10/2020 15:56	WG1506878
Ethene	U		0.422	1.27	1	07/10/2020 15:56	WG1506878

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	U		0.548	1.00	1	07/16/2020 03:46	WG1509453
Acrylonitrile	U		0.0760	0.500	1	07/16/2020 03:46	WG1509453
Benzene	U		0.0160	0.0400	1	07/16/2020 03:46	WG1509453
Bromobenzene	U		0.0420	0.500	1	07/16/2020 03:46	WG1509453
Bromodichloromethane	U		0.0315	0.100	1	07/16/2020 03:46	WG1509453
Bromoform	U		0.239	1.00	1	07/16/2020 03:46	WG1509453
Bromomethane	U		0.148	0.500	1	07/16/2020 03:46	WG1509453
n-Butylbenzene	U		0.153	0.500	1	07/16/2020 03:46	WG1509453
sec-Butylbenzene	U		0.101	0.500	1	07/16/2020 03:46	WG1509453
tert-Butylbenzene	U		0.0620	0.200	1	07/16/2020 03:46	WG1509453
Carbon tetrachloride	U		0.0432	0.200	1	07/16/2020 03:46	WG1509453
Chlorobenzene	U		0.0229	0.100	1	07/16/2020 03:46	WG1509453
Chlorodibromomethane	U		0.0180	0.100	1	07/16/2020 03:46	WG1509453

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Volatile Organic Compounds (GC/MS) by Method 8260D

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Chloroethane	U		0.0432	0.200	1	07/16/2020 03:46	WG1509453
Chloroform	U		0.0166	0.100	1	07/16/2020 03:46	WG1509453
Chloromethane	U		0.0556	0.500	1	07/16/2020 03:46	WG1509453
2-Chlorotoluene	U		0.0368	0.100	1	07/16/2020 03:46	WG1509453
4-Chlorotoluene	U		0.0452	0.200	1	07/16/2020 03:46	WG1509453
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	07/16/2020 03:46	WG1509453
1,2-Dibromoethane	U		0.0210	0.100	1	07/16/2020 03:46	WG1509453
Dibromomethane	U		0.0400	0.200	1	07/16/2020 03:46	WG1509453
1,2-Dichlorobenzene	U		0.0580	0.200	1	07/16/2020 03:46	WG1509453
1,3-Dichlorobenzene	U		0.0680	0.200	1	07/16/2020 03:46	WG1509453
1,4-Dichlorobenzene	U		0.0788	0.200	1	07/16/2020 03:46	WG1509453
Dichlorodifluoromethane	U		0.0327	0.100	1	07/16/2020 03:46	WG1509453
1,1-Dichloroethane	U		0.0230	0.100	1	07/16/2020 03:46	WG1509453
1,2-Dichloroethane	U		0.0190	0.100	1	07/16/2020 03:46	WG1509453
1,1-Dichloroethene	3.41		0.0200	0.100	1	07/16/2020 03:46	WG1509453
cis-1,2-Dichloroethene	75.7		0.0276	0.100	1	07/16/2020 03:46	WG1509453
trans-1,2-Dichloroethene	0.646		0.0572	0.200	1	07/16/2020 03:46	WG1509453
1,2-Dichloropropane	U		0.0508	0.200	1	07/16/2020 03:46	WG1509453
1,1-Dichloropropene	U		0.0280	0.100	1	07/16/2020 03:46	WG1509453
1,3-Dichloropropane	U		0.0700	0.200	1	07/16/2020 03:46	WG1509453
cis-1,3-Dichloropropene	U		0.0271	0.100	1	07/16/2020 03:46	WG1509453
trans-1,3-Dichloropropene	U		0.0612	0.200	1	07/16/2020 03:46	WG1509453
2,2-Dichloropropane	U		0.0317	0.100	1	07/16/2020 03:46	WG1509453
Di-isopropyl ether	U		0.0140	0.0400	1	07/16/2020 03:46	WG1509453
Ethylbenzene	U		0.0212	0.100	1	07/16/2020 03:46	WG1509453
Hexachloro-1,3-butadiene	U		0.508	1.00	1	07/16/2020 03:46	WG1509453
Isopropylbenzene	U		0.0345	0.100	1	07/16/2020 03:46	WG1509453
p-Isopropyltoluene	U		0.0932	0.200	1	07/16/2020 03:46	WG1509453
2-Butanone (MEK)	U		0.500	1.00	1	07/16/2020 03:46	WG1509453
Methylene Chloride	U		0.265	1.00	1	07/16/2020 03:46	WG1509453
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	07/16/2020 03:46	WG1509453
Methyl tert-butyl ether	U		0.0118	0.0400	1	07/16/2020 03:46	WG1509453
Naphthalene	U		0.124	0.500	1	07/16/2020 03:46	WG1509453
n-Propylbenzene	U		0.0472	0.200	1	07/16/2020 03:46	WG1509453
Styrene	U		0.109	0.500	1	07/16/2020 03:46	WG1509453
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	07/16/2020 03:46	WG1509453
1,1,2,2-Tetrachloroethane	U UJ	J0	0.0156	0.100	1	07/16/2020 03:46	WG1509453
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	07/16/2020 03:46	WG1509453
Tetrachloroethene	154		0.280	1.00	10	07/14/2020 04:08	WG1508223
Toluene	1.04		0.0500	0.200	1	07/16/2020 03:46	WG1509453
1,2,3-Trichlorobenzene	U		0.0250	0.500	1	07/16/2020 03:46	WG1509453
1,2,4-Trichlorobenzene	U		0.193	0.500	1	07/16/2020 03:46	WG1509453
1,1,1-Trichloroethane	U		0.0110	0.100	1	07/16/2020 03:46	WG1509453
1,1,2-Trichloroethane	U		0.0353	0.100	1	07/16/2020 03:46	WG1509453
Trichloroethene	88.4		0.0160	0.0400	1	07/16/2020 03:46	WG1509453
Trichlorofluoromethane	U		0.0200	0.100	1	07/16/2020 03:46	WG1509453
1,2,3-Trichloropropane	U		0.204	0.500	1	07/16/2020 03:46	WG1509453
1,2,4-Trimethylbenzene	0.0690	J	0.0464	0.200	1	07/16/2020 03:46	WG1509453
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	07/16/2020 03:46	WG1509453
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	07/16/2020 03:46	WG1509453
Vinyl chloride	0.971		0.0273	0.100	1	07/16/2020 03:46	WG1509453
Xylenes, Total	0.411		0.191	0.260	1	07/16/2020 03:46	WG1509453
Ethyl Ether	U		0.0170	0.100	1	07/16/2020 03:46	WG1509453
Tetrahydrofuran	U		0.0900	0.500	1	07/16/2020 03:46	WG1509453
Iodomethane	U		0.242	0.500	1	07/16/2020 03:46	WG1509453
Allyl chloride	U		0.580	1.00	1	07/16/2020 03:46	WG1509453

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Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l		Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Trans-1,4-Dichloro-2-butene	U	UJ	J0	0.0560	0.200	1	07/16/2020 03:46	WG1509453
(S) Toluene-d8	*101*				*75.0-131*		*07/14/2020 04:08*	WG1508223
(S) Toluene-d8	*94.8*				*75.0-131*		*07/16/2020 03:46*	WG1509453
(S) 4-Bromofluorobenzene	*93.1*				*67.0-138*		*07/14/2020 04:08*	WG1508223
(S) 4-Bromofluorobenzene	*101*				*67.0-138*		*07/16/2020 03:46*	WG1509453
(S) 1,2-Dichloroethane-d4	*110*				*70.0-130*		*07/14/2020 04:08*	WG1508223
(S) 1,2-Dichloroethane-d4	*110*				*70.0-130*		*07/16/2020 03:46*	WG1509453

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Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	213000		8450	20000	1	07/14/2020 16:04	WG1508212

Sample Narrative:

L1237678-04 WG1508212: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	19900		379	1000	1	07/09/2020 16:13	WG1506275
Nitrate	U		48.0	100	1	07/09/2020 16:13	WG1506275
Sulfate	32500		594	5000	1	07/09/2020 16:13	WG1506275

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	5940		102	1000	1	07/10/2020 18:41	WG1506941

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	11200		48.9	100	1	07/10/2020 22:27	WG1506425
Manganese	2540		1.32	5.00	1	07/10/2020 22:27	WG1506425

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	4480		0.287	0.678	1	07/10/2020 15:58	WG1506878
Ethane	U		0.296	1.29	1	07/10/2020 15:58	WG1506878
Ethene	U		0.422	1.27	1	07/10/2020 15:58	WG1506878

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U		0.548	1.00	1	07/14/2020 01:17	WG1508223
Acrylonitrile	U		0.0760	0.500	1	07/14/2020 01:17	WG1508223
Benzene	0.0430		0.0160	0.0400	1	07/14/2020 01:17	WG1508223
Bromobenzene	U		0.0420	0.500	1	07/14/2020 01:17	WG1508223
Bromodichloromethane	U		0.0315	0.100	1	07/14/2020 01:17	WG1508223
Bromoform	U		0.239	1.00	1	07/14/2020 01:17	WG1508223
Bromomethane	U		0.148	0.500	1	07/14/2020 01:17	WG1508223
n-Butylbenzene	U		0.153	0.500	1	07/14/2020 01:17	WG1508223
sec-Butylbenzene	U		0.101	0.500	1	07/14/2020 01:17	WG1508223
tert-Butylbenzene	U		0.0620	0.200	1	07/14/2020 01:17	WG1508223
Carbon tetrachloride	U		0.0432	0.200	1	07/14/2020 01:17	WG1508223
Chlorobenzene	U		0.0229	0.100	1	07/14/2020 01:17	WG1508223
Chlorodibromomethane	U		0.0180	0.100	1	07/14/2020 01:17	WG1508223
Chloroethane	U		0.0432	0.200	1	07/14/2020 01:17	WG1508223
Chloroform	U		0.0166	0.100	1	07/14/2020 01:17	WG1508223
Chloromethane	U		0.0556	0.500	1	07/14/2020 01:17	WG1508223
2-Chlorotoluene	U		0.0368	0.100	1	07/14/2020 01:17	WG1508223
4-Chlorotoluene	U		0.0452	0.200	1	07/14/2020 01:17	WG1508223
1,2-Dibromo-3-Chloropropane	U	UJ J0	0.204	1.00	1	07/14/2020 01:17	WG1508223
1,2-Dibromoethane	U		0.0210	0.100	1	07/14/2020 01:17	WG1508223

JC 8/11/2020

SAMPLE RESULTS - 04

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Dibromomethane	U		0.0400	0.200	1	07/14/2020 01:17	WG1508223
1,2-Dichlorobenzene	U		0.0580	0.200	1	07/14/2020 01:17	WG1508223
1,3-Dichlorobenzene	U		0.0680	0.200	1	07/14/2020 01:17	WG1508223
1,4-Dichlorobenzene	U		0.0788	0.200	1	07/14/2020 01:17	WG1508223
Dichlorodifluoromethane	U		0.0327	0.100	1	07/14/2020 01:17	WG1508223
1,1-Dichloroethane	U		0.0230	0.100	1	07/14/2020 01:17	WG1508223
1,2-Dichloroethane	0.0290	J	0.0190	0.100	1	07/14/2020 01:17	WG1508223
1,1-Dichloroethene	U		0.0200	0.100	1	07/14/2020 01:17	WG1508223
cis-1,2-Dichloroethene	6.67		0.0276	0.100	1	07/14/2020 01:17	WG1508223
trans-1,2-Dichloroethene	0.163	J ~~J4~~	0.0572	0.200	1	07/14/2020 01:17	WG1508223
1,2-Dichloropropane	U		0.0508	0.200	1	07/14/2020 01:17	WG1508223
1,1-Dichloropropene	U		0.0280	0.100	1	07/14/2020 01:17	WG1508223
1,3-Dichloropropane	U		0.0700	0.200	1	07/14/2020 01:17	WG1508223
cis-1,3-Dichloropropene	U		0.0271	0.100	1	07/14/2020 01:17	WG1508223
trans-1,3-Dichloropropene	U		0.0612	0.200	1	07/14/2020 01:17	WG1508223
2,2-Dichloropropane	U		0.0317	0.100	1	07/14/2020 01:17	WG1508223
Di-isopropyl ether	U		0.0140	0.0400	1	07/14/2020 01:17	WG1508223
Ethylbenzene	U		0.0212	0.100	1	07/14/2020 01:17	WG1508223
Hexachloro-1,3-butadiene	U		0.508	1.00	1	07/14/2020 01:17	WG1508223
Isopropylbenzene	U		0.0345	0.100	1	07/14/2020 01:17	WG1508223
p-Isopropyltoluene	U		0.0932	0.200	1	07/14/2020 01:17	WG1508223
2-Butanone (MEK)	U		0.500	1.00	1	07/14/2020 01:17	WG1508223
Methylene Chloride	U		0.265	1.00	1	07/14/2020 01:17	WG1508223
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	07/14/2020 01:17	WG1508223
Methyl tert-butyl ether	U		0.0118	0.0400	1	07/14/2020 01:17	WG1508223
Naphthalene	U		0.124	0.500	1	07/14/2020 01:17	WG1508223
n-Propylbenzene	U		0.0472	0.200	1	07/14/2020 01:17	WG1508223
Styrene	U		0.109	0.500	1	07/14/2020 01:17	WG1508223
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	07/14/2020 01:17	WG1508223
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	07/14/2020 01:17	WG1508223
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	07/14/2020 01:17	WG1508223
Tetrachloroethene	0.306		0.0280	0.100	1	07/14/2020 01:17	WG1508223
Toluene	0.644		0.0500	0.200	1	07/14/2020 01:17	WG1508223
1,2,3-Trichlorobenzene	U		0.0250	0.500	1	07/14/2020 01:17	WG1508223
1,2,4-Trichlorobenzene	U		0.193	0.500	1	07/14/2020 01:17	WG1508223
1,1,1-Trichloroethane	U		0.0110	0.100	1	07/14/2020 01:17	WG1508223
1,1,2-Trichloroethane	U		0.0353	0.100	1	07/14/2020 01:17	WG1508223
Trichloroethene	1.96		0.0160	0.0400	1	07/14/2020 01:17	WG1508223
Trichlorofluoromethane	U		0.0200	0.100	1	07/14/2020 01:17	WG1508223
1,2,3-Trichloropropane	U		0.204	0.500	1	07/14/2020 01:17	WG1508223
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	07/14/2020 01:17	WG1508223
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	07/14/2020 01:17	WG1508223
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	07/14/2020 01:17	WG1508223
Vinyl chloride	0.0480	J	0.0273	0.100	1	07/14/2020 01:17	WG1508223
Xylenes, Total	U		0.191	0.260	1	07/14/2020 01:17	WG1508223
Ethyl Ether	U		0.0170	0.100	1	07/14/2020 01:17	WG1508223
Tetrahydrofuran	0.227 J	J J0 J3	0.0900	0.500	1	07/14/2020 01:17	WG1508223
Iodomethane	U		0.242	0.500	1	07/14/2020 01:17	WG1508223
Allyl chloride	U		0.580	1.00	1	07/14/2020 01:17	WG1508223
Trans-1,4-Dichloro-2-butene	U UJ	J0	0.0560	0.200	1	07/14/2020 01:17	WG1508223
(S) Toluene-d8	*97.8*			*75.0-131*		*07/14/2020 01:17*	WG1508223
(S) 4-Bromofluorobenzene	*99.9*			*67.0-138*		*07/14/2020 01:17*	WG1508223
(S) 1,2-Dichloroethane-d4	*112*			*70.0-130*		*07/14/2020 01:17*	WG1508223

JC 8/11/2020

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	1250000		8450	20000	1	07/14/2020 16:12	WG1508212

Sample Narrative:

L1237678-05 WG1508212: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	158000		3790	10000	10	07/09/2020 16:48	WG1506275
Nitrate	U		48.0	100	1	07/09/2020 16:30	WG1506275
Sulfate	19900		594	5000	1	07/09/2020 16:30	WG1506275

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	123000		204	2000	2	07/10/2020 19:51	WG1506941

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	60600		48.9	100	1	07/10/2020 22:31	WG1506425
Manganese	5820		6.60	25.0	5	07/10/2020 23:03	WG1506425

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	1000	Z, J+	31.6	100	1	07/12/2020 00:59	WG1507596
(S) a,a,a-Trifluorotoluene(FID)	*112*			*78.0-120*		*07/12/2020 00:59*	WG1507596

Sample Narrative:

L1237678-05 WG1507596: No discernable petroleum pattern

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	27700		2.87	6.78	10	07/15/2020 13:42	WG1509488
Ethane	375		0.296	1.29	1	07/10/2020 16:01	WG1506878
Ethene	1710		0.422	1.27	1	07/10/2020 16:01	WG1506878

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U		27.4	50.0	50	07/14/2020 04:27	WG1508223
Acrylonitrile	U		3.80	25.0	50	07/14/2020 04:27	WG1508223
Benzene	U		0.800	2.00	50	07/14/2020 04:27	WG1508223
Bromobenzene	U		2.10	25.0	50	07/14/2020 04:27	WG1508223
Bromodichloromethane	U		1.58	5.00	50	07/14/2020 04:27	WG1508223
Bromoform	U		12.0	50.0	50	07/14/2020 04:27	WG1508223
Bromomethane	U		7.40	25.0	50	07/14/2020 04:27	WG1508223
n-Butylbenzene	U		7.65	25.0	50	07/14/2020 04:27	WG1508223
sec-Butylbenzene	U		5.05	25.0	50	07/14/2020 04:27	WG1508223
tert-Butylbenzene	U		3.10	10.0	50	07/14/2020 04:27	WG1508223

JC 8/11/2020

Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	1250000		8450	20000	1	07/14/2020 16:12	WG1508212

Sample Narrative:

L1237678-05 WG1508212: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	158000		3790	10000	10	07/09/2020 16:48	WG1506275
Nitrate	U		48.0	100	1	07/09/2020 16:30	WG1506275
Sulfate	19900		594	5000	1	07/09/2020 16:30	WG1506275

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	123000		204	2000	2	07/10/2020 19:51	WG1506941

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	60600		48.9	100	1	07/10/2020 22:31	WG1506425
Manganese	5820		6.60	25.0	5	07/10/2020 23:03	WG1506425

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	1000		31.6	100	1	07/12/2020 00:59	WG1507596
(S) a,a,a-Trifluorotoluene(FID)	*112*			*78.0-120*		*07/12/2020 00:59*	WG1507596

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	27700		2.87	6.78	10	07/15/2020 13:42	WG1509488
Ethane	375		0.296	1.29	1	07/10/2020 16:01	WG1506878
Ethene	1710		0.422	1.27	1	07/10/2020 16:01	WG1506878

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U		27.4	50.0	50	07/14/2020 04:27	WG1508223
Acrylonitrile	U		3.80	25.0	50	07/14/2020 04:27	WG1508223
Benzene	U		0.800	2.00	50	07/14/2020 04:27	WG1508223
Bromobenzene	U		2.10	25.0	50	07/14/2020 04:27	WG1508223
Bromodichloromethane	U		1.58	5.00	50	07/14/2020 04:27	WG1508223
Bromoform	U		12.0	50.0	50	07/14/2020 04:27	WG1508223
Bromomethane	U		7.40	25.0	50	07/14/2020 04:27	WG1508223
n-Butylbenzene	U		7.65	25.0	50	07/14/2020 04:27	WG1508223
sec-Butylbenzene	U		5.05	25.0	50	07/14/2020 04:27	WG1508223
tert-Butylbenzene	U		3.10	10.0	50	07/14/2020 04:27	WG1508223
Carbon tetrachloride	U		2.16	10.0	50	07/14/2020 04:27	WG1508223
Chlorobenzene	U		1.15	5.00	50	07/14/2020 04:27	WG1508223
Chlorodibromomethane	U		0.900	5.00	50	07/14/2020 04:27	WG1508223

MW-182-070820

Collected date/time: 07/08/20 12:00

SAMPLE RESULTS - 05

L1237678

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch	
Chloroethane	U		2.16	10.0	50	07/14/2020 04:27	WG1508223	
Chloroform	U		0.830	5.00	50	07/14/2020 04:27	WG1508223	
Chloromethane	U		2.78	25.0	50	07/14/2020 04:27	WG1508223	
2-Chlorotoluene	U		1.84	5.00	50	07/14/2020 04:27	WG1508223	
4-Chlorotoluene	U		2.26	10.0	50	07/14/2020 04:27	WG1508223	
1,2-Dibromo-3-Chloropropane	U	UJ J0	10.2	50.0	50	07/14/2020 04:27	WG1508223	
1,2-Dibromoethane	U		1.05	5.00	50	07/14/2020 04:27	WG1508223	
Dibromomethane	U		2.00	10.0	50	07/14/2020 04:27	WG1508223	
1,2-Dichlorobenzene	U		2.90	10.0	50	07/14/2020 04:27	WG1508223	
1,3-Dichlorobenzene	U		3.40	10.0	50	07/14/2020 04:27	WG1508223	
1,4-Dichlorobenzene	U		3.94	10.0	50	07/14/2020 04:27	WG1508223	
Dichlorodifluoromethane	U		1.64	5.00	50	07/14/2020 04:27	WG1508223	
1,1-Dichloroethane	U		1.15	5.00	50	07/14/2020 04:27	WG1508223	
1,2-Dichloroethane	2.20	J	0.950	5.00	50	07/14/2020 04:27	WG1508223	
1,1-Dichloroethene	2.45	J	1.00	5.00	50	07/14/2020 04:27	WG1508223	
cis-1,2-Dichloroethene	715		1.38	5.00	50	07/14/2020 04:27	WG1508223	
trans-1,2-Dichloroethene	16.2	~~J4~~	2.86	10.0	50	07/14/2020 04:27	WG1508223	
1,2-Dichloropropane	U		2.54	10.0	50	07/14/2020 04:27	WG1508223	
1,1-Dichloropropene	U		1.40	5.00	50	07/14/2020 04:27	WG1508223	
1,3-Dichloropropane	U		3.50	10.0	50	07/14/2020 04:27	WG1508223	
cis-1,3-Dichloropropene	U		1.36	5.00	50	07/14/2020 04:27	WG1508223	
trans-1,3-Dichloropropene	U		3.06	10.0	50	07/14/2020 04:27	WG1508223	
2,2-Dichloropropane	U		1.59	5.00	50	07/14/2020 04:27	WG1508223	
Di-isopropyl ether	U		0.700	2.00	50	07/14/2020 04:27	WG1508223	
Ethylbenzene	U		1.06	5.00	50	07/14/2020 04:27	WG1508223	
Hexachloro-1,3-butadiene	U		25.4	50.0	50	07/14/2020 04:27	WG1508223	
Isopropylbenzene	U		1.73	5.00	50	07/14/2020 04:27	WG1508223	
p-Isopropyltoluene	U		4.66	10.0	50	07/14/2020 04:27	WG1508223	
2-Butanone (MEK)	U		25.0	50.0	50	07/14/2020 04:27	WG1508223	
Methylene Chloride	U		13.3	50.0	50	07/14/2020 04:27	WG1508223	
4-Methyl-2-pentanone (MIBK)	U		20.0	50.0	50	07/14/2020 04:27	WG1508223	
Methyl tert-butyl ether	U		0.590	2.00	50	07/14/2020 04:27	WG1508223	
Naphthalene	U		6.20	25.0	50	07/14/2020 04:27	WG1508223	
n-Propylbenzene	U		2.36	10.0	50	07/14/2020 04:27	WG1508223	
Styrene	U		5.45	25.0	50	07/14/2020 04:27	WG1508223	
1,1,1,2-Tetrachloroethane	U		1.00	5.00	50	07/14/2020 04:27	WG1508223	
1,1,2,2-Tetrachloroethane	U		0.780	5.00	50	07/14/2020 04:27	WG1508223	
1,1,2-Trichlorotrifluoroethane	U		1.35	5.00	50	07/14/2020 04:27	WG1508223	
Tetrachloroethene	126		1.40	5.00	50	07/14/2020 04:27	WG1508223	
Toluene	U		2.50	10.0	50	07/14/2020 04:27	WG1508223	
1,2,3-Trichlorobenzene	U		1.25	25.0	50	07/14/2020 04:27	WG1508223	
1,2,4-Trichlorobenzene	U		9.65	25.0	50	07/14/2020 04:27	WG1508223	
1,1,1-Trichloroethane	U		0.550	5.00	50	07/14/2020 04:27	WG1508223	
1,1,2-Trichloroethane	U		1.77	5.00	50	07/14/2020 04:27	WG1508223	
Trichloroethene	28.0		0.800	2.00	50	07/14/2020 04:27	WG1508223	
Trichlorofluoromethane	U		1.00	5.00	50	07/14/2020 04:27	WG1508223	
1,2,3-Trichloropropane	U		10.2	25.0	50	07/14/2020 04:27	WG1508223	
1,2,4-Trimethylbenzene	U		2.32	10.0	50	07/14/2020 04:27	WG1508223	
1,2,3-Trimethylbenzene	U		2.30	10.0	50	07/14/2020 04:27	WG1508223	
1,3,5-Trimethylbenzene	U		2.16	10.0	50	07/14/2020 04:27	WG1508223	
Vinyl chloride	1350		1.36	5.00	50	07/14/2020 04:27	WG1508223	JC 8/11/2020
Xylenes, Total	U		9.55	13.0	50	07/14/2020 04:27	WG1508223	
Ethyl Ether	U		0.850	5.00	50	07/14/2020 04:27	WG1508223	
Tetrahydrofuran	U	UJ J0 J3	4.50	25.0	50	07/14/2020 04:27	WG1508223	
Iodomethane	U		12.1	25.0	50	07/14/2020 04:27	WG1508223	
Allyl chloride	U		29.0	50.0	50	07/14/2020 04:27	WG1508223	

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l		Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Trans-1,4-Dichloro-2-butene	U	UJ	J0	2.80	10.0	50	07/14/2020 04:27	WG1508223
(S) Toluene-d8	*95.7*				*75.0-131*		*07/14/2020 04:27*	WG1508223
(S) 4-Bromofluorobenzene	*97.2*				*67.0-138*		*07/14/2020 04:27*	WG1508223
(S) 1,2-Dichloroethane-d4	*113*				*70.0-130*		*07/14/2020 04:27*	WG1508223

JC 8/11/2020

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	175000		8450	20000	1	07/14/2020 16:20	WG1508212

Sample Narrative:

L1237678-06 WG1508212: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	11800		379	1000	1	07/09/2020 17:05	WG1506275
Nitrate	U		48.0	100	1	07/09/2020 17:05	WG1506275
Sulfate	5130		594	5000	1	07/09/2020 17:05	WG1506275

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	2960		102	1000	1	07/10/2020 20:06	WG1506941

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	5110		48.9	100	1	07/10/2020 22:34	WG1506425
Manganese	141		1.32	5.00	1	07/10/2020 22:34	WG1506425

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	76.2 U	B J	31.6	100	1	07/12/2020 01:22	WG1507596
(S) a,a,a-Trifluorotoluene(FID)	*112*			*78.0-120*		*07/12/2020 01:22*	WG1507596

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	3890		0.287	0.678	1	07/10/2020 16:03	WG1506878
Ethane	U		0.296	1.29	1	07/10/2020 16:03	WG1506878
Ethene	15.6		0.422	1.27	1	07/10/2020 16:03	WG1506878

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	1.51		0.548	1.00	1	07/14/2020 01:36	WG1508223
Acrylonitrile	U		0.0760	0.500	1	07/14/2020 01:36	WG1508223
Benzene	0.0270	J	0.0160	0.0400	1	07/14/2020 01:36	WG1508223
Bromobenzene	U		0.0420	0.500	1	07/14/2020 01:36	WG1508223
Bromodichloromethane	U		0.0315	0.100	1	07/14/2020 01:36	WG1508223
Bromoform	U		0.239	1.00	1	07/14/2020 01:36	WG1508223
Bromomethane	U		0.148	0.500	1	07/14/2020 01:36	WG1508223
n-Butylbenzene	U		0.153	0.500	1	07/14/2020 01:36	WG1508223
sec-Butylbenzene	U		0.101	0.500	1	07/14/2020 01:36	WG1508223
tert-Butylbenzene	U		0.0620	0.200	1	07/14/2020 01:36	WG1508223
Carbon tetrachloride	U		0.0432	0.200	1	07/14/2020 01:36	WG1508223
Chlorobenzene	U		0.0229	0.100	1	07/14/2020 01:36	WG1508223
Chlorodibromomethane	U		0.0180	0.100	1	07/14/2020 01:36	WG1508223

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Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloroethane	U		0.0432	0.200	1	07/14/2020 01:36	WG1508223
Chloroform	U		0.0166	0.100	1	07/14/2020 01:36	WG1508223
Chloromethane	U		0.0556	0.500	1	07/14/2020 01:36	WG1508223
2-Chlorotoluene	U		0.0368	0.100	1	07/14/2020 01:36	WG1508223
4-Chlorotoluene	U		0.0452	0.200	1	07/14/2020 01:36	WG1508223
1,2-Dibromo-3-Chloropropane	U UJ	J0	0.204	1.00	1	07/14/2020 01:36	WG1508223
1,2-Dibromoethane	U		0.0210	0.100	1	07/14/2020 01:36	WG1508223
Dibromomethane	U		0.0400	0.200	1	07/14/2020 01:36	WG1508223
1,2-Dichlorobenzene	U		0.0580	0.200	1	07/14/2020 01:36	WG1508223
1,3-Dichlorobenzene	U		0.0680	0.200	1	07/14/2020 01:36	WG1508223
1,4-Dichlorobenzene	U		0.0788	0.200	1	07/14/2020 01:36	WG1508223
Dichlorodifluoromethane	U		0.0327	0.100	1	07/14/2020 01:36	WG1508223
1,1-Dichloroethane	U		0.0230	0.100	1	07/14/2020 01:36	WG1508223
1,2-Dichloroethane	0.0480	J	0.0190	0.100	1	07/14/2020 01:36	WG1508223
1,1-Dichloroethene	U		0.0200	0.100	1	07/14/2020 01:36	WG1508223
cis-1,2-Dichloroethene	0.893		0.0276	0.100	1	07/14/2020 01:36	WG1508223
trans-1,2-Dichloroethene	U	~~J4~~	0.0572	0.200	1	07/14/2020 01:36	WG1508223
1,2-Dichloropropane	U		0.0508	0.200	1	07/14/2020 01:36	WG1508223
1,1-Dichloropropene	U		0.0280	0.100	1	07/14/2020 01:36	WG1508223
1,3-Dichloropropane	U		0.0700	0.200	1	07/14/2020 01:36	WG1508223
cis-1,3-Dichloropropene	U		0.0271	0.100	1	07/14/2020 01:36	WG1508223
trans-1,3-Dichloropropene	U		0.0612	0.200	1	07/14/2020 01:36	WG1508223
2,2-Dichloropropane	U		0.0317	0.100	1	07/14/2020 01:36	WG1508223
Di-isopropyl ether	U		0.0140	0.0400	1	07/14/2020 01:36	WG1508223
Ethylbenzene	0.128		0.0212	0.100	1	07/14/2020 01:36	WG1508223
Hexachloro-1,3-butadiene	U		0.508	1.00	1	07/14/2020 01:36	WG1508223
Isopropylbenzene	0.0370	J	0.0345	0.100	1	07/14/2020 01:36	WG1508223
p-Isopropyltoluene	U		0.0932	0.200	1	07/14/2020 01:36	WG1508223
2-Butanone (MEK)	U		0.500	1.00	1	07/14/2020 01:36	WG1508223
Methylene Chloride	U		0.265	1.00	1	07/14/2020 01:36	WG1508223
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	07/14/2020 01:36	WG1508223
Methyl tert-butyl ether	U		0.0118	0.0400	1	07/14/2020 01:36	WG1508223
Naphthalene	U		0.124	0.500	1	07/14/2020 01:36	WG1508223
n-Propylbenzene	U		0.0472	0.200	1	07/14/2020 01:36	WG1508223
Styrene	U		0.109	0.500	1	07/14/2020 01:36	WG1508223
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	07/14/2020 01:36	WG1508223
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	07/14/2020 01:36	WG1508223
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	07/14/2020 01:36	WG1508223
Tetrachloroethene	0.0750	J	0.0280	0.100	1	07/14/2020 01:36	WG1508223
Toluene	2.39		0.0500	0.200	1	07/14/2020 01:36	WG1508223
1,2,3-Trichlorobenzene	U		0.0250	0.500	1	07/14/2020 01:36	WG1508223
1,2,4-Trichlorobenzene	U		0.193	0.500	1	07/14/2020 01:36	WG1508223
1,1,1-Trichloroethane	U		0.0110	0.100	1	07/14/2020 01:36	WG1508223
1,1,2-Trichloroethane	U		0.0353	0.100	1	07/14/2020 01:36	WG1508223
Trichloroethene	0.0630		0.0160	0.0400	1	07/14/2020 01:36	WG1508223
Trichlorofluoromethane	U		0.0200	0.100	1	07/14/2020 01:36	WG1508223
1,2,3-Trichloropropane	U		0.204	0.500	1	07/14/2020 01:36	WG1508223
1,2,4-Trimethylbenzene	0.110	J	0.0464	0.200	1	07/14/2020 01:36	WG1508223
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	07/14/2020 01:36	WG1508223
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	07/14/2020 01:36	WG1508223
Vinyl chloride	4.24		0.0273	0.100	1	07/14/2020 01:36	WG1508223
Xylenes, Total	0.844		0.191	0.260	1	07/14/2020 01:36	WG1508223
Ethyl Ether	U		0.0170	0.100	1	07/14/2020 01:36	WG1508223
Tetrahydrofuran	0.170 J	J J0 J3	0.0900	0.500	1	07/14/2020 01:36	WG1508223
Iodomethane	U		0.242	0.500	1	07/14/2020 01:36	WG1508223
Allyl chloride	U		0.580	1.00	1	07/14/2020 01:36	WG1508223

JC 8/11/2020

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Trans-1,4-Dichloro-2-butene	U UJ	J0	0.0560	0.200	1	07/14/2020 01:36	WG1508223
(S) Toluene-d8	*97.1*			*75.0-131*		*07/14/2020 01:36*	WG1508223
(S) 4-Bromofluorobenzene	*100*			*67.0-138*		*07/14/2020 01:36*	WG1508223
(S) 1,2-Dichloroethane-d4	*112*			*70.0-130*		*07/14/2020 01:36*	WG1508223

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

JC 8/11/2020

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Wet Chemistry by Method 2320 B-2011

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Alkalinity	204000		8450	20000	1	07/14/2020 16:30	WG1508212

Sample Narrative:

L1237678-07 WG1508212: Endpoint pH 4.5

Wet Chemistry by Method 9056A

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Chloride	22500		379	1000	1	07/09/2020 17:22	WG1506275
Nitrate	U		48.0	100	1	07/09/2020 17:22	WG1506275
Sulfate	36200		594	5000	1	07/09/2020 17:22	WG1506275

Wet Chemistry by Method 9060A

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
TOC (Total Organic Carbon)	958	~~B~~ J	102	1000	1	07/10/2020 21:49	WG1506941

Metals (ICPMS) by Method 6020B

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Iron	2390		48.9	100	1	07/10/2020 22:37	WG1506425
Manganese	444		1.32	5.00	1	07/10/2020 22:37	WG1506425

Volatile Organic Compounds (GC) by Method NWTPHGX

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Gasoline Range Organics-NWTPH	61.9	U ~~B J~~	31.6	100	1	07/12/2020 01:45	WG1507596
(S) a,a,a-Trifluorotoluene(FID)	*112*			*78.0-120*		*07/12/2020 01:45*	WG1507596

Volatile Organic Compounds (GC) by Method RSK175

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Methane	66.1		0.287	0.678	1	07/10/2020 16:07	WG1506878
Ethane	U		0.296	1.29	1	07/10/2020 16:07	WG1506878
Ethene	U		0.422	1.27	1	07/10/2020 16:07	WG1506878

Volatile Organic Compounds (GC/MS) by Method 8260D

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Acetone	U		0.548	1.00	1	07/14/2020 01:55	WG1508223
Acrylonitrile	U		0.0760	0.500	1	07/14/2020 01:55	WG1508223
Benzene	U		0.0160	0.0400	1	07/14/2020 01:55	WG1508223
Bromobenzene	U		0.0420	0.500	1	07/14/2020 01:55	WG1508223
Bromodichloromethane	U		0.0315	0.100	1	07/14/2020 01:55	WG1508223
Bromoform	U		0.239	1.00	1	07/14/2020 01:55	WG1508223
Bromomethane	U		0.148	0.500	1	07/14/2020 01:55	WG1508223
n-Butylbenzene	U		0.153	0.500	1	07/14/2020 01:55	WG1508223
sec-Butylbenzene	U		0.101	0.500	1	07/14/2020 01:55	WG1508223
tert-Butylbenzene	U		0.0620	0.200	1	07/14/2020 01:55	WG1508223
Carbon tetrachloride	U		0.0432	0.200	1	07/14/2020 01:55	WG1508223
Chlorobenzene	U		0.0229	0.100	1	07/14/2020 01:55	WG1508223
Chlorodibromomethane	U		0.0180	0.100	1	07/14/2020 01:55	WG1508223

JC 8/11/2020

MW-188-070820

Collected date/time: 07/08/20 13:10

SAMPLE RESULTS - 07

L1237678

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloroethane	U		0.0432	0.200	1	07/14/2020 01:55	WG1508223
Chloroform	U		0.0166	0.100	1	07/14/2020 01:55	WG1508223
Chloromethane	U		0.0556	0.500	1	07/14/2020 01:55	WG1508223
2-Chlorotoluene	U		0.0368	0.100	1	07/14/2020 01:55	WG1508223
4-Chlorotoluene	U		0.0452	0.200	1	07/14/2020 01:55	WG1508223
1,2-Dibromo-3-Chloropropane	U UJ	J0	0.204	1.00	1	07/14/2020 01:55	WG1508223
1,2-Dibromoethane	U		0.0210	0.100	1	07/14/2020 01:55	WG1508223
Dibromomethane	U		0.0400	0.200	1	07/14/2020 01:55	WG1508223
1,2-Dichlorobenzene	U		0.0580	0.200	1	07/14/2020 01:55	WG1508223
1,3-Dichlorobenzene	U		0.0680	0.200	1	07/14/2020 01:55	WG1508223
1,4-Dichlorobenzene	U		0.0788	0.200	1	07/14/2020 01:55	WG1508223
Dichlorodifluoromethane	U		0.0327	0.100	1	07/14/2020 01:55	WG1508223
1,1-Dichloroethane	U		0.0230	0.100	1	07/14/2020 01:55	WG1508223
1,2-Dichloroethane	U		0.0190	0.100	1	07/14/2020 01:55	WG1508223
1,1-Dichloroethene	U		0.0200	0.100	1	07/14/2020 01:55	WG1508223
cis-1,2-Dichloroethene	U		0.0276	0.100	1	07/14/2020 01:55	WG1508223
trans-1,2-Dichloroethene	U	~~J4~~	0.0572	0.200	1	07/14/2020 01:55	WG1508223
1,2-Dichloropropane	U		0.0508	0.200	1	07/14/2020 01:55	WG1508223
1,1-Dichloropropene	U		0.0280	0.100	1	07/14/2020 01:55	WG1508223
1,3-Dichloropropane	U		0.0700	0.200	1	07/14/2020 01:55	WG1508223
cis-1,3-Dichloropropene	U		0.0271	0.100	1	07/14/2020 01:55	WG1508223
trans-1,3-Dichloropropene	U		0.0612	0.200	1	07/14/2020 01:55	WG1508223
2,2-Dichloropropane	U		0.0317	0.100	1	07/14/2020 01:55	WG1508223
Di-isopropyl ether	U		0.0140	0.0400	1	07/14/2020 01:55	WG1508223
Ethylbenzene	0.0830	J	0.0212	0.100	1	07/14/2020 01:55	WG1508223
Hexachloro-1,3-butadiene	U		0.508	1.00	1	07/14/2020 01:55	WG1508223
Isopropylbenzene	U		0.0345	0.100	1	07/14/2020 01:55	WG1508223
p-Isopropyltoluene	U		0.0932	0.200	1	07/14/2020 01:55	WG1508223
2-Butanone (MEK)	U		0.500	1.00	1	07/14/2020 01:55	WG1508223
Methylene Chloride	U		0.265	1.00	1	07/14/2020 01:55	WG1508223
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	07/14/2020 01:55	WG1508223
Methyl tert-butyl ether	U		0.0118	0.0400	1	07/14/2020 01:55	WG1508223
Naphthalene	U		0.124	0.500	1	07/14/2020 01:55	WG1508223
n-Propylbenzene	U		0.0472	0.200	1	07/14/2020 01:55	WG1508223
Styrene	U		0.109	0.500	1	07/14/2020 01:55	WG1508223
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	07/14/2020 01:55	WG1508223
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	07/14/2020 01:55	WG1508223
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	07/14/2020 01:55	WG1508223
Tetrachloroethene	U		0.0280	0.100	1	07/14/2020 01:55	WG1508223
Toluene	1.86		0.0500	0.200	1	07/14/2020 01:55	WG1508223
1,2,3-Trichlorobenzene	U		0.0250	0.500	1	07/14/2020 01:55	WG1508223
1,2,4-Trichlorobenzene	U		0.193	0.500	1	07/14/2020 01:55	WG1508223
1,1,1-Trichloroethane	U		0.0110	0.100	1	07/14/2020 01:55	WG1508223
1,1,2-Trichloroethane	U		0.0353	0.100	1	07/14/2020 01:55	WG1508223
Trichloroethene	U		0.0160	0.0400	1	07/14/2020 01:55	WG1508223
Trichlorofluoromethane	U		0.0200	0.100	1	07/14/2020 01:55	WG1508223
1,2,3-Trichloropropane	U		0.204	0.500	1	07/14/2020 01:55	WG1508223
1,2,4-Trimethylbenzene	0.0680	J	0.0464	0.200	1	07/14/2020 01:55	WG1508223
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	07/14/2020 01:55	WG1508223
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	07/14/2020 01:55	WG1508223
Vinyl chloride	U		0.0273	0.100	1	07/14/2020 01:55	WG1508223
Xylenes, Total	0.786		0.191	0.260	1	07/14/2020 01:55	WG1508223
Ethyl Ether	U		0.0170	0.100	1	07/14/2020 01:55	WG1508223
Tetrahydrofuran	U UJ	J0 ~~J3~~	0.0900	0.500	1	07/14/2020 01:55	WG1508223
Iodomethane	U		0.242	0.500	1	07/14/2020 01:55	WG1508223
Allyl chloride	U		0.580	1.00	1	07/14/2020 01:55	WG1508223

JC 8/11/2020

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l		Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Trans-1,4-Dichloro-2-butene	U	UJ	J0	0.0560	0.200	1	07/14/2020 01:55	WG1508223
(S) Toluene-d8	*92.9*				*75.0-131*		*07/14/2020 01:55*	WG1508223
(S) 4-Bromofluorobenzene	*97.1*				*67.0-138*		*07/14/2020 01:55*	WG1508223
(S) 1,2-Dichloroethane-d4	*113*				*70.0-130*		*07/14/2020 01:55*	WG1508223

JC 8/11/2020

MW-336-070820
Collected date/time: 07/08/20 13:10

SAMPLE RESULTS - 08

L1237678

Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	465000		8450	20000	1	07/14/2020 16:39	WG1508212

Sample Narrative:

L1237678-08 WG1508212: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	36400		379	1000	1	07/09/2020 17:40	WG1506275
Nitrate	U		48.0	100	1	07/09/2020 17:40	WG1506275
Sulfate	72100		594	5000	1	07/09/2020 17:40	WG1506275

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	2680		102	1000	1	07/10/2020 22:03	WG1506941

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	7720		48.9	100	1	07/10/2020 22:41	WG1506425
Manganese	462		1.32	5.00	1	07/10/2020 22:41	WG1506425

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	343		0.287	0.678	1	07/11/2020 14:32	WG1507440
Ethane	7.16		0.296	1.29	1	07/11/2020 14:32	WG1507440
Ethene	U		0.422	1.27	1	07/11/2020 14:32	WG1507440

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U		0.548	1.00	1	07/14/2020 02:14	WG1508223
Acrylonitrile	U		0.0760	0.500	1	07/14/2020 02:14	WG1508223
Benzene	0.0490		0.0160	0.0400	1	07/14/2020 02:14	WG1508223
Bromobenzene	U		0.0420	0.500	1	07/14/2020 02:14	WG1508223
Bromodichloromethane	U		0.0315	0.100	1	07/14/2020 02:14	WG1508223
Bromoform	U		0.239	1.00	1	07/14/2020 02:14	WG1508223
Bromomethane	U		0.148	0.500	1	07/14/2020 02:14	WG1508223
n-Butylbenzene	U		0.153	0.500	1	07/14/2020 02:14	WG1508223
sec-Butylbenzene	U		0.101	0.500	1	07/14/2020 02:14	WG1508223
tert-Butylbenzene	U		0.0620	0.200	1	07/14/2020 02:14	WG1508223
Carbon tetrachloride	U		0.0432	0.200	1	07/14/2020 02:14	WG1508223
Chlorobenzene	U		0.0229	0.100	1	07/14/2020 02:14	WG1508223
Chlorodibromomethane	U		0.0180	0.100	1	07/14/2020 02:14	WG1508223
Chloroethane	U		0.0432	0.200	1	07/14/2020 02:14	WG1508223
Chloroform	U		0.0166	0.100	1	07/14/2020 02:14	WG1508223
Chloromethane	U		0.0556	0.500	1	07/14/2020 02:14	WG1508223
2-Chlorotoluene	U		0.0368	0.100	1	07/14/2020 02:14	WG1508223
4-Chlorotoluene	U		0.0452	0.200	1	07/14/2020 02:14	WG1508223
1,2-Dibromo-3-Chloropropane	U UJ	J0	0.204	1.00	1	07/14/2020 02:14	WG1508223
1,2-Dibromoethane	U		0.0210	0.100	1	07/14/2020 02:14	WG1508223

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Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Dibromomethane	U		0.0400	0.200	1	07/14/2020 02:14	WG1508223
1,2-Dichlorobenzene	U		0.0580	0.200	1	07/14/2020 02:14	WG1508223
1,3-Dichlorobenzene	U		0.0680	0.200	1	07/14/2020 02:14	WG1508223
1,4-Dichlorobenzene	U		0.0788	0.200	1	07/14/2020 02:14	WG1508223
Dichlorodifluoromethane	U		0.0327	0.100	1	07/14/2020 02:14	WG1508223
1,1-Dichloroethane	U		0.0230	0.100	1	07/14/2020 02:14	WG1508223
1,2-Dichloroethane	0.0330	J	0.0190	0.100	1	07/14/2020 02:14	WG1508223
1,1-Dichloroethene	0.139		0.0200	0.100	1	07/14/2020 02:14	WG1508223
cis-1,2-Dichloroethene	61.1		0.0276	0.100	1	07/14/2020 02:14	WG1508223
trans-1,2-Dichloroethene	0.127 J	J ~~J4~~	0.0572	0.200	1	07/14/2020 02:14	WG1508223
1,2-Dichloropropane	U		0.0508	0.200	1	07/14/2020 02:14	WG1508223
1,1-Dichloropropene	U		0.0280	0.100	1	07/14/2020 02:14	WG1508223
1,3-Dichloropropane	U		0.0700	0.200	1	07/14/2020 02:14	WG1508223
cis-1,3-Dichloropropene	U		0.0271	0.100	1	07/14/2020 02:14	WG1508223
trans-1,3-Dichloropropene	U		0.0612	0.200	1	07/14/2020 02:14	WG1508223
2,2-Dichloropropane	U		0.0317	0.100	1	07/14/2020 02:14	WG1508223
Di-isopropyl ether	U		0.0140	0.0400	1	07/14/2020 02:14	WG1508223
Ethylbenzene	U		0.0212	0.100	1	07/14/2020 02:14	WG1508223
Hexachloro-1,3-butadiene	U		0.508	1.00	1	07/14/2020 02:14	WG1508223
Isopropylbenzene	U		0.0345	0.100	1	07/14/2020 02:14	WG1508223
p-Isopropyltoluene	U		0.0932	0.200	1	07/14/2020 02:14	WG1508223
2-Butanone (MEK)	U		0.500	1.00	1	07/14/2020 02:14	WG1508223
Methylene Chloride	U		0.265	1.00	1	07/14/2020 02:14	WG1508223
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	07/14/2020 02:14	WG1508223
Methyl tert-butyl ether	U		0.0118	0.0400	1	07/14/2020 02:14	WG1508223
Naphthalene	U		0.124	0.500	1	07/14/2020 02:14	WG1508223
n-Propylbenzene	U		0.0472	0.200	1	07/14/2020 02:14	WG1508223
Styrene	U		0.109	0.500	1	07/14/2020 02:14	WG1508223
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	07/14/2020 02:14	WG1508223
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	07/14/2020 02:14	WG1508223
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	07/14/2020 02:14	WG1508223
Tetrachloroethene	0.600		0.0280	0.100	1	07/14/2020 02:14	WG1508223
Toluene	1.21		0.0500	0.200	1	07/14/2020 02:14	WG1508223
1,2,3-Trichlorobenzene	U		0.0250	0.500	1	07/14/2020 02:14	WG1508223
1,2,4-Trichlorobenzene	U		0.193	0.500	1	07/14/2020 02:14	WG1508223
1,1,1-Trichloroethane	U		0.0110	0.100	1	07/14/2020 02:14	WG1508223
1,1,2-Trichloroethane	U		0.0353	0.100	1	07/14/2020 02:14	WG1508223
Trichloroethene	6.08		0.0160	0.0400	1	07/14/2020 02:14	WG1508223
Trichlorofluoromethane	U		0.0200	0.100	1	07/14/2020 02:14	WG1508223
1,2,3-Trichloropropane	U		0.204	0.500	1	07/14/2020 02:14	WG1508223
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	07/14/2020 02:14	WG1508223
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	07/14/2020 02:14	WG1508223
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	07/14/2020 02:14	WG1508223
Vinyl chloride	7.71		0.0273	0.100	1	07/14/2020 02:14	WG1508223
Xylenes, Total	U		0.191	0.260	1	07/14/2020 02:14	WG1508223
Ethyl Ether	0.0570	J	0.0170	0.100	1	07/14/2020 02:14	WG1508223
Tetrahydrofuran	U UJ	J0 J3	0.0900	0.500	1	07/14/2020 02:14	WG1508223
Iodomethane	U		0.242	0.500	1	07/14/2020 02:14	WG1508223
Allyl chloride	U		0.580	1.00	1	07/14/2020 02:14	WG1508223
Trans-1,4-Dichloro-2-butene	U UJ	J0	0.0560	0.200	1	07/14/2020 02:14	WG1508223
(S) Toluene-d8	*95.4*			*75.0-131*		*07/14/2020 02:14*	WG1508223
(S) 4-Bromofluorobenzene	*97.8*			*67.0-138*		*07/14/2020 02:14*	WG1508223
(S) 1,2-Dichloroethane-d4	*108*			*70.0-130*		*07/14/2020 02:14*	WG1508223

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Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	762000		8450	20000	1	07/14/2020 16:48	WG1508212

Sample Narrative:

L1237678-09 WG1508212: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	109000		1900	5000	5	07/09/2020 18:32	WG1506275
Nitrate	U		48.0	100	1	07/09/2020 18:15	WG1506275
Sulfate	U		594	5000	1	07/09/2020 18:15	WG1506275

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	18700		102	1000	1	07/10/2020 23:23	WG1506941

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	13100		48.9	100	1	07/10/2020 22:48	WG1506425
Manganese	1640		1.32	5.00	1	07/10/2020 22:48	WG1506425

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	56.3 U	~~B J~~	31.6	100	1	07/12/2020 02:08	WG1507596
(S) a,a,a-Trifluorotoluene(FID)	*113*			*78.0-120*		*07/12/2020 02:08*	WG1507596

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	28500		2.87	6.78	10	07/15/2020 13:45	WG1509488
Ethane	288		0.296	1.29	1	07/10/2020 16:10	WG1506878
Ethene	U		0.422	1.27	1	07/10/2020 16:10	WG1506878

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	3.06		0.548	1.00	1	07/14/2020 02:33	WG1508223
Acrylonitrile	U		0.0760	0.500	1	07/14/2020 02:33	WG1508223
Benzene	0.127		0.0160	0.0400	1	07/14/2020 02:33	WG1508223
Bromobenzene	U		0.0420	0.500	1	07/14/2020 02:33	WG1508223
Bromodichloromethane	U		0.0315	0.100	1	07/14/2020 02:33	WG1508223
Bromoform	U		0.239	1.00	1	07/14/2020 02:33	WG1508223
Bromomethane	U		0.148	0.500	1	07/14/2020 02:33	WG1508223
n-Butylbenzene	U		0.153	0.500	1	07/14/2020 02:33	WG1508223
sec-Butylbenzene	U		0.101	0.500	1	07/14/2020 02:33	WG1508223
tert-Butylbenzene	U		0.0620	0.200	1	07/14/2020 02:33	WG1508223
Carbon tetrachloride	U		0.0432	0.200	1	07/14/2020 02:33	WG1508223
Chlorobenzene	U		0.0229	0.100	1	07/14/2020 02:33	WG1508223
Chlorodibromomethane	U		0.0180	0.100	1	07/14/2020 02:33	WG1508223

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MW-185-070820
Collected date/time: 07/08/20 14:15

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L1237678

Volatile Organic Compounds (GC/MS) by Method 8260D

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Chloroethane	0.650		0.0432	0.200	1	07/14/2020 02:33	WG1508223
Chloroform	U		0.0166	0.100	1	07/14/2020 02:33	WG1508223
Chloromethane	U		0.0556	0.500	1	07/14/2020 02:33	WG1508223
2-Chlorotoluene	U		0.0368	0.100	1	07/14/2020 02:33	WG1508223
4-Chlorotoluene	U		0.0452	0.200	1	07/14/2020 02:33	WG1508223
1,2-Dibromo-3-Chloropropane	U	UJ J0	0.204	1.00	1	07/14/2020 02:33	WG1508223
1,2-Dibromoethane	U		0.0210	0.100	1	07/14/2020 02:33	WG1508223
Dibromomethane	U		0.0400	0.200	1	07/14/2020 02:33	WG1508223
1,2-Dichlorobenzene	U		0.0580	0.200	1	07/14/2020 02:33	WG1508223
1,3-Dichlorobenzene	U		0.0680	0.200	1	07/14/2020 02:33	WG1508223
1,4-Dichlorobenzene	U		0.0788	0.200	1	07/14/2020 02:33	WG1508223
Dichlorodifluoromethane	U		0.0327	0.100	1	07/14/2020 02:33	WG1508223
1,1-Dichloroethane	U		0.0230	0.100	1	07/14/2020 02:33	WG1508223
1,2-Dichloroethane	U		0.0190	0.100	1	07/14/2020 02:33	WG1508223
1,1-Dichloroethene	U		0.0200	0.100	1	07/14/2020 02:33	WG1508223
cis-1,2-Dichloroethene	0.752		0.0276	0.100	1	07/14/2020 02:33	WG1508223
trans-1,2-Dichloroethene	0.375	~~J4~~	0.0572	0.200	1	07/14/2020 02:33	WG1508223
1,2-Dichloropropane	U		0.0508	0.200	1	07/14/2020 02:33	WG1508223
1,1-Dichloropropene	U		0.0280	0.100	1	07/14/2020 02:33	WG1508223
1,3-Dichloropropane	U		0.0700	0.200	1	07/14/2020 02:33	WG1508223
cis-1,3-Dichloropropene	U		0.0271	0.100	1	07/14/2020 02:33	WG1508223
trans-1,3-Dichloropropene	U		0.0612	0.200	1	07/14/2020 02:33	WG1508223
2,2-Dichloropropane	U		0.0317	0.100	1	07/14/2020 02:33	WG1508223
Di-isopropyl ether	U		0.0140	0.0400	1	07/14/2020 02:33	WG1508223
Ethylbenzene	0.0630	J	0.0212	0.100	1	07/14/2020 02:33	WG1508223
Hexachloro-1,3-butadiene	U		0.508	1.00	1	07/14/2020 02:33	WG1508223
Isopropylbenzene	U		0.0345	0.100	1	07/14/2020 02:33	WG1508223
p-Isopropyltoluene	U		0.0932	0.200	1	07/14/2020 02:33	WG1508223
2-Butanone (MEK)	U		0.500	1.00	1	07/14/2020 02:33	WG1508223
Methylene Chloride	U		0.265	1.00	1	07/14/2020 02:33	WG1508223
4-Methyl-2-pentanone (MIBK)	0.864	J	0.400	1.00	1	07/14/2020 02:33	WG1508223
Methyl tert-butyl ether	U		0.0118	0.0400	1	07/14/2020 02:33	WG1508223
Naphthalene	U		0.124	0.500	1	07/14/2020 02:33	WG1508223
n-Propylbenzene	U		0.0472	0.200	1	07/14/2020 02:33	WG1508223
Styrene	U		0.109	0.500	1	07/14/2020 02:33	WG1508223
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	07/14/2020 02:33	WG1508223
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	07/14/2020 02:33	WG1508223
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	07/14/2020 02:33	WG1508223
Tetrachloroethene	0.0570	J	0.0280	0.100	1	07/14/2020 02:33	WG1508223
Toluene	0.545		0.0500	0.200	1	07/14/2020 02:33	WG1508223
1,2,3-Trichlorobenzene	U		0.0250	0.500	1	07/14/2020 02:33	WG1508223
1,2,4-Trichlorobenzene	U		0.193	0.500	1	07/14/2020 02:33	WG1508223
1,1,1-Trichloroethane	U		0.0110	0.100	1	07/14/2020 02:33	WG1508223
1,1,2-Trichloroethane	U		0.0353	0.100	1	07/14/2020 02:33	WG1508223
Trichloroethene	0.0760		0.0160	0.0400	1	07/14/2020 02:33	WG1508223
Trichlorofluoromethane	U		0.0200	0.100	1	07/14/2020 02:33	WG1508223
1,2,3-Trichloropropane	U		0.204	0.500	1	07/14/2020 02:33	WG1508223
1,2,4-Trimethylbenzene	0.0720	J	0.0464	0.200	1	07/14/2020 02:33	WG1508223
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	07/14/2020 02:33	WG1508223
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	07/14/2020 02:33	WG1508223
Vinyl chloride	0.883		0.0273	0.100	1	07/14/2020 02:33	WG1508223
Xylenes, Total	0.432		0.191	0.260	1	07/14/2020 02:33	WG1508223
Ethyl Ether	U		0.0170	0.100	1	07/14/2020 02:33	WG1508223
Tetrahydrofuran	2.24	J J0 J3	0.0900	0.500	1	07/14/2020 02:33	WG1508223
Iodomethane	U		0.242	0.500	1	07/14/2020 02:33	WG1508223
Allyl chloride	U		0.580	1.00	1	07/14/2020 02:33	WG1508223

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Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l		Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Trans-1,4-Dichloro-2-butene	U	UJ	J0	0.0560	0.200	1	07/14/2020 02:33	WG1508223
(S) Toluene-d8	*98.1*				*75.0-131*		*07/14/2020 02:33*	WG1508223
(S) 4-Bromofluorobenzene	*97.3*				*67.0-138*		*07/14/2020 02:33*	WG1508223
(S) 1,2-Dichloroethane-d4	*111*				*70.0-130*		*07/14/2020 02:33*	WG1508223

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Wet Chemistry by Method 2320 B-2011

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Alkalinity	298000		8450	20000	1	07/14/2020 16:56	WG1508212

Sample Narrative:

L1237678-10 WG1508212: Endpoint pH 4.5

Wet Chemistry by Method 9056A

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Chloride	54400		379	1000	1	07/09/2020 19:24	WG1506275
Nitrate	U		48.0	100	1	07/09/2020 19:24	WG1506275
Sulfate	9560		594	5000	1	07/09/2020 19:24	WG1506275

Wet Chemistry by Method 9060A

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
TOC (Total Organic Carbon)	4910		102	1000	1	07/10/2020 23:41	WG1506941

Metals (ICPMS) by Method 6020B

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Iron	3570		48.9	100	1	07/10/2020 23:06	WG1506425
Manganese	260		1.32	5.00	1	07/10/2020 23:06	WG1506425

Volatile Organic Compounds (GC) by Method NWTPHGX

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Gasoline Range Organics-NWTPH	54.3	U ~~BJ~~	31.6	100	1	07/12/2020 01:13	WG1507643
(S) a,a,a-Trifluorotoluene(FID)	*94.3*			*78.0-120*		*07/12/2020 01:13*	WG1507643

Volatile Organic Compounds (GC) by Method RSK175

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Methane	2770		0.287	0.678	1	07/14/2020 17:03	WG1506879
Ethane	17.9		0.296	1.29	1	07/14/2020 17:03	WG1506879
Ethene	20.4		0.422	1.27	1	07/14/2020 17:03	WG1506879

Volatile Organic Compounds (GC/MS) by Method 8260D

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Acetone	U		0.548	1.00	1	07/14/2020 02:52	WG1508223
Acrylonitrile	U		0.0760	0.500	1	07/14/2020 02:52	WG1508223
Benzene	U		0.0160	0.0400	1	07/14/2020 02:52	WG1508223
Bromobenzene	U		0.0420	0.500	1	07/14/2020 02:52	WG1508223
Bromodichloromethane	U		0.0315	0.100	1	07/14/2020 02:52	WG1508223
Bromoform	U		0.239	1.00	1	07/14/2020 02:52	WG1508223
Bromomethane	U		0.148	0.500	1	07/14/2020 02:52	WG1508223
n-Butylbenzene	U		0.153	0.500	1	07/14/2020 02:52	WG1508223
sec-Butylbenzene	U		0.101	0.500	1	07/14/2020 02:52	WG1508223
tert-Butylbenzene	U		0.0620	0.200	1	07/14/2020 02:52	WG1508223
Carbon tetrachloride	U		0.0432	0.200	1	07/14/2020 02:52	WG1508223
Chlorobenzene	U		0.0229	0.100	1	07/14/2020 02:52	WG1508223
Chlorodibromomethane	U		0.0180	0.100	1	07/14/2020 02:52	WG1508223

JC 8/11/2020

MW-186-070820
Collected date/time: 07/08/20 14:45

SAMPLE RESULTS - 10

L1237678

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloroethane	U		0.0432	0.200	1	07/14/2020 02:52	WG1508223
Chloroform	U		0.0166	0.100	1	07/14/2020 02:52	WG1508223
Chloromethane	U		0.0556	0.500	1	07/14/2020 02:52	WG1508223
2-Chlorotoluene	U		0.0368	0.100	1	07/14/2020 02:52	WG1508223
4-Chlorotoluene	U		0.0452	0.200	1	07/14/2020 02:52	WG1508223
1,2-Dibromo-3-Chloropropane	U UJ	J0	0.204	1.00	1	07/14/2020 02:52	WG1508223
1,2-Dibromoethane	U		0.0210	0.100	1	07/14/2020 02:52	WG1508223
Dibromomethane	U		0.0400	0.200	1	07/14/2020 02:52	WG1508223
1,2-Dichlorobenzene	U		0.0580	0.200	1	07/14/2020 02:52	WG1508223
1,3-Dichlorobenzene	U		0.0680	0.200	1	07/14/2020 02:52	WG1508223
1,4-Dichlorobenzene	U		0.0788	0.200	1	07/14/2020 02:52	WG1508223
Dichlorodifluoromethane	U		0.0327	0.100	1	07/14/2020 02:52	WG1508223
1,1-Dichloroethane	U		0.0230	0.100	1	07/14/2020 02:52	WG1508223
1,2-Dichloroethane	0.0330	J	0.0190	0.100	1	07/14/2020 02:52	WG1508223
1,1-Dichloroethene	U		0.0200	0.100	1	07/14/2020 02:52	WG1508223
cis-1,2-Dichloroethene	0.101		0.0276	0.100	1	07/14/2020 02:52	WG1508223
trans-1,2-Dichloroethene	U	~~J4~~	0.0572	0.200	1	07/14/2020 02:52	WG1508223
1,2-Dichloropropane	U		0.0508	0.200	1	07/14/2020 02:52	WG1508223
1,1-Dichloropropene	U		0.0280	0.100	1	07/14/2020 02:52	WG1508223
1,3-Dichloropropane	U		0.0700	0.200	1	07/14/2020 02:52	WG1508223
cis-1,3-Dichloropropene	U		0.0271	0.100	1	07/14/2020 02:52	WG1508223
trans-1,3-Dichloropropene	U		0.0612	0.200	1	07/14/2020 02:52	WG1508223
2,2-Dichloropropane	U		0.0317	0.100	1	07/14/2020 02:52	WG1508223
Di-isopropyl ether	U		0.0140	0.0400	1	07/14/2020 02:52	WG1508223
Ethylbenzene	0.107		0.0212	0.100	1	07/14/2020 02:52	WG1508223
Hexachloro-1,3-butadiene	U		0.508	1.00	1	07/14/2020 02:52	WG1508223
Isopropylbenzene	U		0.0345	0.100	1	07/14/2020 02:52	WG1508223
p-Isopropyltoluene	U		0.0932	0.200	1	07/14/2020 02:52	WG1508223
2-Butanone (MEK)	U		0.500	1.00	1	07/14/2020 02:52	WG1508223
Methylene Chloride	U		0.265	1.00	1	07/14/2020 02:52	WG1508223
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	07/14/2020 02:52	WG1508223
Methyl tert-butyl ether	U		0.0118	0.0400	1	07/14/2020 02:52	WG1508223
Naphthalene	U		0.124	0.500	1	07/14/2020 02:52	WG1508223
n-Propylbenzene	U		0.0472	0.200	1	07/14/2020 02:52	WG1508223
Styrene	U		0.109	0.500	1	07/14/2020 02:52	WG1508223
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	07/14/2020 02:52	WG1508223
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	07/14/2020 02:52	WG1508223
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	07/14/2020 02:52	WG1508223
Tetrachloroethene	U		0.0280	0.100	1	07/14/2020 02:52	WG1508223
Toluene	1.91		0.0500	0.200	1	07/14/2020 02:52	WG1508223
1,2,3-Trichlorobenzene	U		0.0250	0.500	1	07/14/2020 02:52	WG1508223
1,2,4-Trichlorobenzene	U		0.193	0.500	1	07/14/2020 02:52	WG1508223
1,1,1-Trichloroethane	U		0.0110	0.100	1	07/14/2020 02:52	WG1508223
1,1,2-Trichloroethane	U		0.0353	0.100	1	07/14/2020 02:52	WG1508223
Trichloroethene	0.0850		0.0160	0.0400	1	07/14/2020 02:52	WG1508223
Trichlorofluoromethane	U		0.0200	0.100	1	07/14/2020 02:52	WG1508223
1,2,3-Trichloropropane	U		0.204	0.500	1	07/14/2020 02:52	WG1508223
1,2,4-Trimethylbenzene	0.105	J	0.0464	0.200	1	07/14/2020 02:52	WG1508223
1,2,3-Trimethylbenzene	0.0660	J	0.0460	0.200	1	07/14/2020 02:52	WG1508223
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	07/14/2020 02:52	WG1508223
Vinyl chloride	4.02		0.0273	0.100	1	07/14/2020 02:52	WG1508223
Xylenes, Total	0.688		0.191	0.260	1	07/14/2020 02:52	WG1508223
Ethyl Ether	U		0.0170	0.100	1	07/14/2020 02:52	WG1508223
Tetrahydrofuran	0.264 J	J J0 J3	0.0900	0.500	1	07/14/2020 02:52	WG1508223
Iodomethane	U		0.242	0.500	1	07/14/2020 02:52	WG1508223
Allyl chloride	U		0.580	1.00	1	07/14/2020 02:52	WG1508223

JC 8/11/2020

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l		Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Trans-1,4-Dichloro-2-butene	U	UJ	J0	0.0560	0.200	1	07/14/2020 02:52	WG1508223
(S) Toluene-d8	*99.2*				*75.0-131*		*07/14/2020 02:52*	WG1508223
(S) 4-Bromofluorobenzene	*94.1*				*67.0-138*		*07/14/2020 02:52*	WG1508223
(S) 1,2-Dichloroethane-d4	*110*				*70.0-130*		*07/14/2020 02:52*	WG1508223

JC 8/11/2020

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L1237678

Wet Chemistry by Method 2320 B-2011

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Alkalinity	201000		8450	20000	1	07/14/2020 17:05	WG1508212

Sample Narrative:

L1237678-11 WG1508212: Endpoint pH 4.5

Wet Chemistry by Method 9056A

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Chloride	17100		379	1000	1	07/09/2020 19:59	WG1506275
Nitrate	U		48.0	100	1	07/09/2020 19:59	WG1506275
Sulfate	13600		594	5000	1	07/09/2020 19:59	WG1506275

Wet Chemistry by Method 9060A

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
TOC (Total Organic Carbon)	2300	B	102	1000	1	07/10/2020 23:56	WG1506941

Metals (ICPMS) by Method 6020B

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Iron	206		48.9	100	1	07/10/2020 23:10	WG1506425
Manganese	114		1.32	5.00	1	07/10/2020 23:10	WG1506425

Volatile Organic Compounds (GC) by Method NWTPHGX

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Gasoline Range Organics-NWTPH	55.6	U ~~B J~~	31.6	100	1	07/12/2020 01:35	WG1507643
(S) a,a,a-Trifluorotoluene(FID)	*95.3*			*78.0-120*		*07/12/2020 01:35*	WG1507643

Volatile Organic Compounds (GC) by Method RSK175

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Methane	67.6		0.287	0.678	1	07/14/2020 17:06	WG1506879
Ethane	U		0.296	1.29	1	07/14/2020 17:06	WG1506879
Ethene	U		0.422	1.27	1	07/14/2020 17:06	WG1506879

Volatile Organic Compounds (GC/MS) by Method 8260D

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Acetone	U		0.548	1.00	1	07/14/2020 03:11	WG1508223
Acrylonitrile	U		0.0760	0.500	1	07/14/2020 03:11	WG1508223
Benzene	U		0.0160	0.0400	1	07/14/2020 03:11	WG1508223
Bromobenzene	U		0.0420	0.500	1	07/14/2020 03:11	WG1508223
Bromodichloromethane	U		0.0315	0.100	1	07/14/2020 03:11	WG1508223
Bromoform	U		0.239	1.00	1	07/14/2020 03:11	WG1508223
Bromomethane	U		0.148	0.500	1	07/14/2020 03:11	WG1508223
n-Butylbenzene	U		0.153	0.500	1	07/14/2020 03:11	WG1508223
sec-Butylbenzene	U		0.101	0.500	1	07/14/2020 03:11	WG1508223
tert-Butylbenzene	U		0.0620	0.200	1	07/14/2020 03:11	WG1508223
Carbon tetrachloride	U		0.0432	0.200	1	07/14/2020 03:11	WG1508223
Chlorobenzene	U		0.0229	0.100	1	07/14/2020 03:11	WG1508223
Chlorodibromomethane	U		0.0180	0.100	1	07/14/2020 03:11	WG1508223

JC 8/11/2020

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloroethane	0.121	J	0.0432	0.200	1	07/14/2020 03:11	WG1508223
Chloroform	U		0.0166	0.100	1	07/14/2020 03:11	WG1508223
Chloromethane	U		0.0556	0.500	1	07/14/2020 03:11	WG1508223
2-Chlorotoluene	U		0.0368	0.100	1	07/14/2020 03:11	WG1508223
4-Chlorotoluene	U		0.0452	0.200	1	07/14/2020 03:11	WG1508223
1,2-Dibromo-3-Chloropropane	U UJ	J0	0.204	1.00	1	07/14/2020 03:11	WG1508223
1,2-Dibromoethane	U		0.0210	0.100	1	07/14/2020 03:11	WG1508223
Dibromomethane	U		0.0400	0.200	1	07/14/2020 03:11	WG1508223
1,2-Dichlorobenzene	U		0.0580	0.200	1	07/14/2020 03:11	WG1508223
1,3-Dichlorobenzene	U		0.0680	0.200	1	07/14/2020 03:11	WG1508223
1,4-Dichlorobenzene	U		0.0788	0.200	1	07/14/2020 03:11	WG1508223
Dichlorodifluoromethane	U		0.0327	0.100	1	07/14/2020 03:11	WG1508223
1,1-Dichloroethane	U		0.0230	0.100	1	07/14/2020 03:11	WG1508223
1,2-Dichloroethane	0.0480	J	0.0190	0.100	1	07/14/2020 03:11	WG1508223
1,1-Dichloroethene	U		0.0200	0.100	1	07/14/2020 03:11	WG1508223
cis-1,2-Dichloroethene	0.123		0.0276	0.100	1	07/14/2020 03:11	WG1508223
trans-1,2-Dichloroethene	U	~~J4~~	0.0572	0.200	1	07/14/2020 03:11	WG1508223
1,2-Dichloropropane	U		0.0508	0.200	1	07/14/2020 03:11	WG1508223
1,1-Dichloropropene	U		0.0280	0.100	1	07/14/2020 03:11	WG1508223
1,3-Dichloropropane	U		0.0700	0.200	1	07/14/2020 03:11	WG1508223
cis-1,3-Dichloropropene	U		0.0271	0.100	1	07/14/2020 03:11	WG1508223
trans-1,3-Dichloropropene	U		0.0612	0.200	1	07/14/2020 03:11	WG1508223
2,2-Dichloropropane	U		0.0317	0.100	1	07/14/2020 03:11	WG1508223
Di-isopropyl ether	U		0.0140	0.0400	1	07/14/2020 03:11	WG1508223
Ethylbenzene	0.126		0.0212	0.100	1	07/14/2020 03:11	WG1508223
Hexachloro-1,3-butadiene	U		0.508	1.00	1	07/14/2020 03:11	WG1508223
Isopropylbenzene	0.0390	J	0.0345	0.100	1	07/14/2020 03:11	WG1508223
p-Isopropyltoluene	U		0.0932	0.200	1	07/14/2020 03:11	WG1508223
2-Butanone (MEK)	U		0.500	1.00	1	07/14/2020 03:11	WG1508223
Methylene Chloride	U		0.265	1.00	1	07/14/2020 03:11	WG1508223
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	07/14/2020 03:11	WG1508223
Methyl tert-butyl ether	U		0.0118	0.0400	1	07/14/2020 03:11	WG1508223
Naphthalene	U		0.124	0.500	1	07/14/2020 03:11	WG1508223
n-Propylbenzene	U		0.0472	0.200	1	07/14/2020 03:11	WG1508223
Styrene	U		0.109	0.500	1	07/14/2020 03:11	WG1508223
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	07/14/2020 03:11	WG1508223
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	07/14/2020 03:11	WG1508223
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	07/14/2020 03:11	WG1508223
Tetrachloroethene	U		0.0280	0.100	1	07/14/2020 03:11	WG1508223
Toluene	2.40		0.0500	0.200	1	07/14/2020 03:11	WG1508223
1,2,3-Trichlorobenzene	U		0.0250	0.500	1	07/14/2020 03:11	WG1508223
1,2,4-Trichlorobenzene	U		0.193	0.500	1	07/14/2020 03:11	WG1508223
1,1,1-Trichloroethane	U		0.0110	0.100	1	07/14/2020 03:11	WG1508223
1,1,2-Trichloroethane	U		0.0353	0.100	1	07/14/2020 03:11	WG1508223
Trichloroethene	U		0.0160	0.0400	1	07/14/2020 03:11	WG1508223
Trichlorofluoromethane	U		0.0200	0.100	1	07/14/2020 03:11	WG1508223
1,2,3-Trichloropropane	U		0.204	0.500	1	07/14/2020 03:11	WG1508223
1,2,4-Trimethylbenzene	0.105	J	0.0464	0.200	1	07/14/2020 03:11	WG1508223
1,2,3-Trimethylbenzene	0.0710	J	0.0460	0.200	1	07/14/2020 03:11	WG1508223
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	07/14/2020 03:11	WG1508223
Vinyl chloride	U		0.0273	0.100	1	07/14/2020 03:11	WG1508223
Xylenes, Total	1.18		0.191	0.260	1	07/14/2020 03:11	WG1508223
Ethyl Ether	U		0.0170	0.100	1	07/14/2020 03:11	WG1508223
Tetrahydrofuran	U UJ	J0 J3	0.0900	0.500	1	07/14/2020 03:11	WG1508223
Iodomethane	U		0.242	0.500	1	07/14/2020 03:11	WG1508223
Allyl chloride	U		0.580	1.00	1	07/14/2020 03:11	WG1508223

JC 8/11/2020

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l		Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Trans-1,4-Dichloro-2-butene	U	UJ	J0	0.0560	0.200	1	07/14/2020 03:11	WG1508223
(S) Toluene-d8	*101*				*75.0-131*		*07/14/2020 03:11*	WG1508223
(S) 4-Bromofluorobenzene	*94.4*				*67.0-138*		*07/14/2020 03:11*	WG1508223
(S) 1,2-Dichloroethane-d4	*109*				*70.0-130*		*07/14/2020 03:11*	WG1508223

JC 8/11/2020

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Wet Chemistry by Method 2320 B-2011

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Alkalinity	192000		8450	20000	1	07/14/2020 17:15	WG1508212

Sample Narrative:

L1237678-12 WG1508212: Endpoint pH 4.5

Wet Chemistry by Method 9056A

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Chloride	20700		379	1000	1	07/09/2020 20:17	WG1506275
Nitrate	U		48.0	100	1	07/09/2020 20:17	WG1506275
Sulfate	59400		594	5000	1	07/09/2020 20:17	WG1506275

Wet Chemistry by Method 9060A

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
TOC (Total Organic Carbon)	2020	~~B~~	102	1000	1	07/11/2020 00:12	WG1506941

Metals (ICPMS) by Method 6020B

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Iron	171		48.9	100	1	07/10/2020 23:13	WG1506425
Manganese	594		1.32	5.00	1	07/10/2020 23:13	WG1506425

Volatile Organic Compounds (GC) by Method RSK175

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Methane	46.3		0.287	0.678	1	07/14/2020 17:09	WG1506879
Ethane	U		0.296	1.29	1	07/14/2020 17:09	WG1506879
Ethene	U		0.422	1.27	1	07/14/2020 17:09	WG1506879

Volatile Organic Compounds (GC/MS) by Method 8260D

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Acetone	U		5.48	10.0	10	07/16/2020 03:08	WG1509623
Acrylonitrile	U		0.760	5.00	10	07/16/2020 03:08	WG1509623
Benzene	U		0.160	0.400	10	07/16/2020 03:08	WG1509623
Bromobenzene	U		0.420	5.00	10	07/16/2020 03:08	WG1509623
Bromodichloromethane	U		0.315	1.00	10	07/16/2020 03:08	WG1509623
Bromoform	U		2.39	10.0	10	07/16/2020 03:08	WG1509623
Bromomethane	U		1.48	5.00	10	07/16/2020 03:08	WG1509623
n-Butylbenzene	U		1.53	5.00	10	07/16/2020 03:08	WG1509623
sec-Butylbenzene	U		1.01	5.00	10	07/16/2020 03:08	WG1509623
tert-Butylbenzene	U		0.620	2.00	10	07/16/2020 03:08	WG1509623
Carbon tetrachloride	U		0.432	2.00	10	07/16/2020 03:08	WG1509623
Chlorobenzene	U		0.229	1.00	10	07/16/2020 03:08	WG1509623
Chlorodibromomethane	U		0.180	1.00	10	07/16/2020 03:08	WG1509623
Chloroethane	U		0.432	2.00	10	07/16/2020 03:08	WG1509623
Chloroform	U		0.166	1.00	10	07/16/2020 03:08	WG1509623
Chloromethane	U		0.556	5.00	10	07/16/2020 03:08	WG1509623
2-Chlorotoluene	U		0.368	1.00	10	07/16/2020 03:08	WG1509623
4-Chlorotoluene	U		0.452	2.00	10	07/16/2020 03:08	WG1509623
1,2-Dibromo-3-Chloropropane	U		2.04	10.0	10	07/16/2020 03:08	WG1509623
1,2-Dibromoethane	U		0.210	1.00	10	07/16/2020 03:08	WG1509623

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Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Dibromomethane	U		0.400	2.00	10	07/16/2020 03:08	WG1509623
1,2-Dichlorobenzene	U		0.580	2.00	10	07/16/2020 03:08	WG1509623
1,3-Dichlorobenzene	U		0.680	2.00	10	07/16/2020 03:08	WG1509623
1,4-Dichlorobenzene	U		0.788	2.00	10	07/16/2020 03:08	WG1509623
Dichlorodifluoromethane	U		0.327	1.00	10	07/16/2020 03:08	WG1509623
1,1-Dichloroethane	U		0.230	1.00	10	07/16/2020 03:08	WG1509623
1,2-Dichloroethane	U		0.190	1.00	10	07/16/2020 03:08	WG1509623
1,1-Dichloroethene	U		0.200	1.00	10	07/16/2020 03:08	WG1509623
cis-1,2-Dichloroethene	89.2		0.276	1.00	10	07/16/2020 03:08	WG1509623
trans-1,2-Dichloroethene	U		0.572	2.00	10	07/16/2020 03:08	WG1509623
1,2-Dichloropropane	U		0.508	2.00	10	07/16/2020 03:08	WG1509623
1,1-Dichloropropene	U		0.280	1.00	10	07/16/2020 03:08	WG1509623
1,3-Dichloropropane	U		0.700	2.00	10	07/16/2020 03:08	WG1509623
cis-1,3-Dichloropropene	U		0.271	1.00	10	07/16/2020 03:08	WG1509623
trans-1,3-Dichloropropene	U		0.612	2.00	10	07/16/2020 03:08	WG1509623
2,2-Dichloropropane	U		0.317	1.00	10	07/16/2020 03:08	WG1509623
Di-isopropyl ether	U		0.140	0.400	10	07/16/2020 03:08	WG1509623
Ethylbenzene	U		0.212	1.00	10	07/16/2020 03:08	WG1509623
Hexachloro-1,3-butadiene	U		5.08	10.0	10	07/16/2020 03:08	WG1509623
Isopropylbenzene	U		0.345	1.00	10	07/16/2020 03:08	WG1509623
p-Isopropyltoluene	U		0.932	2.00	10	07/16/2020 03:08	WG1509623
2-Butanone (MEK)	U		5.00	10.0	10	07/16/2020 03:08	WG1509623
Methylene Chloride	U		2.65	10.0	10	07/16/2020 03:08	WG1509623
4-Methyl-2-pentanone (MIBK)	U		4.00	10.0	10	07/16/2020 03:08	WG1509623
Methyl tert-butyl ether	U		0.118	0.400	10	07/16/2020 03:08	WG1509623
Naphthalene	U		1.24	5.00	10	07/16/2020 03:08	WG1509623
n-Propylbenzene	U		0.472	2.00	10	07/16/2020 03:08	WG1509623
Styrene	U		1.09	5.00	10	07/16/2020 03:08	WG1509623
1,1,1,2-Tetrachloroethane	U		0.200	1.00	10	07/16/2020 03:08	WG1509623
1,1,2,2-Tetrachloroethane	U	UJ J0	0.156	1.00	10	07/16/2020 03:08	WG1509623
1,1,2-Trichlorotrifluoroethane	U		0.270	1.00	10	07/16/2020 03:08	WG1509623
Tetrachloroethene	203		0.280	1.00	10	07/16/2020 03:08	WG1509623
Toluene	1.40	J	0.500	2.00	10	07/16/2020 03:08	WG1509623
1,2,3-Trichlorobenzene	U		0.250	5.00	10	07/16/2020 03:08	WG1509623
1,2,4-Trichlorobenzene	U		1.93	5.00	10	07/16/2020 03:08	WG1509623
1,1,1-Trichloroethane	U		0.110	1.00	10	07/16/2020 03:08	WG1509623
1,1,2-Trichloroethane	U		0.353	1.00	10	07/16/2020 03:08	WG1509623
Trichloroethene	215		0.160	0.400	10	07/16/2020 03:08	WG1509623
Trichlorofluoromethane	U		0.200	1.00	10	07/16/2020 03:08	WG1509623
1,2,3-Trichloropropane	U		2.04	5.00	10	07/16/2020 03:08	WG1509623
1,2,4-Trimethylbenzene	U		0.464	2.00	10	07/16/2020 03:08	WG1509623
1,2,3-Trimethylbenzene	U		0.460	2.00	10	07/16/2020 03:08	WG1509623
1,3,5-Trimethylbenzene	U		0.432	2.00	10	07/16/2020 03:08	WG1509623
Vinyl chloride	U		0.273	1.00	10	07/16/2020 03:08	WG1509623
Xylenes, Total	U		1.91	2.60	10	07/16/2020 03:08	WG1509623
Ethyl Ether	U		0.170	1.00	10	07/16/2020 03:08	WG1509623
Tetrahydrofuran	U		0.900	5.00	10	07/16/2020 03:08	WG1509623
Iodomethane	U		2.42	5.00	10	07/16/2020 03:08	WG1509623
Allyl chloride	U		5.80	10.0	10	07/16/2020 03:08	WG1509623
Trans-1,4-Dichloro-2-butene	U	UJ J0	0.560	2.00	10	07/16/2020 03:08	WG1509623
(S) Toluene-d8	*96.4*			*75.0-131*		*07/16/2020 03:08*	WG1509623
(S) 4-Bromofluorobenzene	*97.2*			*67.0-138*		*07/16/2020 03:08*	WG1509623
(S) 1,2-Dichloroethane-d4	*108*			*70.0-130*		*07/16/2020 03:08*	WG1509623

JC 8/11/2020

TB-070820

Collected date/time: 07/08/20 16:30

Volatile Organic Compounds (GC) by Method NWTPHGX

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Gasoline Range Organics-NWTPH	43.3	B J	31.6	100	1	07/11/2020 23:46	WG1507643
(S) a,a,a-Trifluorotoluene(FID)	*95.1*			*78.0-120*		*07/11/2020 23:46*	WG1507643

Volatile Organic Compounds (GC/MS) by Method 8260D

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Acetone	U		0.548	1.00	1	07/15/2020 21:09	WG1509623
Acrylonitrile	U		0.0760	0.500	1	07/15/2020 21:09	WG1509623
Benzene	U		0.0160	0.0400	1	07/15/2020 21:09	WG1509623
Bromobenzene	U		0.0420	0.500	1	07/15/2020 21:09	WG1509623
Bromodichloromethane	U		0.0315	0.100	1	07/15/2020 21:09	WG1509623
Bromoform	U		0.239	1.00	1	07/15/2020 21:09	WG1509623
Bromomethane	U		0.148	0.500	1	07/15/2020 21:09	WG1509623
n-Butylbenzene	U		0.153	0.500	1	07/15/2020 21:09	WG1509623
sec-Butylbenzene	U		0.101	0.500	1	07/15/2020 21:09	WG1509623
tert-Butylbenzene	U		0.0620	0.200	1	07/15/2020 21:09	WG1509623
Carbon tetrachloride	U		0.0432	0.200	1	07/15/2020 21:09	WG1509623
Chlorobenzene	U		0.0229	0.100	1	07/15/2020 21:09	WG1509623
Chlorodibromomethane	U		0.0180	0.100	1	07/15/2020 21:09	WG1509623
Chloroethane	U		0.0432	0.200	1	07/15/2020 21:09	WG1509623
Chloroform	U		0.0166	0.100	1	07/15/2020 21:09	WG1509623
Chloromethane	U		0.0556	0.500	1	07/15/2020 21:09	WG1509623
2-Chlorotoluene	U		0.0368	0.100	1	07/15/2020 21:09	WG1509623
4-Chlorotoluene	U		0.0452	0.200	1	07/15/2020 21:09	WG1509623
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	07/15/2020 21:09	WG1509623
1,2-Dibromoethane	U		0.0210	0.100	1	07/15/2020 21:09	WG1509623
Dibromomethane	U		0.0400	0.200	1	07/15/2020 21:09	WG1509623
1,2-Dichlorobenzene	U		0.0580	0.200	1	07/15/2020 21:09	WG1509623
1,3-Dichlorobenzene	U		0.0680	0.200	1	07/15/2020 21:09	WG1509623
1,4-Dichlorobenzene	U		0.0788	0.200	1	07/15/2020 21:09	WG1509623
Dichlorodifluoromethane	U		0.0327	0.100	1	07/15/2020 21:09	WG1509623
1,1-Dichloroethane	U		0.0230	0.100	1	07/15/2020 21:09	WG1509623
1,2-Dichloroethane	U		0.0190	0.100	1	07/15/2020 21:09	WG1509623
1,1-Dichloroethene	U		0.0200	0.100	1	07/15/2020 21:09	WG1509623
cis-1,2-Dichloroethene	U		0.0276	0.100	1	07/15/2020 21:09	WG1509623
trans-1,2-Dichloroethene	U		0.0572	0.200	1	07/15/2020 21:09	WG1509623
1,2-Dichloropropane	U		0.0508	0.200	1	07/15/2020 21:09	WG1509623
1,1-Dichloropropene	U		0.0280	0.100	1	07/15/2020 21:09	WG1509623
1,3-Dichloropropane	U		0.0700	0.200	1	07/15/2020 21:09	WG1509623
cis-1,3-Dichloropropene	U		0.0271	0.100	1	07/15/2020 21:09	WG1509623
trans-1,3-Dichloropropene	U		0.0612	0.200	1	07/15/2020 21:09	WG1509623
2,2-Dichloropropane	U		0.0317	0.100	1	07/15/2020 21:09	WG1509623
Di-isopropyl ether	U		0.0140	0.0400	1	07/15/2020 21:09	WG1509623
Ethylbenzene	U		0.0212	0.100	1	07/15/2020 21:09	WG1509623
Hexachloro-1,3-butadiene	U		0.508	1.00	1	07/15/2020 21:09	WG1509623
Isopropylbenzene	U		0.0345	0.100	1	07/15/2020 21:09	WG1509623
p-Isopropyltoluene	U		0.0932	0.200	1	07/15/2020 21:09	WG1509623
2-Butanone (MEK)	U		0.500	1.00	1	07/15/2020 21:09	WG1509623
Methylene Chloride	U		0.265	1.00	1	07/15/2020 21:09	WG1509623
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	07/15/2020 21:09	WG1509623
Methyl tert-butyl ether	U		0.0118	0.0400	1	07/15/2020 21:09	WG1509623
Naphthalene	U		0.124	0.500	1	07/15/2020 21:09	WG1509623
n-Propylbenzene	U		0.0472	0.200	1	07/15/2020 21:09	WG1509623
Styrene	U		0.109	0.500	1	07/15/2020 21:09	WG1509623

JC 8/11/2020

TB-070820

Collected date/time: 07/08/20 16:30

SAMPLE RESULTS - 13

L1237678

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	07/15/2020 21:09	WG1509623
1,1,2,2-Tetrachloroethane	U UJ	J0	0.0156	0.100	1	07/15/2020 21:09	WG1509623
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	07/15/2020 21:09	WG1509623
Tetrachloroethene	U		0.0280	0.100	1	07/15/2020 21:09	WG1509623
Toluene	U		0.0500	0.200	1	07/15/2020 21:09	WG1509623
1,2,3-Trichlorobenzene	U		0.0250	0.500	1	07/15/2020 21:09	WG1509623
1,2,4-Trichlorobenzene	U		0.193	0.500	1	07/15/2020 21:09	WG1509623
1,1,1-Trichloroethane	U		0.0110	0.100	1	07/15/2020 21:09	WG1509623
1,1,2-Trichloroethane	U		0.0353	0.100	1	07/15/2020 21:09	WG1509623
Trichloroethene	U		0.0160	0.0400	1	07/15/2020 21:09	WG1509623
Trichlorofluoromethane	U		0.0200	0.100	1	07/15/2020 21:09	WG1509623
1,2,3-Trichloropropane	U		0.204	0.500	1	07/15/2020 21:09	WG1509623
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	07/15/2020 21:09	WG1509623
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	07/15/2020 21:09	WG1509623
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	07/15/2020 21:09	WG1509623
Vinyl chloride	U		0.0273	0.100	1	07/15/2020 21:09	WG1509623
Xylenes, Total	U		0.191	0.260	1	07/15/2020 21:09	WG1509623
Ethyl Ether	U		0.0170	0.100	1	07/15/2020 21:09	WG1509623
Tetrahydrofuran	U		0.0900	0.500	1	07/15/2020 21:09	WG1509623
Iodomethane	U		0.242	0.500	1	07/15/2020 21:09	WG1509623
Allyl chloride	U		0.580	1.00	1	07/15/2020 21:09	WG1509623
Trans-1,4-Dichloro-2-butene	U UJ	J0	0.0560	0.200	1	07/15/2020 21:09	WG1509623
(S) Toluene-d8	*96.1*			*75.0-131*		*07/15/2020 21:09*	WG1509623
(S) 4-Bromofluorobenzene	*99.9*			*67.0-138*		*07/15/2020 21:09*	WG1509623
(S) 1,2-Dichloroethane-d4	*108*			*70.0-130*		*07/15/2020 21:09*	WG1509623

JC 8/11/2020

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	383000		8450	20000	1	07/15/2020 18:15	WG1508214

Sample Narrative:

L1238146-01 WG1508214: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	42900		379	1000	1	07/10/2020 13:18	WG1506965
Nitrate	U		48.0	100	1	07/10/2020 13:18	WG1506965
Sulfate	16600		594	5000	1	07/10/2020 13:18	WG1506965

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	2920	~~B~~	102	1000	1	07/11/2020 20:12	WG1507486

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	3080		48.9	100	1	07/12/2020 21:02	WG1507536
Manganese	1140		1.32	5.00	1	07/12/2020 21:02	WG1507536

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	5990		0.287	0.678	1	07/11/2020 14:34	WG1507440
Ethane	U		0.296	1.29	1	07/11/2020 14:34	WG1507440
Ethene	463		0.422	1.27	1	07/11/2020 14:34	WG1507440

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U		0.548	1.00	1	07/15/2020 23:21	WG1509623
Acrylonitrile	U		0.0760	0.500	1	07/15/2020 23:21	WG1509623
Benzene	0.0740		0.0160	0.0400	1	07/15/2020 23:21	WG1509623
Bromobenzene	U		0.0420	0.500	1	07/15/2020 23:21	WG1509623
Bromodichloromethane	U		0.0315	0.100	1	07/15/2020 23:21	WG1509623
Bromoform	U		0.239	1.00	1	07/15/2020 23:21	WG1509623
Bromomethane	U		0.148	0.500	1	07/15/2020 23:21	WG1509623
n-Butylbenzene	U		0.153	0.500	1	07/15/2020 23:21	WG1509623
sec-Butylbenzene	U		0.101	0.500	1	07/15/2020 23:21	WG1509623
tert-Butylbenzene	U		0.0620	0.200	1	07/15/2020 23:21	WG1509623
Carbon tetrachloride	U		0.0432	0.200	1	07/15/2020 23:21	WG1509623
Chlorobenzene	U		0.0229	0.100	1	07/15/2020 23:21	WG1509623
Chlorodibromomethane	U		0.0180	0.100	1	07/15/2020 23:21	WG1509623
Chloroethane	U		0.0432	0.200	1	07/15/2020 23:21	WG1509623
Chloroform	U		0.0166	0.100	1	07/15/2020 23:21	WG1509623
Chloromethane	U		0.0556	0.500	1	07/15/2020 23:21	WG1509623
2-Chlorotoluene	U		0.0368	0.100	1	07/15/2020 23:21	WG1509623
4-Chlorotoluene	U		0.0452	0.200	1	07/15/2020 23:21	WG1509623
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	07/15/2020 23:21	WG1509623
1,2-Dibromoethane	U		0.0210	0.100	1	07/15/2020 23:21	WG1509623

JC 8/11/2020

MW-146-070920

Collected date/time: 07/09/20 13:10

SAMPLE RESULTS - 01

L1238146

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Volatile Organic Compounds (GC/MS) by Method 8260D

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Dibromomethane	U		0.0400	0.200	1	07/15/2020 23:21	WG1509623
1,2-Dichlorobenzene	U		0.0580	0.200	1	07/15/2020 23:21	WG1509623
1,3-Dichlorobenzene	U		0.0680	0.200	1	07/15/2020 23:21	WG1509623
1,4-Dichlorobenzene	U		0.0788	0.200	1	07/15/2020 23:21	WG1509623
Dichlorodifluoromethane	U		0.0327	0.100	1	07/15/2020 23:21	WG1509623
1,1-Dichloroethane	U		0.0230	0.100	1	07/15/2020 23:21	WG1509623
1,2-Dichloroethane	U		0.0190	0.100	1	07/15/2020 23:21	WG1509623
1,1-Dichloroethene	3.77		0.0200	0.100	1	07/15/2020 23:21	WG1509623
cis-1,2-Dichloroethene	2750		13.8	50.0	500	07/17/2020 06:37	WG1510200
trans-1,2-Dichloroethene	15.5		0.0572	0.200	1	07/15/2020 23:21	WG1509623
1,2-Dichloropropane	U		0.0508	0.200	1	07/15/2020 23:21	WG1509623
1,1-Dichloropropene	U		0.0280	0.100	1	07/15/2020 23:21	WG1509623
1,3-Dichloropropane	U		0.0700	0.200	1	07/15/2020 23:21	WG1509623
cis-1,3-Dichloropropene	U		0.0271	0.100	1	07/15/2020 23:21	WG1509623
trans-1,3-Dichloropropene	U		0.0612	0.200	1	07/15/2020 23:21	WG1509623
2,2-Dichloropropane	U		0.0317	0.100	1	07/15/2020 23:21	WG1509623
Di-isopropyl ether	U		0.0140	0.0400	1	07/15/2020 23:21	WG1509623
Ethylbenzene	U		0.0212	0.100	1	07/15/2020 23:21	WG1509623
Hexachloro-1,3-butadiene	U		0.508	1.00	1	07/15/2020 23:21	WG1509623
Isopropylbenzene	U		0.0345	0.100	1	07/15/2020 23:21	WG1509623
p-Isopropyltoluene	U		0.0932	0.200	1	07/15/2020 23:21	WG1509623
2-Butanone (MEK)	U		0.500	1.00	1	07/15/2020 23:21	WG1509623
Methylene Chloride	U		0.265	1.00	1	07/15/2020 23:21	WG1509623
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	07/15/2020 23:21	WG1509623
Methyl tert-butyl ether	U		0.0118	0.0400	1	07/15/2020 23:21	WG1509623
Naphthalene	U		0.124	0.500	1	07/15/2020 23:21	WG1509623
n-Propylbenzene	U		0.0472	0.200	1	07/15/2020 23:21	WG1509623
Styrene	U		0.109	0.500	1	07/15/2020 23:21	WG1509623
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	07/15/2020 23:21	WG1509623
1,1,2,2-Tetrachloroethane	U	UJ J0	0.0156	0.100	1	07/15/2020 23:21	WG1509623
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	07/15/2020 23:21	WG1509623
Tetrachloroethene	0.781		0.0280	0.100	1	07/15/2020 23:21	WG1509623
Toluene	1.13		0.0500	0.200	1	07/15/2020 23:21	WG1509623
1,2,3-Trichlorobenzene	U		0.0250	0.500	1	07/15/2020 23:21	WG1509623
1,2,4-Trichlorobenzene	U		0.193	0.500	1	07/15/2020 23:21	WG1509623
1,1,1-Trichloroethane	U		0.0110	0.100	1	07/15/2020 23:21	WG1509623
1,1,2-Trichloroethane	U		0.0353	0.100	1	07/15/2020 23:21	WG1509623
Trichloroethene	3.17		0.0160	0.0400	1	07/15/2020 23:21	WG1509623
Trichlorofluoromethane	U		0.0200	0.100	1	07/15/2020 23:21	WG1509623
1,2,3-Trichloropropane	U		0.204	0.500	1	07/15/2020 23:21	WG1509623
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	07/15/2020 23:21	WG1509623
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	07/15/2020 23:21	WG1509623
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	07/15/2020 23:21	WG1509623
Vinyl chloride	8610		13.6	50.0	500	07/17/2020 06:37	WG1510200
Xylenes, Total	U		0.191	0.260	1	07/15/2020 23:21	WG1509623
Ethyl Ether	U		0.0170	0.100	1	07/15/2020 23:21	WG1509623
Tetrahydrofuran	U		0.0900	0.500	1	07/15/2020 23:21	WG1509623
Iodomethane	U		0.242	0.500	1	07/15/2020 23:21	WG1509623
Allyl chloride	U		0.580	1.00	1	07/15/2020 23:21	WG1509623
Trans-1,4-Dichloro-2-butene	U	UJ J0	0.0560	0.200	1	07/15/2020 23:21	WG1509623
(S) Toluene-d8	*99.6*			*75.0-131*		*07/15/2020 23:21*	WG1509623
(S) Toluene-d8	*93.2*			*75.0-131*		*07/17/2020 06:37*	WG1510200
(S) 4-Bromofluorobenzene	*94.6*			*67.0-138*		*07/15/2020 23:21*	WG1509623
(S) 4-Bromofluorobenzene	*102*			*67.0-138*		*07/17/2020 06:37*	WG1510200
(S) 1,2-Dichloroethane-d4	*104*			*70.0-130*		*07/15/2020 23:21*	WG1509623
(S) 1,2-Dichloroethane-d4	*111*			*70.0-130*		*07/17/2020 06:37*	WG1510200

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Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	204000		8450	20000	1	07/15/2020 18:23	WG1508214

Sample Narrative:

L1238146-02 WG1508214: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	21300		379	1000	1	07/10/2020 13:35	WG1506965
Nitrate	U		48.0	100	1	07/10/2020 13:35	WG1506965
Sulfate	34300		594	5000	1	07/10/2020 13:35	WG1506965

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	6990		102	1000	1	07/11/2020 20:24	WG1507486

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	4880		48.9	100	1	07/12/2020 21:05	WG1507536
Manganese	2050		1.32	5.00	1	07/12/2020 21:05	WG1507536

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	4430	Z, J+	31.6	100	1	07/13/2020 13:08	WG1508114
(S) a,a,a-Trifluorotoluene(FID)	*103*			*78.0-120*		*07/13/2020 13:08*	WG1508114

Sample Narrative:

L1238146-02 WG1508114: No discernable petroleum pattern

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	256		0.287	0.678	1	07/11/2020 14:37	WG1507440
Ethane	U		0.296	1.29	1	07/11/2020 14:37	WG1507440
Ethene	U		0.422	1.27	1	07/11/2020 14:37	WG1507440

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U		0.548	1.00	1	07/15/2020 23:40	WG1509623
Acrylonitrile	U		0.0760	0.500	1	07/15/2020 23:40	WG1509623
Benzene	0.0550		0.0160	0.0400	1	07/15/2020 23:40	WG1509623
Bromobenzene	U		0.0420	0.500	1	07/15/2020 23:40	WG1509623
Bromodichloromethane	U		0.0315	0.100	1	07/15/2020 23:40	WG1509623
Bromoform	U		0.239	1.00	1	07/15/2020 23:40	WG1509623
Bromomethane	U		0.148	0.500	1	07/15/2020 23:40	WG1509623
n-Butylbenzene	U		0.153	0.500	1	07/15/2020 23:40	WG1509623
sec-Butylbenzene	U		0.101	0.500	1	07/15/2020 23:40	WG1509623
tert-Butylbenzene	U		0.0620	0.200	1	07/15/2020 23:40	WG1509623

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MW-172-070920
Collected date/time: 07/09/20 13:40

SAMPLE RESULTS - 02

L1238146

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Carbon tetrachloride	U		0.0432	0.200	1	07/15/2020 23:40	WG1509623
Chlorobenzene	U		0.0229	0.100	1	07/15/2020 23:40	WG1509623
Chlorodibromomethane	U		0.0180	0.100	1	07/15/2020 23:40	WG1509623
Chloroethane	U		0.0432	0.200	1	07/15/2020 23:40	WG1509623
Chloroform	U		0.0166	0.100	1	07/15/2020 23:40	WG1509623
Chloromethane	U		0.0556	0.500	1	07/15/2020 23:40	WG1509623
2-Chlorotoluene	U		0.0368	0.100	1	07/15/2020 23:40	WG1509623
4-Chlorotoluene	U		0.0452	0.200	1	07/15/2020 23:40	WG1509623
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	07/15/2020 23:40	WG1509623
1,2-Dibromoethane	U		0.0210	0.100	1	07/15/2020 23:40	WG1509623
Dibromomethane	U		0.0400	0.200	1	07/15/2020 23:40	WG1509623
1,2-Dichlorobenzene	U		0.0580	0.200	1	07/15/2020 23:40	WG1509623
1,3-Dichlorobenzene	U		0.0680	0.200	1	07/15/2020 23:40	WG1509623
1,4-Dichlorobenzene	U		0.0788	0.200	1	07/15/2020 23:40	WG1509623
Dichlorodifluoromethane	U		0.0327	0.100	1	07/15/2020 23:40	WG1509623
1,1-Dichloroethane	0.270		0.0230	0.100	1	07/15/2020 23:40	WG1509623
1,2-Dichloroethane	U		0.0190	0.100	1	07/15/2020 23:40	WG1509623
1,1-Dichloroethene	66.1		0.0200	0.100	1	07/15/2020 23:40	WG1509623
cis-1,2-Dichloroethene	668		5.52	20.0	200	07/17/2020 06:18	WG1510200
trans-1,2-Dichloroethene	56.9		0.0572	0.200	1	07/15/2020 23:40	WG1509623
1,2-Dichloropropane	U		0.0508	0.200	1	07/15/2020 23:40	WG1509623
1,1-Dichloropropene	U		0.0280	0.100	1	07/15/2020 23:40	WG1509623
1,3-Dichloropropane	U		0.0700	0.200	1	07/15/2020 23:40	WG1509623
cis-1,3-Dichloropropene	U		0.0271	0.100	1	07/15/2020 23:40	WG1509623
trans-1,3-Dichloropropene	U		0.0612	0.200	1	07/15/2020 23:40	WG1509623
2,2-Dichloropropane	U		0.0317	0.100	1	07/15/2020 23:40	WG1509623
Di-isopropyl ether	U		0.0140	0.0400	1	07/15/2020 23:40	WG1509623
Ethylbenzene	U		0.0212	0.100	1	07/15/2020 23:40	WG1509623
Hexachloro-1,3-butadiene	U		0.508	1.00	1	07/15/2020 23:40	WG1509623
Isopropylbenzene	U		0.0345	0.100	1	07/15/2020 23:40	WG1509623
p-Isopropyltoluene	U		0.0932	0.200	1	07/15/2020 23:40	WG1509623
2-Butanone (MEK)	U		0.500	1.00	1	07/15/2020 23:40	WG1509623
Methylene Chloride	U		0.265	1.00	1	07/15/2020 23:40	WG1509623
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	07/15/2020 23:40	WG1509623
Methyl tert-butyl ether	U		0.0118	0.0400	1	07/15/2020 23:40	WG1509623
Naphthalene	U		0.124	0.500	1	07/15/2020 23:40	WG1509623
n-Propylbenzene	U		0.0472	0.200	1	07/15/2020 23:40	WG1509623
Styrene	U		0.109	0.500	1	07/15/2020 23:40	WG1509623
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	07/15/2020 23:40	WG1509623
1,1,2,2-Tetrachloroethane	U UJ	J0	0.0156	0.100	1	07/15/2020 23:40	WG1509623
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	07/15/2020 23:40	WG1509623
Tetrachloroethene	6570		5.60	20.0	200	07/17/2020 06:18	WG1510200
Toluene	0.757		0.0500	0.200	1	07/15/2020 23:40	WG1509623
1,2,3-Trichlorobenzene	U		0.0250	0.500	1	07/15/2020 23:40	WG1509623
1,2,4-Trichlorobenzene	U		0.193	0.500	1	07/15/2020 23:40	WG1509623
1,1,1-Trichloroethane	U		0.0110	0.100	1	07/15/2020 23:40	WG1509623
1,1,2-Trichloroethane	U		0.0353	0.100	1	07/15/2020 23:40	WG1509623
Trichloroethene	4660		3.20	8.00	200	07/17/2020 06:18	WG1510200
Trichlorofluoromethane	U		0.0200	0.100	1	07/15/2020 23:40	WG1509623
1,2,3-Trichloropropane	U		0.204	0.500	1	07/15/2020 23:40	WG1509623
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	07/15/2020 23:40	WG1509623
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	07/15/2020 23:40	WG1509623
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	07/15/2020 23:40	WG1509623
Vinyl chloride	5.57		0.0273	0.100	1	07/15/2020 23:40	WG1509623
Xylenes, Total	0.402		0.191	0.260	1	07/15/2020 23:40	WG1509623
Ethyl Ether	U		0.0170	0.100	1	07/15/2020 23:40	WG1509623

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1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

MW-172-070920

Collected date/time: 07/09/20 13:40

SAMPLE RESULTS - 02

L1238146

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l		Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Tetrahydrofuran	U			0.0900	0.500	1	07/15/2020 23:40	WG1509623
Iodomethane	U			0.242	0.500	1	07/15/2020 23:40	WG1509623
Allyl chloride	U			0.580	1.00	1	07/15/2020 23:40	WG1509623
Trans-1,4-Dichloro-2-butene	U	UJ	J0	0.0560	0.200	1	07/15/2020 23:40	WG1509623
(S) Toluene-d8	*103*				*75.0-131*		*07/15/2020 23:40*	WG1509623
(S) Toluene-d8	*93.6*				*75.0-131*		*07/17/2020 06:18*	WG1510200
(S) 4-Bromofluorobenzene	*96.9*				*67.0-138*		*07/15/2020 23:40*	WG1509623
(S) 4-Bromofluorobenzene	*99.2*				*67.0-138*		*07/17/2020 06:18*	WG1510200
(S) 1,2-Dichloroethane-d4	*101*				*70.0-130*		*07/15/2020 23:40*	WG1509623
(S) 1,2-Dichloroethane-d4	*107*				*70.0-130*		*07/17/2020 06:18*	WG1510200

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Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	481000		8450	20000	1	07/15/2020 18:33	WG1508214

Sample Narrative:

L1238146-03 WG1508214: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	186000		1900	5000	5	07/10/2020 14:08	WG1506965
Nitrate	U		48.0	100	1	07/10/2020 13:51	WG1506965
Sulfate	16900		594	5000	1	07/10/2020 13:51	WG1506965

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	13200		102	1000	1	07/11/2020 21:34	WG1507486

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	12100		48.9	100	1	07/12/2020 21:09	WG1507536
Manganese	1220		1.32	5.00	1	07/12/2020 21:09	WG1507536

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	24300	Z, J+	316	1000	10	07/13/2020 19:51	WG1508114
(S) a,a,a-Trifluorotoluene(FID)	*101*			*78.0-120*		*07/13/2020 19:51*	WG1508114

Sample Narrative:

L1238146-03 WG1508114: No discernable petroleum pattern

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	13000		2.87	6.78	10	07/14/2020 12:53	WG1508536
Ethane	31.5		0.296	1.29	1	07/11/2020 14:40	WG1507440
Ethene	1120		0.422	1.27	1	07/11/2020 14:40	WG1507440

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U		5.48	10.0	10	07/16/2020 03:27	WG1509623
Acrylonitrile	U		0.760	5.00	10	07/16/2020 03:27	WG1509623
Benzene	0.450		0.160	0.400	10	07/16/2020 03:27	WG1509623
Bromobenzene	U		0.420	5.00	10	07/16/2020 03:27	WG1509623
Bromodichloromethane	U		0.315	1.00	10	07/16/2020 03:27	WG1509623
Bromoform	U		2.39	10.0	10	07/16/2020 03:27	WG1509623
Bromomethane	U		1.48	5.00	10	07/16/2020 03:27	WG1509623
n-Butylbenzene	U		1.53	5.00	10	07/16/2020 03:27	WG1509623
sec-Butylbenzene	U		1.01	5.00	10	07/16/2020 03:27	WG1509623
tert-Butylbenzene	U		0.620	2.00	10	07/16/2020 03:27	WG1509623

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Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Carbon tetrachloride	U		0.432	2.00	10	07/16/2020 03:27	WG1509623
Chlorobenzene	U		0.229	1.00	10	07/16/2020 03:27	WG1509623
Chlorodibromomethane	U		0.180	1.00	10	07/16/2020 03:27	WG1509623
Chloroethane	U		0.432	2.00	10	07/16/2020 03:27	WG1509623
Chloroform	U		0.166	1.00	10	07/16/2020 03:27	WG1509623
Chloromethane	U		0.556	5.00	10	07/16/2020 03:27	WG1509623
2-Chlorotoluene	U		0.368	1.00	10	07/16/2020 03:27	WG1509623
4-Chlorotoluene	U		0.452	2.00	10	07/16/2020 03:27	WG1509623
1,2-Dibromo-3-Chloropropane	U		2.04	10.0	10	07/16/2020 03:27	WG1509623
1,2-Dibromoethane	U		0.210	1.00	10	07/16/2020 03:27	WG1509623
Dibromomethane	U		0.400	2.00	10	07/16/2020 03:27	WG1509623
1,2-Dichlorobenzene	U		0.580	2.00	10	07/16/2020 03:27	WG1509623
1,3-Dichlorobenzene	U		0.680	2.00	10	07/16/2020 03:27	WG1509623
1,4-Dichlorobenzene	U		0.788	2.00	10	07/16/2020 03:27	WG1509623
Dichlorodifluoromethane	U		0.327	1.00	10	07/16/2020 03:27	WG1509623
1,1-Dichloroethane	U		0.230	1.00	10	07/16/2020 03:27	WG1509623
1,2-Dichloroethane	U		0.190	1.00	10	07/16/2020 03:27	WG1509623
1,1-Dichloroethene	82.9		0.200	1.00	10	07/16/2020 03:27	WG1509623
cis-1,2-Dichloroethene	32700		13.8	50.0	500	07/17/2020 06:56	WG1510200
trans-1,2-Dichloroethene	211		0.572	2.00	10	07/16/2020 03:27	WG1509623
1,2-Dichloropropane	U		0.508	2.00	10	07/16/2020 03:27	WG1509623
1,1-Dichloropropene	U		0.280	1.00	10	07/16/2020 03:27	WG1509623
1,3-Dichloropropane	U		0.700	2.00	10	07/16/2020 03:27	WG1509623
cis-1,3-Dichloropropene	U		0.271	1.00	10	07/16/2020 03:27	WG1509623
trans-1,3-Dichloropropene	U		0.612	2.00	10	07/16/2020 03:27	WG1509623
2,2-Dichloropropane	U		0.317	1.00	10	07/16/2020 03:27	WG1509623
Di-isopropyl ether	U		0.140	0.400	10	07/16/2020 03:27	WG1509623
Ethylbenzene	U		0.212	1.00	10	07/16/2020 03:27	WG1509623
Hexachloro-1,3-butadiene	U		5.08	10.0	10	07/16/2020 03:27	WG1509623
Isopropylbenzene	U		0.345	1.00	10	07/16/2020 03:27	WG1509623
p-Isopropyltoluene	U		0.932	2.00	10	07/16/2020 03:27	WG1509623
2-Butanone (MEK)	U		5.00	10.0	10	07/16/2020 03:27	WG1509623
Methylene Chloride	U		2.65	10.0	10	07/16/2020 03:27	WG1509623
4-Methyl-2-pentanone (MIBK)	U		4.00	10.0	10	07/16/2020 03:27	WG1509623
Methyl tert-butyl ether	U		0.118	0.400	10	07/16/2020 03:27	WG1509623
Naphthalene	U		1.24	5.00	10	07/16/2020 03:27	WG1509623
n-Propylbenzene	U		0.472	2.00	10	07/16/2020 03:27	WG1509623
Styrene	U		1.09	5.00	10	07/16/2020 03:27	WG1509623
1,1,1,2-Tetrachloroethane	U		0.200	1.00	10	07/16/2020 03:27	WG1509623
1,1,2,2-Tetrachloroethane	U UJ	J0	0.156	1.00	10	07/16/2020 03:27	WG1509623
1,1,2-Trichlorotrifluoroethane	U		0.270	1.00	10	07/16/2020 03:27	WG1509623
Tetrachloroethene	2340		14.0	50.0	500	07/17/2020 06:56	WG1510200
Toluene	2.54		0.500	2.00	10	07/16/2020 03:27	WG1509623
1,2,3-Trichlorobenzene	U		0.250	5.00	10	07/16/2020 03:27	WG1509623
1,2,4-Trichlorobenzene	U		1.93	5.00	10	07/16/2020 03:27	WG1509623
1,1,1-Trichloroethane	U		0.110	1.00	10	07/16/2020 03:27	WG1509623
1,1,2-Trichloroethane	U		0.353	1.00	10	07/16/2020 03:27	WG1509623
Trichloroethene	3050		8.00	20.0	500	07/17/2020 06:56	WG1510200
Trichlorofluoromethane	U		0.200	1.00	10	07/16/2020 03:27	WG1509623
1,2,3-Trichloropropane	U		2.04	5.00	10	07/16/2020 03:27	WG1509623
1,2,4-Trimethylbenzene	0.850	J	0.464	2.00	10	07/16/2020 03:27	WG1509623
1,2,3-Trimethylbenzene	U		0.460	2.00	10	07/16/2020 03:27	WG1509623
1,3,5-Trimethylbenzene	U		0.432	2.00	10	07/16/2020 03:27	WG1509623
Vinyl chloride	7520		13.6	50.0	500	07/17/2020 06:56	WG1510200
Xylenes, Total	U		1.91	2.60	10	07/16/2020 03:27	WG1509623
Ethyl Ether	U		0.170	1.00	10	07/16/2020 03:27	WG1509623

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Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Tetrahydrofuran	U		0.900	5.00	10	07/16/2020 03:27	WG1509623
Iodomethane	U		2.42	5.00	10	07/16/2020 03:27	WG1509623
Allyl chloride	U		5.80	10.0	10	07/16/2020 03:27	WG1509623
Trans-1,4-Dichloro-2-butene	U UJ	J0	0.560	2.00	10	07/16/2020 03:27	WG1509623
(S) Toluene-d8	*96.8*			*75.0-131*		*07/16/2020 03:27*	WG1509623
(S) Toluene-d8	*95.3*			*75.0-131*		*07/17/2020 06:56*	WG1510200
(S) 4-Bromofluorobenzene	*99.2*			*67.0-138*		*07/16/2020 03:27*	WG1509623
(S) 4-Bromofluorobenzene	*102*			*67.0-138*		*07/17/2020 06:56*	WG1510200
(S) 1,2-Dichloroethane-d4	*107*			*70.0-130*		*07/16/2020 03:27*	WG1509623
(S) 1,2-Dichloroethane-d4	*109*			*70.0-130*		*07/17/2020 06:56*	WG1510200

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Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	401000		8450	20000	1	07/15/2020 18:42	WG1508214

Sample Narrative:

L1238146-04 WG1508214: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	43300		379	1000	1	07/10/2020 14:25	WG1506965
Nitrate	U		48.0	100	1	07/10/2020 14:25	WG1506965
Sulfate	14000		594	5000	1	07/10/2020 14:25	WG1506965

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	3290	~~B~~	102	1000	1	07/11/2020 21:46	WG1507486

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	13300		48.9	100	1	07/12/2020 21:12	WG1507536
Manganese	1040		1.32	5.00	1	07/12/2020 21:12	WG1507536

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	5490		0.287	0.678	1	07/11/2020 14:48	WG1507440
Ethane	4.65		0.296	1.29	1	07/11/2020 14:48	WG1507440
Ethene	641		0.422	1.27	1	07/11/2020 14:48	WG1507440

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	1.48		0.548	1.00	1	07/15/2020 23:59	WG1509623
Acrylonitrile	U		0.0760	0.500	1	07/15/2020 23:59	WG1509623
Benzene	0.0890		0.0160	0.0400	1	07/15/2020 23:59	WG1509623
Bromobenzene	U		0.0420	0.500	1	07/15/2020 23:59	WG1509623
Bromodichloromethane	U		0.0315	0.100	1	07/15/2020 23:59	WG1509623
Bromoform	U		0.239	1.00	1	07/15/2020 23:59	WG1509623
Bromomethane	U		0.148	0.500	1	07/15/2020 23:59	WG1509623
n-Butylbenzene	U		0.153	0.500	1	07/15/2020 23:59	WG1509623
sec-Butylbenzene	U		0.101	0.500	1	07/15/2020 23:59	WG1509623
tert-Butylbenzene	U		0.0620	0.200	1	07/15/2020 23:59	WG1509623
Carbon tetrachloride	U		0.0432	0.200	1	07/15/2020 23:59	WG1509623
Chlorobenzene	U		0.0229	0.100	1	07/15/2020 23:59	WG1509623
Chlorodibromomethane	U		0.0180	0.100	1	07/15/2020 23:59	WG1509623
Chloroethane	U		0.0432	0.200	1	07/15/2020 23:59	WG1509623
Chloroform	U		0.0166	0.100	1	07/15/2020 23:59	WG1509623
Chloromethane	U		0.0556	0.500	1	07/15/2020 23:59	WG1509623
2-Chlorotoluene	U		0.0368	0.100	1	07/15/2020 23:59	WG1509623
4-Chlorotoluene	U		0.0452	0.200	1	07/15/2020 23:59	WG1509623
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	07/15/2020 23:59	WG1509623
1,2-Dibromoethane	U		0.0210	0.100	1	07/15/2020 23:59	WG1509623

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MW-147-070920

Collected date/time: 07/09/20 14:50

SAMPLE RESULTS - 04

L1238146

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Dibromomethane	U		0.0400	0.200	1	07/15/2020 23:59	WG1509623
1,2-Dichlorobenzene	U		0.0580	0.200	1	07/15/2020 23:59	WG1509623
1,3-Dichlorobenzene	U		0.0680	0.200	1	07/15/2020 23:59	WG1509623
1,4-Dichlorobenzene	U		0.0788	0.200	1	07/15/2020 23:59	WG1509623
Dichlorodifluoromethane	U		0.0327	0.100	1	07/15/2020 23:59	WG1509623
1,1-Dichloroethane	0.0510	J	0.0230	0.100	1	07/15/2020 23:59	WG1509623
1,2-Dichloroethane	U		0.0190	0.100	1	07/15/2020 23:59	WG1509623
1,1-Dichloroethene	4.11		0.0200	0.100	1	07/15/2020 23:59	WG1509623
cis-1,2-Dichloroethene	2220		13.8	50.0	500	07/17/2020 07:15	WG1510200
trans-1,2-Dichloroethene	11.9		0.0572	0.200	1	07/15/2020 23:59	WG1509623
1,2-Dichloropropane	U		0.0508	0.200	1	07/15/2020 23:59	WG1509623
1,1-Dichloropropene	U		0.0280	0.100	1	07/15/2020 23:59	WG1509623
1,3-Dichloropropane	U		0.0700	0.200	1	07/15/2020 23:59	WG1509623
cis-1,3-Dichloropropene	U		0.0271	0.100	1	07/15/2020 23:59	WG1509623
trans-1,3-Dichloropropene	U		0.0612	0.200	1	07/15/2020 23:59	WG1509623
2,2-Dichloropropane	U		0.0317	0.100	1	07/15/2020 23:59	WG1509623
Di-isopropyl ether	U		0.0140	0.0400	1	07/15/2020 23:59	WG1509623
Ethylbenzene	U		0.0212	0.100	1	07/15/2020 23:59	WG1509623
Hexachloro-1,3-butadiene	U		0.508	1.00	1	07/15/2020 23:59	WG1509623
Isopropylbenzene	U		0.0345	0.100	1	07/15/2020 23:59	WG1509623
p-Isopropyltoluene	U		0.0932	0.200	1	07/15/2020 23:59	WG1509623
2-Butanone (MEK)	U		0.500	1.00	1	07/15/2020 23:59	WG1509623
Methylene Chloride	U		0.265	1.00	1	07/15/2020 23:59	WG1509623
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	07/15/2020 23:59	WG1509623
Methyl tert-butyl ether	U		0.0118	0.0400	1	07/15/2020 23:59	WG1509623
Naphthalene	U		0.124	0.500	1	07/15/2020 23:59	WG1509623
n-Propylbenzene	U		0.0472	0.200	1	07/15/2020 23:59	WG1509623
Styrene	U		0.109	0.500	1	07/15/2020 23:59	WG1509623
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	07/15/2020 23:59	WG1509623
1,1,2,2-Tetrachloroethane	U UJ	J0	0.0156	0.100	1	07/15/2020 23:59	WG1509623
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	07/15/2020 23:59	WG1509623
Tetrachloroethene	4.29		0.0280	0.100	1	07/15/2020 23:59	WG1509623
Toluene	3.52		0.0500	0.200	1	07/15/2020 23:59	WG1509623
1,2,3-Trichlorobenzene	U		0.0250	0.500	1	07/15/2020 23:59	WG1509623
1,2,4-Trichlorobenzene	U		0.193	0.500	1	07/15/2020 23:59	WG1509623
1,1,1-Trichloroethane	U		0.0110	0.100	1	07/15/2020 23:59	WG1509623
1,1,2-Trichloroethane	U		0.0353	0.100	1	07/15/2020 23:59	WG1509623
Trichloroethene	12.4		0.0160	0.0400	1	07/15/2020 23:59	WG1509623
Trichlorofluoromethane	U		0.0200	0.100	1	07/15/2020 23:59	WG1509623
1,2,3-Trichloropropane	U		0.204	0.500	1	07/15/2020 23:59	WG1509623
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	07/15/2020 23:59	WG1509623
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	07/15/2020 23:59	WG1509623
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	07/15/2020 23:59	WG1509623
Vinyl chloride	6970		13.6	50.0	500	07/17/2020 07:15	WG1510200
Xylenes, Total	U		0.191	0.260	1	07/15/2020 23:59	WG1509623
Ethyl Ether	U		0.0170	0.100	1	07/15/2020 23:59	WG1509623
Tetrahydrofuran	U		0.0900	0.500	1	07/15/2020 23:59	WG1509623
Iodomethane	U		0.242	0.500	1	07/15/2020 23:59	WG1509623
Allyl chloride	U		0.580	1.00	1	07/15/2020 23:59	WG1509623
Trans-1,4-Dichloro-2-butene	U UJ	J0	0.0560	0.200	1	07/15/2020 23:59	WG1509623
(S) Toluene-d8	*96.3*			*75.0-131*		*07/15/2020 23:59*	WG1509623
(S) Toluene-d8	*95.3*			*75.0-131*		*07/17/2020 07:15*	WG1510200
(S) 4-Bromofluorobenzene	*98.6*			*67.0-138*		*07/15/2020 23:59*	WG1509623
(S) 4-Bromofluorobenzene	*100*			*67.0-138*		*07/17/2020 07:15*	WG1510200
(S) 1,2-Dichloroethane-d4	*102*			*70.0-130*		*07/15/2020 23:59*	WG1509623
(S) 1,2-Dichloroethane-d4	*108*			*70.0-130*		*07/17/2020 07:15*	WG1510200

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Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	276000		8450	20000	1	07/15/2020 18:50	WG1508214

Sample Narrative:

L1238146-05 WG1508214: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	30300		379	1000	1	07/10/2020 14:59	WG1506965
Nitrate	U		48.0	100	1	07/10/2020 14:59	WG1506965
Sulfate	9590		594	5000	1	07/10/2020 14:59	WG1506965

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	3760		102	1000	1	07/11/2020 22:32	WG1507486

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	4180		48.9	100	1	07/12/2020 21:25	WG1507536
Manganese	176		1.32	5.00	1	07/12/2020 21:25	WG1507536

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	U		31.6	100	1	07/13/2020 13:31	WG1508114
(S) a,a,a-Trifluorotoluene(FID)	*101*			*78.0-120*		*07/13/2020 13:31*	WG1508114

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	963		0.287	0.678	1	07/11/2020 14:51	WG1507440
Ethane	14.1		0.296	1.29	1	07/11/2020 14:51	WG1507440
Ethene	72.3		0.422	1.27	1	07/11/2020 14:51	WG1507440

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U		0.548	1.00	1	07/16/2020 00:18	WG1509623
Acrylonitrile	U		0.0760	0.500	1	07/16/2020 00:18	WG1509623
Benzene	0.0280	J	0.0160	0.0400	1	07/16/2020 00:18	WG1509623
Bromobenzene	U		0.0420	0.500	1	07/16/2020 00:18	WG1509623
Bromodichloromethane	U		0.0315	0.100	1	07/16/2020 00:18	WG1509623
Bromoform	U		0.239	1.00	1	07/16/2020 00:18	WG1509623
Bromomethane	U		0.148	0.500	1	07/16/2020 00:18	WG1509623
n-Butylbenzene	U		0.153	0.500	1	07/16/2020 00:18	WG1509623
sec-Butylbenzene	U		0.101	0.500	1	07/16/2020 00:18	WG1509623
tert-Butylbenzene	U		0.0620	0.200	1	07/16/2020 00:18	WG1509623
Carbon tetrachloride	U		0.0432	0.200	1	07/16/2020 00:18	WG1509623
Chlorobenzene	U		0.0229	0.100	1	07/16/2020 00:18	WG1509623
Chlorodibromomethane	U		0.0180	0.100	1	07/16/2020 00:18	WG1509623

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Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloroethane	U		0.0432	0.200	1	07/16/2020 00:18	WG1509623
Chloroform	U		0.0166	0.100	1	07/16/2020 00:18	WG1509623
Chloromethane	U		0.0556	0.500	1	07/16/2020 00:18	WG1509623
2-Chlorotoluene	U		0.0368	0.100	1	07/16/2020 00:18	WG1509623
4-Chlorotoluene	U		0.0452	0.200	1	07/16/2020 00:18	WG1509623
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	07/16/2020 00:18	WG1509623
1,2-Dibromoethane	U		0.0210	0.100	1	07/16/2020 00:18	WG1509623
Dibromomethane	U		0.0400	0.200	1	07/16/2020 00:18	WG1509623
1,2-Dichlorobenzene	U		0.0580	0.200	1	07/16/2020 00:18	WG1509623
1,3-Dichlorobenzene	U		0.0680	0.200	1	07/16/2020 00:18	WG1509623
1,4-Dichlorobenzene	U		0.0788	0.200	1	07/16/2020 00:18	WG1509623
Dichlorodifluoromethane	U		0.0327	0.100	1	07/16/2020 00:18	WG1509623
1,1-Dichloroethane	U		0.0230	0.100	1	07/16/2020 00:18	WG1509623
1,2-Dichloroethane	U		0.0190	0.100	1	07/16/2020 00:18	WG1509623
1,1-Dichloroethene	U		0.0200	0.100	1	07/16/2020 00:18	WG1509623
cis-1,2-Dichloroethene	1.53		0.0276	0.100	1	07/17/2020 05:21	WG1510200
trans-1,2-Dichloroethene	U		0.0572	0.200	1	07/16/2020 00:18	WG1509623
1,2-Dichloropropane	U		0.0508	0.200	1	07/16/2020 00:18	WG1509623
1,1-Dichloropropene	U		0.0280	0.100	1	07/16/2020 00:18	WG1509623
1,3-Dichloropropane	U		0.0700	0.200	1	07/16/2020 00:18	WG1509623
cis-1,3-Dichloropropene	U		0.0271	0.100	1	07/16/2020 00:18	WG1509623
trans-1,3-Dichloropropene	U		0.0612	0.200	1	07/16/2020 00:18	WG1509623
2,2-Dichloropropane	U		0.0317	0.100	1	07/16/2020 00:18	WG1509623
Di-isopropyl ether	U		0.0140	0.0400	1	07/16/2020 00:18	WG1509623
Ethylbenzene	U		0.0212	0.100	1	07/16/2020 00:18	WG1509623
Hexachloro-1,3-butadiene	U		0.508	1.00	1	07/16/2020 00:18	WG1509623
Isopropylbenzene	U		0.0345	0.100	1	07/16/2020 00:18	WG1509623
p-Isopropyltoluene	U		0.0932	0.200	1	07/16/2020 00:18	WG1509623
2-Butanone (MEK)	U		0.500	1.00	1	07/16/2020 00:18	WG1509623
Methylene Chloride	U		0.265	1.00	1	07/16/2020 00:18	WG1509623
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	07/16/2020 00:18	WG1509623
Methyl tert-butyl ether	U		0.0118	0.0400	1	07/16/2020 00:18	WG1509623
Naphthalene	U		0.124	0.500	1	07/16/2020 00:18	WG1509623
n-Propylbenzene	U		0.0472	0.200	1	07/16/2020 00:18	WG1509623
Styrene	U		0.109	0.500	1	07/16/2020 00:18	WG1509623
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	07/16/2020 00:18	WG1509623
1,1,2,2-Tetrachloroethane	U UJ	J0	0.0156	0.100	1	07/16/2020 00:18	WG1509623
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	07/16/2020 00:18	WG1509623
Tetrachloroethene	0.103		0.0280	0.100	1	07/17/2020 05:21	WG1510200
Toluene	0.0850	J	0.0500	0.200	1	07/16/2020 00:18	WG1509623
1,2,3-Trichlorobenzene	U		0.0250	0.500	1	07/16/2020 00:18	WG1509623
1,2,4-Trichlorobenzene	U		0.193	0.500	1	07/16/2020 00:18	WG1509623
1,1,1-Trichloroethane	U		0.0110	0.100	1	07/16/2020 00:18	WG1509623
1,1,2-Trichloroethane	U		0.0353	0.100	1	07/16/2020 00:18	WG1509623
Trichloroethene	0.288		0.0160	0.0400	1	07/17/2020 05:21	WG1510200
Trichlorofluoromethane	U		0.0200	0.100	1	07/16/2020 00:18	WG1509623
1,2,3-Trichloropropane	U		0.204	0.500	1	07/16/2020 00:18	WG1509623
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	07/16/2020 00:18	WG1509623
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	07/16/2020 00:18	WG1509623
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	07/16/2020 00:18	WG1509623
Vinyl chloride	8.43		0.0273	0.100	1	07/17/2020 05:21	WG1510200
Xylenes, Total	U		0.191	0.260	1	07/16/2020 00:18	WG1509623
Ethyl Ether	U		0.0170	0.100	1	07/16/2020 00:18	WG1509623
Tetrahydrofuran	U		0.0900	0.500	1	07/16/2020 00:18	WG1509623
Iodomethane	U		0.242	0.500	1	07/16/2020 00:18	WG1509623
Allyl chloride	U		0.580	1.00	1	07/16/2020 00:18	WG1509623

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Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l		Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Trans-1,4-Dichloro-2-butene	U	UJ	J0	0.0560	0.200	1	07/16/2020 00:18	WG1509623
(S) Toluene-d8	*99.9*				*75.0-131*		*07/16/2020 00:18*	WG1509623
(S) Toluene-d8	*95.9*				*75.0-131*		*07/17/2020 05:21*	WG1510200
(S) 4-Bromofluorobenzene	*94.6*				*67.0-138*		*07/16/2020 00:18*	WG1509623
(S) 4-Bromofluorobenzene	*101*				*67.0-138*		*07/17/2020 05:21*	WG1510200
(S) 1,2-Dichloroethane-d4	*103*				*70.0-130*		*07/16/2020 00:18*	WG1509623
(S) 1,2-Dichloroethane-d4	*108*				*70.0-130*		*07/17/2020 05:21*	WG1510200

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Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	U		31.6	100	1	07/13/2020 12:22	WG1508114
(S) a,a,a-Trifluorotoluene(FID)	*100*			*78.0-120*		*07/13/2020 12:22*	WG1508114

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U		0.548	1.00	1	07/15/2020 21:27	WG1509623
Acrylonitrile	U		0.0760	0.500	1	07/15/2020 21:27	WG1509623
Benzene	U		0.0160	0.0400	1	07/15/2020 21:27	WG1509623
Bromobenzene	U		0.0420	0.500	1	07/15/2020 21:27	WG1509623
Bromodichloromethane	U		0.0315	0.100	1	07/15/2020 21:27	WG1509623
Bromoform	U		0.239	1.00	1	07/15/2020 21:27	WG1509623
Bromomethane	U		0.148	0.500	1	07/15/2020 21:27	WG1509623
n-Butylbenzene	U		0.153	0.500	1	07/15/2020 21:27	WG1509623
sec-Butylbenzene	U		0.101	0.500	1	07/15/2020 21:27	WG1509623
tert-Butylbenzene	U		0.0620	0.200	1	07/15/2020 21:27	WG1509623
Carbon tetrachloride	U		0.0432	0.200	1	07/15/2020 21:27	WG1509623
Chlorobenzene	U		0.0229	0.100	1	07/15/2020 21:27	WG1509623
Chlorodibromomethane	U		0.0180	0.100	1	07/15/2020 21:27	WG1509623
Chloroethane	U		0.0432	0.200	1	07/15/2020 21:27	WG1509623
Chloroform	U		0.0166	0.100	1	07/15/2020 21:27	WG1509623
Chloromethane	U		0.0556	0.500	1	07/15/2020 21:27	WG1509623
2-Chlorotoluene	U		0.0368	0.100	1	07/15/2020 21:27	WG1509623
4-Chlorotoluene	U		0.0452	0.200	1	07/15/2020 21:27	WG1509623
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	07/15/2020 21:27	WG1509623
1,2-Dibromoethane	U		0.0210	0.100	1	07/15/2020 21:27	WG1509623
Dibromomethane	U		0.0400	0.200	1	07/15/2020 21:27	WG1509623
1,2-Dichlorobenzene	U		0.0580	0.200	1	07/15/2020 21:27	WG1509623
1,3-Dichlorobenzene	U		0.0680	0.200	1	07/15/2020 21:27	WG1509623
1,4-Dichlorobenzene	U		0.0788	0.200	1	07/15/2020 21:27	WG1509623
Dichlorodifluoromethane	U		0.0327	0.100	1	07/15/2020 21:27	WG1509623
1,1-Dichloroethane	U		0.0230	0.100	1	07/15/2020 21:27	WG1509623
1,2-Dichloroethane	U		0.0190	0.100	1	07/15/2020 21:27	WG1509623
1,1-Dichloroethene	U		0.0200	0.100	1	07/15/2020 21:27	WG1509623
cis-1,2-Dichloroethene	U		0.0276	0.100	1	07/15/2020 21:27	WG1509623
trans-1,2-Dichloroethene	U		0.0572	0.200	1	07/15/2020 21:27	WG1509623
1,2-Dichloropropane	U		0.0508	0.200	1	07/15/2020 21:27	WG1509623
1,1-Dichloropropene	U		0.0280	0.100	1	07/15/2020 21:27	WG1509623
1,3-Dichloropropane	U		0.0700	0.200	1	07/15/2020 21:27	WG1509623
cis-1,3-Dichloropropene	U		0.0271	0.100	1	07/15/2020 21:27	WG1509623
trans-1,3-Dichloropropene	U		0.0612	0.200	1	07/15/2020 21:27	WG1509623
2,2-Dichloropropane	U		0.0317	0.100	1	07/15/2020 21:27	WG1509623
Di-isopropyl ether	U		0.0140	0.0400	1	07/15/2020 21:27	WG1509623
Ethylbenzene	U		0.0212	0.100	1	07/15/2020 21:27	WG1509623
Hexachloro-1,3-butadiene	U		0.508	1.00	1	07/15/2020 21:27	WG1509623
Isopropylbenzene	U		0.0345	0.100	1	07/15/2020 21:27	WG1509623
p-Isopropyltoluene	U		0.0932	0.200	1	07/15/2020 21:27	WG1509623
2-Butanone (MEK)	U		0.500	1.00	1	07/15/2020 21:27	WG1509623
Methylene Chloride	U		0.265	1.00	1	07/15/2020 21:27	WG1509623
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	07/15/2020 21:27	WG1509623
Methyl tert-butyl ether	U		0.0118	0.0400	1	07/15/2020 21:27	WG1509623
Naphthalene	U		0.124	0.500	1	07/15/2020 21:27	WG1509623
n-Propylbenzene	U		0.0472	0.200	1	07/15/2020 21:27	WG1509623
Styrene	U		0.109	0.500	1	07/15/2020 21:27	WG1509623

JC 8/11/2020

TB-070920
Collected date/time: 07/09/20 16:00

SAMPLE RESULTS - 06

L1238146

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l		Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,1,1,2-Tetrachloroethane	U			0.0200	0.100	1	07/15/2020 21:27	WG1509623
1,1,2,2-Tetrachloroethane	U	UJ	J0	0.0156	0.100	1	07/15/2020 21:27	WG1509623
1,1,2-Trichlorotrifluoroethane	U			0.0270	0.100	1	07/15/2020 21:27	WG1509623
Tetrachloroethene	U			0.0280	0.100	1	07/15/2020 21:27	WG1509623
Toluene	U			0.0500	0.200	1	07/15/2020 21:27	WG1509623
1,2,3-Trichlorobenzene	U			0.0250	0.500	1	07/15/2020 21:27	WG1509623
1,2,4-Trichlorobenzene	U			0.193	0.500	1	07/15/2020 21:27	WG1509623
1,1,1-Trichloroethane	U			0.0110	0.100	1	07/15/2020 21:27	WG1509623
1,1,2-Trichloroethane	U			0.0353	0.100	1	07/15/2020 21:27	WG1509623
Trichloroethene	U			0.0160	0.0400	1	07/15/2020 21:27	WG1509623
Trichlorofluoromethane	U			0.0200	0.100	1	07/15/2020 21:27	WG1509623
1,2,3-Trichloropropane	U			0.204	0.500	1	07/15/2020 21:27	WG1509623
1,2,4-Trimethylbenzene	U			0.0464	0.200	1	07/15/2020 21:27	WG1509623
1,2,3-Trimethylbenzene	U			0.0460	0.200	1	07/15/2020 21:27	WG1509623
1,3,5-Trimethylbenzene	U			0.0432	0.200	1	07/15/2020 21:27	WG1509623
Vinyl chloride	U			0.0273	0.100	1	07/15/2020 21:27	WG1509623
Xylenes, Total	U			0.191	0.260	1	07/15/2020 21:27	WG1509623
Ethyl Ether	U			0.0170	0.100	1	07/15/2020 21:27	WG1509623
Tetrahydrofuran	U			0.0900	0.500	1	07/15/2020 21:27	WG1509623
Iodomethane	U			0.242	0.500	1	07/15/2020 21:27	WG1509623
Allyl chloride	U			0.580	1.00	1	07/15/2020 21:27	WG1509623
Trans-1,4-Dichloro-2-butene	U	UJ	J0	0.0560	0.200	1	07/15/2020 21:27	WG1509623
(S) Toluene-d8	*94.6*				*75.0-131*		*07/15/2020 21:27*	WG1509623
(S) 4-Bromofluorobenzene	*100*				*67.0-138*		*07/15/2020 21:27*	WG1509623
(S) 1,2-Dichloroethane-d4	*109*				*70.0-130*		*07/15/2020 21:27*	WG1509623

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

JC 8/11/2020

MEMORANDUM

TO: Project File **DATE:** August 18, 2020

FROM: Jessie Compeau

SUBJECT: Laboratory Data Validation Review

PROJECT: American Linen Data Validation

PROJECT #: 1413.001.02.501G

TASK: EIM Data Validation Level EPA2A for 3rd Quarter Monitoring – Groundwater Samples – Group 2

LAB: Pace Sample Delivery Groups (SDGs): L1238175, L1238602, L1239455, L1240037, and L1240639

Thirty-two (32) groundwater samples including three field duplicates, two equipment blanks, and one trip blank were collected as part of the 3rd Quarterly Monitoring Round for 2020 for the ongoing Remedial Investigation (RI) sampling at the Former American Linen Supply Site, in Seattle, Washington in July 2020. The samples were shipped and delivered to Pace Lab Sciences (Pace) of Mount Juliet, TN for laboratory analysis. Selected samples were analyzed for the following:

- Volatile organic compounds (VOCs) by United States Environmental Protection Agency (USEPA) Method 8260D;
- Total petroleum hydrocarbons as gasoline (TPH-Gx) by NWTPH-Gx per analytical method stipulated by Washington State Department of Ecology;
- VOCs (dissolved gases – methane, ethane, and ethene) by EPA SOP RSK 175;
- Alkalinity by Method 2320 B-2011;
- Anions (chloride, nitrate, and sulfate) by USEPA Method 9056A;
- Total Organic Carbon (TOC) by USEPA Method 9060A; and
- Metals (iron and manganese) by USEPA Method 6020B.

Results are reported in multiple SDGs from Pace. Pace SDGs are reviewed in small groups for each data validation report. Group 2 analytical results are reported in SDGs L1238175, L1238602, L1239455, L1240037, and L1240639. The quality assurance review of the laboratory data associated with Group 2 is summarized below.

DATA QUALIFICATIONS

Guidelines established by USEPA for a limited data validation review of analytical data along with Pace control limit criteria were used to validate the data. The comments presented in this memorandum refer to the laboratory's performance in meeting the quality control criteria outlined in the USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (USEPA, 2017) and USEPA Contract Laboratory

Program National Functional Guidelines for Inorganic Superfund Methods Data Review (USEPA, 2017). Following Guidelines, non-project-specific laboratory duplicates and matrix spike results were not evaluated as part of this data validation.

DATA VALIDATION

Completeness

All samples were collected and analyzed as requested with the following exceptions:

- SDG L1238175: Pace corrected sample MW-171-070920 to read MW-174-070920 per PES's July 10, 2020 request.
- SDG L1238602: Sample MW-178-071020 was received unpreserved for metals. The sample was preserved with nitric acid in the laboratory. No action is taken other than to note this.

Sample Collection and Preservation

Samples were collected in laboratory-supplied sample containers preserved as appropriate for the individual analyses conducted. The samples were packed on ice in coolers and delivered by courier to the analytical laboratory. The laboratory reported that the coolers were received at a cooler temperature less than the recommended temperature preservation of 6°C. Samples were received in good condition. No data were qualified based upon the sample collection and preservation information.

Holding Times

USEPA Method 8260D:
All samples were analyzed for VOCs within the EPA recommended holding time of fourteen days for preserved waters from the date of collection. All holding time criteria are met.

NWTPH-Gx Method:
All samples were analyzed within the WA State recommended holding time of fourteen days for preserved waters from the date of sample collection. All holding time criteria are met.

Dissolved Gases (Methane, Ethane, and Ethene) by RSK 175:
All samples were analyzed within the WA State recommended holding time of fourteen days for preserved waters from the date of sample collection. All holding time criteria are met.

USEPA Method 6020B:
All samples were analyzed within the USEPA recommended holding time for iron and manganese of 180 days for preserved waters from the date of sample collection. All holding time criteria are met.

General Chemistry (Alkalinity, Chloride, Sulfate, Nitrate, and TOC):

All samples were analyzed within the USEPA recommended holding time for alkalinity (14 days), chloride (28 days), sulfate (28 days), and nitrate (48 hours), and TOC (28 days) for preserved waters from the date of sample collection. All holding time criteria are met.

Initial and Continuing Calibration

Calibration data for this project are not required for this deliverable however Pace's notes indicate the following:

- Multiple SDGs - *USEPA Method 8260D:* Continuing calibration verification (CCV) issues were noted by Pace for multiple compounds associated with analytical batches in each SDG. These compounds are qualified by the laboratory "J0" to indicate that percent difference CCV is outside of laboratory acceptance criteria. **Associated sample results with laboratory qualified (J0) results are estimated and qualified (J/UJ).**

Method Blank Results

USEPA Method 8260D:
Laboratory method blanks were included with the analytical batches per method requirement. The target analytes were not detected in the method blanks at or above the reporting detection limits (RDLs).

NWTPH-Gx Method:
Laboratory method blanks were included with the analytical batches per method requirement. The target analyte (gasoline) was not detected in the method blanks at or above the RDLs with the following exceptions:

- SDG L1238602 – Analytical batch WG1509433: A low level gasoline concentration is detected in the method blank. No action is required since concentrations are greater than the RDL.

- SDG L1238602 – Analytical batch WG1511658: A low level gasoline concentration is detected in the method blank. **A low level of gasoline, below the RDL, is detected in sample (MW-178-071020) and is laboratory qualified (BJ). Gasoline detection in sample MW-178-071020 is qualified as not detected (U).**

- SDG L1239455 – Analytical batch WG1510803: A low level gasoline concentration is detected in the method blank. A low level of gasoline, below the RDL, are detected in equipment blank sample (EQ-071420) and is laboratory qualified (BJ). No action is taken other than to note this.

Dissolved Gases (Methane, Ethane, and Ethene) by RSK 175:
Laboratory method blanks were included with the analytical batches per method requirement. The target analytes (dissolved gases) are not detected in the method blanks at or above the RDLs.

USEPA Method 6020B and General Chemistry (Alkalinity, Chloride, Sulfate, Nitrate, and TOC):

Laboratory method blanks were included with the analytical batches per method requirement. The target analytes were detected in the method blanks below the RDLs. Per Guidance, no action is taken for blank detections less than the RDL when associated sample detections are greater than the RDL. General chemistry and metal blank detections are shown below:

SDG	Batch	Method	Analyte	Method Blank Result	Qualifier	RDL	Units	Associated Result(s) Qualified
L1238175	WG1507487	9060A	TOC	296	J	1000	µg/L	NO
L1238602	WG1508116	9060A	TOC	238	J	1000	µg/L	NO
L1239455	WG1509588	9060A	TOC	408	J	1000	µg/L	NO
L1240037	WG1510700	9060A	TOC	367	J	1000	µg/L	NO
L1240639	WG1511400	9060A	TOC	351	J	1000	µg/L	NO

Target analytes were detected in method blanks at low levels with no impact to the associated samples.

Trip Blank Results

USEPA Method 8260D:
One trip blank TB-071520 (SDG L1240037) was collected and analyzed for VOCs. The target analytes were not detected in the trip blank at or above the RDLs.

Field, Rinsate, or Equipment Blank Results

All Analytical Methods:
Two equipment blanks were collected and analyzed. Details are as follows:

- Equipment blank (EQ-071420 with SDG L1239455) is associated with all samples collected via bladder pump on July 14, 2020. Specifically, this equipment blank is associated with samples MW127-071420, MW-934-071420, and MW120-071420. Low levels of gasoline and TOC were detected in the equipment blank. No action is taken for these TOC detections since these are either not detected in the associated samples or sample detections are far greater than detection in the equipment blank. Associated samples were not analyzed for gasoline. Low levels of acetone, benzene, toluene, and 1,2,3-trimethylbenzene are detected in the equipment blank. **Associated TOC results for samples MW127-071420 and MW-934-071420 are detected below the RDL. These results are qualified as not detected (U) due to method and/or equipment blank contamination.**

- Equipment blank (EQ-071620 with SDG L1240639) is associated with all samples collected via bladder pump on July 16, 2020. This equipment blank is associated with samples MW108-071620, MW-314-071620, MW-311-071620, MW110-071620, MW-935-071620, and MW-330-071620. A low level of TOC was detected in the equipment blank and detected greater than the action level in associated samples. No action is necessary. Low levels of acetone, benzene, toluene, and 1,2,3-trimethylbenzene are detected in the equipment blank. No action is necessary since the associated sample results are non-detect for these compounds.

Field Duplicate Analyses

Field duplicate pairs were submitted and analyzed. Field duplicate sample pair is as follows:

- SDG L1238175: MW-166-070920 is a field duplicate of MW-933-070920
- SDG L1239455: MW127-071420 is a field duplicate of MW-934-071420
- SDG L1240639: MW108-071620 is a field duplicate of MW-935-071620

Target analyte results are comparable and within a relative percent difference (RPD) of 30% (± 1x RDL for groundwater results <5X the RDL) for the field duplicate pairs with the following exception:

- SDG L1238175: MW-166-070920 is a field duplicate of MW-933-070920. **Acetone RPD exceeds acceptance criteria for this field duplicate pair are estimated and qualified (J).**

Laboratory Duplicate Analyses

USEPA Method 8260D:
Laboratory duplicate samples were not analyzed. Refer to laboratory control sample/sample duplicate (LCS/LCSD) or matrix spike/matrix spike duplicate (MS/MSD) results for precision data.

NWTPH-Gx Method:
Laboratory duplicate samples were not analyzed. Precision data are not provided. Refer to field duplicate results for precision data.

Dissolved Gases (Methane, Ethane, and Ethene) by RSK 175:
Laboratory duplicate sample analyses were performed on client and non-client samples within the analytical batches. The primary/duplicate RPDs for dissolved gas analyses are within the laboratory control limit of 20%.

USEPA Method 6020B:
Laboratory duplicate samples were not analyzed. Refer to MS/MSD results for precision data.

General Chemistry (Alkalinity, Chloride, Sulfate, Nitrate, and TOC):
Laboratory duplicate sample analyses were performed on client samples and/or on non-client samples. The primary/duplicate RPDs for general chemistry parameters are within the laboratory control RPD limits or ± 1x RDL for groundwater results <5X the RDL with the following exception:

- SDG L1238175: Laboratory duplicates for alkalinity were performed on non-client samples. Laboratory duplicate RPD result on one of the non-client samples exceeds laboratory criteria. No action is taken since the duplicate was performed on a non-client sample.

Surrogate Recoveries

USEPA Method 8260D:
The surrogate recovery results for the samples, laboratory control samples, matrix spike samples, and the method blanks are within the laboratory surrogate control limits for all the analyses.

NWTPH-Gx Method:
The surrogate recovery results for the samples, laboratory control samples, matrix spike samples, and the method blanks are within the laboratory surrogate control limits for all analyses.

Laboratory Control Samples

USEPA Method 8260D:
Laboratory control sample/laboratory control sample duplicate (LCS/LCSD) or laboratory control sample (LCS) were analyzed by USEPA Method 8260D method. The LCS % Rs or LCS/LCSD % Rs and RPDs for all target compounds are within the laboratory control criteria for waters with the following exceptions:

- SDG L1238175 - Analytical batch WG1510563: LCS % recovery for 1,2-dichlorobenzene is below laboratory acceptance criteria and laboratory qualified (J4). **Associated sample (MW-167-070920 and MW-166-070920) 1,2-dichlorobenzene results are below the RDL and estimated (UJ).**

- SDG L1238602 - Analytical batch WG1510563: LCS % recovery for 1,2-dichlorobenzene is below laboratory acceptance criteria and laboratory qualified (J4). **Associated sample 1,2-dichlorobenzene results are below the RDL and estimated (UJ).**

- SDG L1238602 - Analytical batch WG1511065: LCS/LCSD RPD results for several compounds are greater than laboratory acceptance criteria and laboratory qualified (J3). No action is taken since the recoveries are within criteria but were recovered wide with one exception. LCSD recovery for trichlorofluoromethane is below laboratory acceptance criteria but LCS recovery is within. No action is taken in this case since the LCS is within criteria.

- SDG L1239455 - Analytical batch WG1510563: LCS % recovery for 1,2-dichlorobenzene is below laboratory acceptance criteria and laboratory qualified (J4). **Associated sample 1,2-dichlorobenzene results are below the RDL and estimated (UJ).**

- SDG L1240037 - Analytical batch WG1511418: LCS/LCSD RPD result for acetone is greater than laboratory acceptance criteria and laboratory qualified (J3). No action is taken since the recoveries are within criteria but are recovered wide.

- SDG L1240037 - Analytical batch WG1511418: LCSD recovery for 1,2-dichlorobenzene less than laboratory acceptance criteria and laboratory qualified (J4). No action is taken since the LCS recovery is within criteria.

- SDG L1240037 - Analytical batch WG1511418: LCS recovery for trans-1,2-dichloroethene is greater than laboratory acceptance criteria and laboratory qualified (J4). No action is taken since trans-1,2-dichloroethene was not detected in the associated samples.

- SDG L1240639 - Analytical batch WG1511692: LCS/LCSD RPD result for acetone is greater than laboratory acceptance criteria and laboratory qualified (J3). No action is taken since the recoveries are within criteria but are recovered wide. LCS/LCSD % recoveries for 1,2-dichlorobenzene are below laboratory acceptance criteria and laboratory qualified (J4). **Associated sample 1,2-dichlorobenzene results are below the RDL and estimated (UJ).** LCS cis-1,2-dichloroethene recovery is below criteria but LCSD recovery is within criteria. No action is taken since the LCSD recovery is within criteria.

NWTPH-Gx Method:
The LCS % Rs for the target compound (gasoline) are within the laboratory control criteria for waters. In many cases, no measure of precision is provided with the analytical batch. No action is taken other than to note this.

Dissolved Gases (Methane, Ethane, and Ethene) by RSK 175:
The LCS/LCSD % Rs and RPDs for the target compound (dissolved gases) are within the laboratory control criteria for waters.

USEPA Method 6020B:
The LCS/LCSD % Rs and RPDs for the target compound (iron and manganese) are within the laboratory control criteria for waters.

General Chemistry (Alkalinity, Chloride, Sulfate, Nitrate, and TOC):
The LCS % Rs for general chemistry parameters are within the laboratory control criteria for waters.

Matrix Spike/Matrix Spike Duplicates

USEPA Method 8260D:
Matrix spike/matrix spike duplicate (MS/MSD) analyses were not performed. Refer to LCS results and field duplicate sample for accuracy and precision data.

NWTPH-Gx Method:
MS/MSD analyses were not performed. Refer to LCS results. No measure of precision was provided. No action was taken other than to note this.

Dissolved Gases (Methane, Ethane, and Ethene) by RSK 175:
MS/MSD analyses were not performed. Refer to LCS results and field duplicate sample for accuracy and precision data with the following exceptions:

- SDG L1238602: Methane MS/MSD spike was performed on a non-client sample and results are laboratory qualified (E,V) to indicate that the results exceeded the linear calibration range and the sample concentration is greater than 4X the spike amount. Per Guidance no action is taken.

- SDG L1240037: MS/MSD spike was performed on a non-client sample and methane ethane and ethene results are laboratory qualified (J6) to indicate that MS recoveries are due to matrix interference. No action is taken since the spike was performed on a non-client sample.

USEPA Method 6020B:
MS/MSD analyses were performed on client and on non-client samples within the analytical batches. The MS/MSD % Rs and RPD were acceptable and within laboratory control limit criteria for water samples with the following discussion:

- SDG L1238175: Matrix spike analysis was performed on a non-client sample and manganese spike results are laboratory qualified (V) to indicate that the sample concentration is greater than 4X the spike amount. Per Guidance no action is taken.

General Chemistry (Alkalinity, Chloride, Sulfate, Nitrate, and TOC):
MS or MS/MSD analyses were performed on client and/or non-client samples within the analytical batches. In cases where MS/MSD spike analyses are not performed refer to LCS/LCSD or laboratory duplicate data for accuracy and precision data. The MS/MSD % Rs and RPDs are acceptable and within laboratory control limit criteria for water samples with the following discussion:

- SDG L1239455: MS/MSD spike was performed on a non-client sample and chloride results are laboratory qualified (E,V) to indicate that the results exceeded the linear calibration range and the sample concentration is greater than 4X the spike amount. Per Guidance no action is taken.

Other Quality Control Issues

No laboratory quality control issues were identified in the laboratory report with the following discussions:

- Multiple SDGs: Selected sample narratives for alkalinity results indicate that several sample containers had some headspace and exposure to air may have impacted the reported results. No action was taken other than to note this.

- Electronic data deliverables (EDDs) for these SDGs were provided by the laboratory and data validator qualifiers were entered. In some cases, different chemical synonyms are used between the EDD and the hardcopy however associated Chemical Abstracts Service (CAS) numbers are provided in the EDD to confirm chemical identifications.

Compound Identification and Quantitation Limits

Results of the analyses were reported based on laboratory RDLs for all compounds. RDLs for selected compounds are elevated due to method-required dilutions with the following discussion:

- SDG L1240639: Sample MW-935-071620 (SDG L1240639) tetrachloroethene was detected above the upper limit of the calibration range of the instrument and qualified (E). **Sample MW-935-071620 tetrachloroethene result is estimated (J) because the result exceeds the upper limit of the calibration range.**

Gasoline and gasoline range organics are analyzed for via Volatile Organic Compounds (GC) by Washington State Method NWTPHGx (using a gas chromatograph/flame ionization detector (GC/FID)) and Pace reported gasoline range organic-NWTPH results. Several chlorinated VOC compounds (including cis-1,2-dichloroethene, trans-1,2-dichloroethene, trichloroethene, and tetrachloroethene) elute within the gasoline range organics (GRO) retention time range as specified by Washington State (detections falling between the toluene and dodecane range).

Non-petroleum organics (e.g. chlorinated VOC compounds) eluting within the gasoline range contribute to the GRO result and GRO results are likely biased high (J+). PES requested that Pace evaluate chromatograms associated with positive sample detections to confirm the potential presence of gasoline. Per PES's request Pace reviewed selected sample chromatograms against the gasoline standard chromatograms and assigned “no discernible petroleum pattern” to GRO results associated with this Task. PES assigned an additional project level qualifier (Z) to GRO results when the chromatogram for the sample does not match a discernible gasoline standard pattern. Associated chromatograms and qualified samples for this Task are as follows:

Sample ID	Laboratory Identification	Gasoline Range Organic Result (µg/L)	DV Qualifier	Data Validation Comments	Pace Chromatogram Review Notes
MW-169-071020	L1238602-01	2400	Z, J+	Elevated chlorinated VOCs detected within the GRO elution range	No discernible petroleum pattern present.
MW-179-071020	L1238602-03	924	Z, J+	Elevated chlorinated VOCs detected within the GRO elution range	No discernible petroleum pattern present.
MW-180-071020	L1238602-04	122	Z, J+	Elevated chlorinated VOCs detected within the GRO elution range	No discernible petroleum pattern present.
MW-177-071020	L1238602-05	92500	Z, J+	Elevated chlorinated VOCs detected within the GRO elution range	No discernible petroleum pattern present.

Project level qualifiers have been included to the PES's project database (Epiphany) as (ZJ+). Washington State EIM valid values were reviewed. In this case no Washington State EIM valid value descriptor is ideal, and the default estimated value (J) has been selected as the best match to qualify GRO (Z, J+) data.

Data Assessment

The laboratory data reported for this project were reviewed based on the criteria outlined in:

- USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (USEPA, 2017); and
- USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Superfund Methods Data Review (USEPA, 2017).

Data qualifiers are assigned and laboratory report pages with qualifiers are attached. All data, including qualified data, are judged to be acceptable for their intended use.

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	524000		8450	20000	1	07/15/2020 18:59	WG1508214

Sample Narrative:

L1238175-01 WG1508214: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	48900		379	1000	1	07/10/2020 16:59	WG1506965
Nitrate	U		48.0	100	1	07/10/2020 16:59	WG1506965
Sulfate	4940	J	594	5000	1	07/10/2020 16:59	WG1506965

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	17200		102	1000	1	07/11/2020 17:45	WG1507487

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	1550		48.9	100	1	07/14/2020 02:00	WG1507540
Manganese	1040		1.32	5.00	1	07/14/2020 02:00	WG1507540

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	U		31.6	100	1	07/13/2020 13:53	WG1508114
(S) a,a,a-Trifluorotoluene(FID)	*101*			*78.0-120*		*07/13/2020 13:53*	WG1508114

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	20300		2.87	6.78	10	07/14/2020 12:55	WG1508536
Ethane	173		0.296	1.29	1	07/11/2020 15:02	WG1507440
Ethene	135		0.422	1.27	1	07/11/2020 15:02	WG1507440

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U		0.548	1.00	1	07/16/2020 00:55	WG1509623
Acrylonitrile	U		0.0760	0.500	1	07/16/2020 00:55	WG1509623
Benzene	0.103		0.0160	0.0400	1	07/16/2020 00:55	WG1509623
Bromobenzene	U		0.0420	0.500	1	07/16/2020 00:55	WG1509623
Bromodichloromethane	U		0.0315	0.100	1	07/16/2020 00:55	WG1509623
Bromoform	U		0.239	1.00	1	07/16/2020 00:55	WG1509623
Bromomethane	U		0.148	0.500	1	07/16/2020 00:55	WG1509623
n-Butylbenzene	U		0.153	0.500	1	07/16/2020 00:55	WG1509623
sec-Butylbenzene	U		0.101	0.500	1	07/16/2020 00:55	WG1509623
tert-Butylbenzene	U		0.0620	0.200	1	07/16/2020 00:55	WG1509623
Carbon tetrachloride	U		0.0432	0.200	1	07/16/2020 00:55	WG1509623
Chlorobenzene	U		0.0229	0.100	1	07/16/2020 00:55	WG1509623
Chlorodibromomethane	U		0.0180	0.100	1	07/16/2020 00:55	WG1509623

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Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloroethane	U		0.0432	0.200	1	07/16/2020 00:55	WG1509623
Chloroform	U		0.0166	0.100	1	07/16/2020 00:55	WG1509623
Chloromethane	U		0.0556	0.500	1	07/16/2020 00:55	WG1509623
2-Chlorotoluene	U		0.0368	0.100	1	07/16/2020 00:55	WG1509623
4-Chlorotoluene	U		0.0452	0.200	1	07/16/2020 00:55	WG1509623
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	07/16/2020 00:55	WG1509623
1,2-Dibromoethane	U		0.0210	0.100	1	07/16/2020 00:55	WG1509623
Dibromomethane	U		0.0400	0.200	1	07/16/2020 00:55	WG1509623
1,2-Dichlorobenzene	U		0.0580	0.200	1	07/16/2020 00:55	WG1509623
1,3-Dichlorobenzene	U		0.0680	0.200	1	07/16/2020 00:55	WG1509623
1,4-Dichlorobenzene	U		0.0788	0.200	1	07/16/2020 00:55	WG1509623
Dichlorodifluoromethane	U		0.0327	0.100	1	07/16/2020 00:55	WG1509623
1,1-Dichloroethane	U		0.0230	0.100	1	07/16/2020 00:55	WG1509623
1,2-Dichloroethane	U		0.0190	0.100	1	07/16/2020 00:55	WG1509623
1,1-Dichloroethene	U		0.0200	0.100	1	07/16/2020 00:55	WG1509623
cis-1,2-Dichloroethene	0.402		0.0276	0.100	1	07/16/2020 00:55	WG1509623
trans-1,2-Dichloroethene	2.87		0.0572	0.200	1	07/16/2020 00:55	WG1509623
1,2-Dichloropropane	U		0.0508	0.200	1	07/16/2020 00:55	WG1509623
1,1-Dichloropropene	U		0.0280	0.100	1	07/16/2020 00:55	WG1509623
1,3-Dichloropropane	U		0.0700	0.200	1	07/16/2020 00:55	WG1509623
cis-1,3-Dichloropropene	U		0.0271	0.100	1	07/16/2020 00:55	WG1509623
trans-1,3-Dichloropropene	U		0.0612	0.200	1	07/16/2020 00:55	WG1509623
2,2-Dichloropropane	U		0.0317	0.100	1	07/16/2020 00:55	WG1509623
Di-isopropyl ether	U		0.0140	0.0400	1	07/16/2020 00:55	WG1509623
Ethylbenzene	U		0.0212	0.100	1	07/16/2020 00:55	WG1509623
Hexachloro-1,3-butadiene	U		0.508	1.00	1	07/16/2020 00:55	WG1509623
Isopropylbenzene	U		0.0345	0.100	1	07/16/2020 00:55	WG1509623
p-Isopropyltoluene	U		0.0932	0.200	1	07/16/2020 00:55	WG1509623
2-Butanone (MEK)	U		0.500	1.00	1	07/16/2020 00:55	WG1509623
Methylene Chloride	U		0.265	1.00	1	07/16/2020 00:55	WG1509623
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	07/16/2020 00:55	WG1509623
Methyl tert-butyl ether	U		0.0118	0.0400	1	07/16/2020 00:55	WG1509623
Naphthalene	U		0.124	0.500	1	07/16/2020 00:55	WG1509623
n-Propylbenzene	U		0.0472	0.200	1	07/16/2020 00:55	WG1509623
Styrene	U		0.109	0.500	1	07/16/2020 00:55	WG1509623
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	07/16/2020 00:55	WG1509623
1,1,2,2-Tetrachloroethane	U UJ	J0	0.0156	0.100	1	07/16/2020 00:55	WG1509623
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	07/16/2020 00:55	WG1509623
Tetrachloroethene	0.360		0.0280	0.100	1	07/16/2020 00:55	WG1509623
Toluene	0.632		0.0500	0.200	1	07/16/2020 00:55	WG1509623
1,2,3-Trichlorobenzene	U		0.0250	0.500	1	07/16/2020 00:55	WG1509623
1,2,4-Trichlorobenzene	U		0.193	0.500	1	07/16/2020 00:55	WG1509623
1,1,1-Trichloroethane	U		0.0110	0.100	1	07/16/2020 00:55	WG1509623
1,1,2-Trichloroethane	U		0.0353	0.100	1	07/16/2020 00:55	WG1509623
Trichloroethene	0.218		0.0160	0.0400	1	07/16/2020 00:55	WG1509623
Trichlorofluoromethane	U		0.0200	0.100	1	07/16/2020 00:55	WG1509623
1,2,3-Trichloropropane	U		0.204	0.500	1	07/16/2020 00:55	WG1509623
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	07/16/2020 00:55	WG1509623
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	07/16/2020 00:55	WG1509623
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	07/16/2020 00:55	WG1509623
Vinyl chloride	26.2		0.0273	0.100	1	07/16/2020 00:55	WG1509623
Xylenes, Total	0.371		0.191	0.260	1	07/16/2020 00:55	WG1509623
Ethyl Ether	U		0.0170	0.100	1	07/16/2020 00:55	WG1509623
Tetrahydrofuran	U		0.0900	0.500	1	07/16/2020 00:55	WG1509623
Iodomethane	U		0.242	0.500	1	07/16/2020 00:55	WG1509623
Allyl chloride	U		0.580	1.00	1	07/16/2020 00:55	WG1509623

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Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l		Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Trans-1,4-Dichloro-2-butene	U	UJ	J0	0.0560	0.200	1	07/16/2020 00:55	WG1509623
(S) Toluene-d8	*94.5*				*75.0-131*		*07/16/2020 00:55*	WG1509623
(S) 4-Bromofluorobenzene	*99.1*				*67.0-138*		*07/16/2020 00:55*	WG1509623
(S) 1,2-Dichloroethane-d4	*106*				*70.0-130*		*07/16/2020 00:55*	WG1509623

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1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	207000		8450	20000	1	07/15/2020 19:07	WG1508214

Sample Narrative:

L1238175-02 WG1508214: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	11000		379	1000	1	07/10/2020 17:16	WG1506965
Nitrate	U		48.0	100	1	07/10/2020 17:16	WG1506965
Sulfate	10300		594	5000	1	07/10/2020 17:16	WG1506965

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	1570	~~B~~	102	1000	1	07/11/2020 18:00	WG1507487

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	6740		48.9	100	1	07/14/2020 02:04	WG1507540
Manganese	341		1.32	5.00	1	07/14/2020 02:04	WG1507540

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	U		31.6	100	1	07/13/2020 14:15	WG1508114
(S) a,a,a-Trifluorotoluene(FID)	*101*			*78.0-120*		*07/13/2020 14:15*	WG1508114

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	71.8		0.287	0.678	1	07/11/2020 15:08	WG1507440
Ethane	U		0.296	1.29	1	07/11/2020 15:08	WG1507440
Ethene	U		0.422	1.27	1	07/11/2020 15:08	WG1507440

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U		0.548	1.00	1	07/16/2020 01:14	WG1509623
Acrylonitrile	U		0.0760	0.500	1	07/16/2020 01:14	WG1509623
Benzene	U		0.0160	0.0400	1	07/16/2020 01:14	WG1509623
Bromobenzene	U		0.0420	0.500	1	07/16/2020 01:14	WG1509623
Bromodichloromethane	U		0.0315	0.100	1	07/16/2020 01:14	WG1509623
Bromoform	U		0.239	1.00	1	07/16/2020 01:14	WG1509623
Bromomethane	U		0.148	0.500	1	07/16/2020 01:14	WG1509623
n-Butylbenzene	U		0.153	0.500	1	07/16/2020 01:14	WG1509623
sec-Butylbenzene	U		0.101	0.500	1	07/16/2020 01:14	WG1509623
tert-Butylbenzene	U		0.0620	0.200	1	07/16/2020 01:14	WG1509623
Carbon tetrachloride	U		0.0432	0.200	1	07/16/2020 01:14	WG1509623
Chlorobenzene	U		0.0229	0.100	1	07/16/2020 01:14	WG1509623
Chlorodibromomethane	U		0.0180	0.100	1	07/16/2020 01:14	WG1509623

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Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloroethane	U		0.0432	0.200	1	07/16/2020 01:14	WG1509623
Chloroform	U		0.0166	0.100	1	07/16/2020 01:14	WG1509623
Chloromethane	U		0.0556	0.500	1	07/16/2020 01:14	WG1509623
2-Chlorotoluene	U		0.0368	0.100	1	07/16/2020 01:14	WG1509623
4-Chlorotoluene	U		0.0452	0.200	1	07/16/2020 01:14	WG1509623
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	07/16/2020 01:14	WG1509623
1,2-Dibromoethane	U		0.0210	0.100	1	07/16/2020 01:14	WG1509623
Dibromomethane	U		0.0400	0.200	1	07/16/2020 01:14	WG1509623
1,2-Dichlorobenzene	U		0.0580	0.200	1	07/16/2020 01:14	WG1509623
1,3-Dichlorobenzene	U		0.0680	0.200	1	07/16/2020 01:14	WG1509623
1,4-Dichlorobenzene	U		0.0788	0.200	1	07/16/2020 01:14	WG1509623
Dichlorodifluoromethane	U		0.0327	0.100	1	07/16/2020 01:14	WG1509623
1,1-Dichloroethane	U		0.0230	0.100	1	07/16/2020 01:14	WG1509623
1,2-Dichloroethane	U		0.0190	0.100	1	07/16/2020 01:14	WG1509623
1,1-Dichloroethene	U		0.0200	0.100	1	07/16/2020 01:14	WG1509623
cis-1,2-Dichloroethene	0.0300	J	0.0276	0.100	1	07/17/2020 05:40	WG1510200
trans-1,2-Dichloroethene	U		0.0572	0.200	1	07/16/2020 01:14	WG1509623
1,2-Dichloropropane	U		0.0508	0.200	1	07/16/2020 01:14	WG1509623
1,1-Dichloropropene	U		0.0280	0.100	1	07/16/2020 01:14	WG1509623
1,3-Dichloropropane	U		0.0700	0.200	1	07/16/2020 01:14	WG1509623
cis-1,3-Dichloropropene	U		0.0271	0.100	1	07/16/2020 01:14	WG1509623
trans-1,3-Dichloropropene	U		0.0612	0.200	1	07/16/2020 01:14	WG1509623
2,2-Dichloropropane	U		0.0317	0.100	1	07/16/2020 01:14	WG1509623
Di-isopropyl ether	U		0.0140	0.0400	1	07/16/2020 01:14	WG1509623
Ethylbenzene	U		0.0212	0.100	1	07/16/2020 01:14	WG1509623
Hexachloro-1,3-butadiene	U		0.508	1.00	1	07/16/2020 01:14	WG1509623
Isopropylbenzene	U		0.0345	0.100	1	07/16/2020 01:14	WG1509623
p-Isopropyltoluene	U		0.0932	0.200	1	07/16/2020 01:14	WG1509623
2-Butanone (MEK)	U		0.500	1.00	1	07/16/2020 01:14	WG1509623
Methylene Chloride	U		0.265	1.00	1	07/16/2020 01:14	WG1509623
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	07/16/2020 01:14	WG1509623
Methyl tert-butyl ether	U		0.0118	0.0400	1	07/16/2020 01:14	WG1509623
Naphthalene	U		0.124	0.500	1	07/16/2020 01:14	WG1509623
n-Propylbenzene	U		0.0472	0.200	1	07/16/2020 01:14	WG1509623
Styrene	U		0.109	0.500	1	07/16/2020 01:14	WG1509623
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	07/16/2020 01:14	WG1509623
1,1,2,2-Tetrachloroethane	U UJ	J0	0.0156	0.100	1	07/16/2020 01:14	WG1509623
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	07/16/2020 01:14	WG1509623
Tetrachloroethene	U		0.0280	0.100	1	07/17/2020 05:40	WG1510200
Toluene	0.709		0.0500	0.200	1	07/16/2020 01:14	WG1509623
1,2,3-Trichlorobenzene	U		0.0250	0.500	1	07/16/2020 01:14	WG1509623
1,2,4-Trichlorobenzene	U		0.193	0.500	1	07/16/2020 01:14	WG1509623
1,1,1-Trichloroethane	U		0.0110	0.100	1	07/16/2020 01:14	WG1509623
1,1,2-Trichloroethane	U		0.0353	0.100	1	07/16/2020 01:14	WG1509623
Trichloroethene	U		0.0160	0.0400	1	07/17/2020 05:40	WG1510200
Trichlorofluoromethane	U		0.0200	0.100	1	07/16/2020 01:14	WG1509623
1,2,3-Trichloropropane	U		0.204	0.500	1	07/16/2020 01:14	WG1509623
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	07/16/2020 01:14	WG1509623
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	07/16/2020 01:14	WG1509623
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	07/16/2020 01:14	WG1509623
Vinyl chloride	U		0.0273	0.100	1	07/17/2020 05:40	WG1510200
Xylenes, Total	0.294		0.191	0.260	1	07/16/2020 01:14	WG1509623
Ethyl Ether	U		0.0170	0.100	1	07/16/2020 01:14	WG1509623
Tetrahydrofuran	U		0.0900	0.500	1	07/16/2020 01:14	WG1509623
Iodomethane	U		0.242	0.500	1	07/16/2020 01:14	WG1509623
Allyl chloride	U		0.580	1.00	1	07/16/2020 01:14	WG1509623

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Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l		Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Trans-1,4-Dichloro-2-butene	U	UJ	J0	0.0560	0.200	1	07/16/2020 01:14	WG1509623
(S) Toluene-d8	*93.0*				*75.0-131*		*07/16/2020 01:14*	WG1509623
(S) Toluene-d8	*95.0*				*75.0-131*		*07/17/2020 05:40*	WG1510200
(S) 4-Bromofluorobenzene	*97.9*				*67.0-138*		*07/16/2020 01:14*	WG1509623
(S) 4-Bromofluorobenzene	*103*				*67.0-138*		*07/17/2020 05:40*	WG1510200
(S) 1,2-Dichloroethane-d4	*106*				*70.0-130*		*07/16/2020 01:14*	WG1509623
(S) 1,2-Dichloroethane-d4	*108*				*70.0-130*		*07/17/2020 05:40*	WG1510200

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

JC 8/18/2020

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	384000		8450	20000	1	07/15/2020 19:16	WG1508214

Sample Narrative:

L1238175-03 WG1508214: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	26300		379	1000	1	07/10/2020 17:32	WG1506965
Nitrate	U		48.0	100	1	07/10/2020 17:32	WG1506965
Sulfate	8340		594	5000	1	07/10/2020 17:32	WG1506965

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	3940		102	1000	1	07/11/2020 18:22	WG1507487

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	6280		48.9	100	1	07/14/2020 02:07	WG1507540
Manganese	761		1.32	5.00	1	07/14/2020 02:07	WG1507540

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	U		31.6	100	1	07/13/2020 14:37	WG1508114
(S) a,a,a-Trifluorotoluene(FID)	*99.8*			*78.0-120*		*07/13/2020 14:37*	WG1508114

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	16700		2.87	6.78	10	07/14/2020 12:59	WG1508536
Ethane	82.3		0.296	1.29	1	07/11/2020 15:43	WG1507440
Ethene	U		0.422	1.27	1	07/11/2020 15:43	WG1507440

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U		0.548	1.00	1	07/16/2020 01:33	WG1509623
Acrylonitrile	U		0.0760	0.500	1	07/16/2020 01:33	WG1509623
Benzene	U		0.0160	0.0400	1	07/16/2020 01:33	WG1509623
Bromobenzene	U		0.0420	0.500	1	07/16/2020 01:33	WG1509623
Bromodichloromethane	U		0.0315	0.100	1	07/16/2020 01:33	WG1509623
Bromoform	U		0.239	1.00	1	07/16/2020 01:33	WG1509623
Bromomethane	U		0.148	0.500	1	07/16/2020 01:33	WG1509623
n-Butylbenzene	U		0.153	0.500	1	07/16/2020 01:33	WG1509623
sec-Butylbenzene	U		0.101	0.500	1	07/16/2020 01:33	WG1509623
tert-Butylbenzene	U		0.0620	0.200	1	07/16/2020 01:33	WG1509623
Carbon tetrachloride	U		0.0432	0.200	1	07/16/2020 01:33	WG1509623
Chlorobenzene	U		0.0229	0.100	1	07/16/2020 01:33	WG1509623
Chlorodibromomethane	U		0.0180	0.100	1	07/16/2020 01:33	WG1509623

JC 8/18/2020

MW-174-070920

Collected date/time: 07/09/20 09:17

SAMPLE RESULTS - 03

L1238175

Volatile Organic Compounds (GC/MS) by Method 8260D

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloroethane	U		0.0432	0.200	1	07/16/2020 01:33	WG1509623
Chloroform	U		0.0166	0.100	1	07/16/2020 01:33	WG1509623
Chloromethane	U		0.0556	0.500	1	07/16/2020 01:33	WG1509623
2-Chlorotoluene	U		0.0368	0.100	1	07/16/2020 01:33	WG1509623
4-Chlorotoluene	U		0.0452	0.200	1	07/16/2020 01:33	WG1509623
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	07/16/2020 01:33	WG1509623
1,2-Dibromoethane	U		0.0210	0.100	1	07/16/2020 01:33	WG1509623
Dibromomethane	U		0.0400	0.200	1	07/16/2020 01:33	WG1509623
1,2-Dichlorobenzene	U		0.0580	0.200	1	07/16/2020 01:33	WG1509623
1,3-Dichlorobenzene	U		0.0680	0.200	1	07/16/2020 01:33	WG1509623
1,4-Dichlorobenzene	U		0.0788	0.200	1	07/16/2020 01:33	WG1509623
Dichlorodifluoromethane	U		0.0327	0.100	1	07/16/2020 01:33	WG1509623
1,1-Dichloroethane	U		0.0230	0.100	1	07/16/2020 01:33	WG1509623
1,2-Dichloroethane	U		0.0190	0.100	1	07/16/2020 01:33	WG1509623
1,1-Dichloroethene	U		0.0200	0.100	1	07/16/2020 01:33	WG1509623
cis-1,2-Dichloroethene	1.19		0.0276	0.100	1	07/16/2020 01:33	WG1509623
trans-1,2-Dichloroethene	1.31		0.0572	0.200	1	07/16/2020 01:33	WG1509623
1,2-Dichloropropane	U		0.0508	0.200	1	07/16/2020 01:33	WG1509623
1,1-Dichloropropene	U		0.0280	0.100	1	07/16/2020 01:33	WG1509623
1,3-Dichloropropane	U		0.0700	0.200	1	07/16/2020 01:33	WG1509623
cis-1,3-Dichloropropene	U		0.0271	0.100	1	07/16/2020 01:33	WG1509623
trans-1,3-Dichloropropene	U		0.0612	0.200	1	07/16/2020 01:33	WG1509623
2,2-Dichloropropane	U		0.0317	0.100	1	07/16/2020 01:33	WG1509623
Di-isopropyl ether	U		0.0140	0.0400	1	07/16/2020 01:33	WG1509623
Ethylbenzene	U		0.0212	0.100	1	07/16/2020 01:33	WG1509623
Hexachloro-1,3-butadiene	U		0.508	1.00	1	07/16/2020 01:33	WG1509623
Isopropylbenzene	U		0.0345	0.100	1	07/16/2020 01:33	WG1509623
p-Isopropyltoluene	U		0.0932	0.200	1	07/16/2020 01:33	WG1509623
2-Butanone (MEK)	U		0.500	1.00	1	07/16/2020 01:33	WG1509623
Methylene Chloride	U		0.265	1.00	1	07/16/2020 01:33	WG1509623
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	07/16/2020 01:33	WG1509623
Methyl tert-butyl ether	U		0.0118	0.0400	1	07/16/2020 01:33	WG1509623
Naphthalene	U		0.124	0.500	1	07/16/2020 01:33	WG1509623
n-Propylbenzene	U		0.0472	0.200	1	07/16/2020 01:33	WG1509623
Styrene	U		0.109	0.500	1	07/16/2020 01:33	WG1509623
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	07/16/2020 01:33	WG1509623
1,1,2,2-Tetrachloroethane	U UJ	J0	0.0156	0.100	1	07/16/2020 01:33	WG1509623
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	07/16/2020 01:33	WG1509623
Tetrachloroethene	0.259		0.0280	0.100	1	07/16/2020 01:33	WG1509623
Toluene	0.901		0.0500	0.200	1	07/16/2020 01:33	WG1509623
1,2,3-Trichlorobenzene	U		0.0250	0.500	1	07/16/2020 01:33	WG1509623
1,2,4-Trichlorobenzene	U		0.193	0.500	1	07/16/2020 01:33	WG1509623
1,1,1-Trichloroethane	U		0.0110	0.100	1	07/16/2020 01:33	WG1509623
1,1,2-Trichloroethane	U		0.0353	0.100	1	07/16/2020 01:33	WG1509623
Trichloroethene	0.184		0.0160	0.0400	1	07/16/2020 01:33	WG1509623
Trichlorofluoromethane	U		0.0200	0.100	1	07/16/2020 01:33	WG1509623
1,2,3-Trichloropropane	U		0.204	0.500	1	07/16/2020 01:33	WG1509623
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	07/16/2020 01:33	WG1509623
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	07/16/2020 01:33	WG1509623
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	07/16/2020 01:33	WG1509623
Vinyl chloride	2.32		0.0273	0.100	1	07/16/2020 01:33	WG1509623
Xylenes, Total	0.511		0.191	0.260	1	07/16/2020 01:33	WG1509623
Ethyl Ether	U		0.0170	0.100	1	07/16/2020 01:33	WG1509623
Tetrahydrofuran	U		0.0900	0.500	1	07/16/2020 01:33	WG1509623
Iodomethane	U		0.242	0.500	1	07/16/2020 01:33	WG1509623
Allyl chloride	U		0.580	1.00	1	07/16/2020 01:33	WG1509623

JC 8/18/2020

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l		Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Trans-1,4-Dichloro-2-butene	U	UJ	J0	0.0560	0.200	1	07/16/2020 01:33	WG1509623
(S) Toluene-d8	*96.8*				*75.0-131*		*07/16/2020 01:33*	WG1509623
(S) 4-Bromofluorobenzene	*100*				*67.0-138*		*07/16/2020 01:33*	WG1509623
(S) 1,2-Dichloroethane-d4	*108*				*70.0-130*		*07/16/2020 01:33*	WG1509623

JC 8/18/2020

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	205000		8450	20000	1	07/15/2020 19:24	WG1508214

Sample Narrative:

L1238175-04 WG1508214: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	11900		379	1000	1	07/10/2020 17:49	WG1506965
Nitrate	U		48.0	100	1	07/10/2020 17:49	WG1506965
Sulfate	U		594	5000	1	07/10/2020 17:49	WG1506965

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	4260		102	1000	1	07/11/2020 18:43	WG1507487

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	1480		48.9	100	1	07/14/2020 02:10	WG1507540
Manganese	56.9		1.32	5.00	1	07/14/2020 02:10	WG1507540

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	U		31.6	100	1	07/13/2020 15:00	WG1508114
(S) a,a,a-Trifluorotoluene(FID)	*100*			*78.0-120*		*07/13/2020 15:00*	WG1508114

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	4720		0.287	0.678	1	07/11/2020 15:46	WG1507440
Ethane	16.3		0.296	1.29	1	07/11/2020 15:46	WG1507440
Ethene	U		0.422	1.27	1	07/11/2020 15:46	WG1507440

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	10.0		0.548	1.00	1	07/16/2020 01:52	WG1509623
Acrylonitrile	U		0.0760	0.500	1	07/16/2020 01:52	WG1509623
Benzene	0.0420		0.0160	0.0400	1	07/16/2020 01:52	WG1509623
Bromobenzene	U		0.0420	0.500	1	07/16/2020 01:52	WG1509623
Bromodichloromethane	U		0.0315	0.100	1	07/16/2020 01:52	WG1509623
Bromoform	U		0.239	1.00	1	07/16/2020 01:52	WG1509623
Bromomethane	U		0.148	0.500	1	07/16/2020 01:52	WG1509623
n-Butylbenzene	U		0.153	0.500	1	07/16/2020 01:52	WG1509623
sec-Butylbenzene	U		0.101	0.500	1	07/16/2020 01:52	WG1509623
tert-Butylbenzene	U		0.0620	0.200	1	07/16/2020 01:52	WG1509623
Carbon tetrachloride	U		0.0432	0.200	1	07/16/2020 01:52	WG1509623
Chlorobenzene	U		0.0229	0.100	1	07/16/2020 01:52	WG1509623
Chlorodibromomethane	U		0.0180	0.100	1	07/16/2020 01:52	WG1509623

JC 8/18/2020

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloroethane	U		0.0432	0.200	1	07/16/2020 01:52	WG1509623
Chloroform	U		0.0166	0.100	1	07/16/2020 01:52	WG1509623
Chloromethane	U		0.0556	0.500	1	07/16/2020 01:52	WG1509623
2-Chlorotoluene	U		0.0368	0.100	1	07/16/2020 01:52	WG1509623
4-Chlorotoluene	U		0.0452	0.200	1	07/16/2020 01:52	WG1509623
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	07/16/2020 01:52	WG1509623
1,2-Dibromoethane	U		0.0210	0.100	1	07/16/2020 01:52	WG1509623
Dibromomethane	U		0.0400	0.200	1	07/16/2020 01:52	WG1509623
1,2-Dichlorobenzene	U		0.0580	0.200	1	07/16/2020 01:52	WG1509623
1,3-Dichlorobenzene	U		0.0680	0.200	1	07/16/2020 01:52	WG1509623
1,4-Dichlorobenzene	U		0.0788	0.200	1	07/16/2020 01:52	WG1509623
Dichlorodifluoromethane	U		0.0327	0.100	1	07/16/2020 01:52	WG1509623
1,1-Dichloroethane	U		0.0230	0.100	1	07/16/2020 01:52	WG1509623
1,2-Dichloroethane	U		0.0190	0.100	1	07/16/2020 01:52	WG1509623
1,1-Dichloroethene	U		0.0200	0.100	1	07/16/2020 01:52	WG1509623
cis-1,2-Dichloroethene	0.400		0.0276	0.100	1	07/16/2020 01:52	WG1509623
trans-1,2-Dichloroethene	U		0.0572	0.200	1	07/16/2020 01:52	WG1509623
1,2-Dichloropropane	U		0.0508	0.200	1	07/16/2020 01:52	WG1509623
1,1-Dichloropropene	U		0.0280	0.100	1	07/16/2020 01:52	WG1509623
1,3-Dichloropropane	U		0.0700	0.200	1	07/16/2020 01:52	WG1509623
cis-1,3-Dichloropropene	U		0.0271	0.100	1	07/16/2020 01:52	WG1509623
trans-1,3-Dichloropropene	U		0.0612	0.200	1	07/16/2020 01:52	WG1509623
2,2-Dichloropropane	U		0.0317	0.100	1	07/16/2020 01:52	WG1509623
Di-isopropyl ether	U		0.0140	0.0400	1	07/16/2020 01:52	WG1509623
Ethylbenzene	U		0.0212	0.100	1	07/16/2020 01:52	WG1509623
Hexachloro-1,3-butadiene	U		0.508	1.00	1	07/16/2020 01:52	WG1509623
Isopropylbenzene	U		0.0345	0.100	1	07/16/2020 01:52	WG1509623
p-Isopropyltoluene	U		0.0932	0.200	1	07/16/2020 01:52	WG1509623
2-Butanone (MEK)	U		0.500	1.00	1	07/16/2020 01:52	WG1509623
Methylene Chloride	U		0.265	1.00	1	07/16/2020 01:52	WG1509623
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	07/16/2020 01:52	WG1509623
Methyl tert-butyl ether	U		0.0118	0.0400	1	07/16/2020 01:52	WG1509623
Naphthalene	U		0.124	0.500	1	07/16/2020 01:52	WG1509623
n-Propylbenzene	U		0.0472	0.200	1	07/16/2020 01:52	WG1509623
Styrene	U		0.109	0.500	1	07/16/2020 01:52	WG1509623
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	07/16/2020 01:52	WG1509623
1,1,2,2-Tetrachloroethane	U UJ	J0	0.0156	0.100	1	07/16/2020 01:52	WG1509623
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	07/16/2020 01:52	WG1509623
Tetrachloroethene	0.196		0.0280	0.100	1	07/16/2020 01:52	WG1509623
Toluene	2.19		0.0500	0.200	1	07/16/2020 01:52	WG1509623
1,2,3-Trichlorobenzene	U		0.0250	0.500	1	07/16/2020 01:52	WG1509623
1,2,4-Trichlorobenzene	U		0.193	0.500	1	07/16/2020 01:52	WG1509623
1,1,1-Trichloroethane	U		0.0110	0.100	1	07/16/2020 01:52	WG1509623
1,1,2-Trichloroethane	U		0.0353	0.100	1	07/16/2020 01:52	WG1509623
Trichloroethene	0.0830		0.0160	0.0400	1	07/16/2020 01:52	WG1509623
Trichlorofluoromethane	U		0.0200	0.100	1	07/16/2020 01:52	WG1509623
1,2,3-Trichloropropane	U		0.204	0.500	1	07/16/2020 01:52	WG1509623
1,2,4-Trimethylbenzene	0.0650	J	0.0464	0.200	1	07/16/2020 01:52	WG1509623
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	07/16/2020 01:52	WG1509623
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	07/16/2020 01:52	WG1509623
Vinyl chloride	1.65		0.0273	0.100	1	07/16/2020 01:52	WG1509623
Xylenes, Total	1.17		0.191	0.260	1	07/16/2020 01:52	WG1509623
Ethyl Ether	U		0.0170	0.100	1	07/16/2020 01:52	WG1509623
Tetrahydrofuran	U		0.0900	0.500	1	07/16/2020 01:52	WG1509623
Iodomethane	U		0.242	0.500	1	07/16/2020 01:52	WG1509623
Allyl chloride	U		0.580	1.00	1	07/16/2020 01:52	WG1509623

JC 8/18/2020

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Trans-1,4-Dichloro-2-butene	U UJ	J0	0.0560	0.200	1	07/16/2020 01:52	WG1509623
(S) Toluene-d8	*97.6*			*75.0-131*		*07/16/2020 01:52*	WG1509623
(S) 4-Bromofluorobenzene	*101*			*67.0-138*		*07/16/2020 01:52*	WG1509623
(S) 1,2-Dichloroethane-d4	*107*			*70.0-130*		*07/16/2020 01:52*	WG1509623

JC 8/18/2020

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Wet Chemistry by Method 2320 B-2011

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Alkalinity	1410000		8450	20000	1	07/15/2020 19:44	WG1508214

Sample Narrative:

L1238175-05 WG1508214: Endpoint pH 4.5

Wet Chemistry by Method 9056A

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Chloride	80800		379	1000	1	07/10/2020 18:06	WG1506965
Nitrate	U		48.0	100	1	07/10/2020 18:06	WG1506965
Sulfate	7660		594	5000	1	07/10/2020 18:06	WG1506965

Wet Chemistry by Method 9060A

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
TOC (Total Organic Carbon)	89200		102	1000	1	07/11/2020 20:42	WG1507487

Metals (ICPMS) by Method 6020B

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Iron	41300		48.9	100	1	07/14/2020 02:13	WG1507540
Manganese	7570		66.0	250	50	07/14/2020 11:21	WG1507540

Volatile Organic Compounds (GC) by Method NWTPHGX

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Gasoline Range Organics-NWTPH	U		31.6	100	1	07/13/2020 15:22	WG1508114
(S) a,a,a-Trifluorotoluene(FID)	*99.8*			*78.0-120*		*07/13/2020 15:22*	WG1508114

Volatile Organic Compounds (GC) by Method RSK175

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Methane	20000		2.87	6.78	10	07/14/2020 13:01	WG1508536
Ethane	476		0.296	1.29	1	07/11/2020 15:48	WG1507440
Ethene	139		0.422	1.27	1	07/11/2020 15:48	WG1507440

Volatile Organic Compounds (GC/MS) by Method 8260D

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Acetone	7.42		0.548	1.00	1	07/16/2020 02:11	WG1509623
Acrylonitrile	U		0.0760	0.500	1	07/16/2020 02:11	WG1509623
Benzene	0.0900		0.0160	0.0400	1	07/16/2020 02:11	WG1509623
Bromobenzene	U		0.0420	0.500	1	07/16/2020 02:11	WG1509623
Bromodichloromethane	U		0.0315	0.100	1	07/16/2020 02:11	WG1509623
Bromoform	U		0.239	1.00	1	07/16/2020 02:11	WG1509623
Bromomethane	U		0.148	0.500	1	07/16/2020 02:11	WG1509623
n-Butylbenzene	U		0.153	0.500	1	07/16/2020 02:11	WG1509623
sec-Butylbenzene	U		0.101	0.500	1	07/16/2020 02:11	WG1509623
tert-Butylbenzene	U		0.0620	0.200	1	07/16/2020 02:11	WG1509623
Carbon tetrachloride	U		0.0432	0.200	1	07/16/2020 02:11	WG1509623
Chlorobenzene	U		0.0229	0.100	1	07/16/2020 02:11	WG1509623
Chlorodibromomethane	U		0.0180	0.100	1	07/16/2020 02:11	WG1509623

JC 8/18/2020

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloroethane	U		0.0432	0.200	1	07/16/2020 02:11	WG1509623
Chloroform	U		0.0166	0.100	1	07/16/2020 02:11	WG1509623
Chloromethane	U		0.0556	0.500	1	07/16/2020 02:11	WG1509623
2-Chlorotoluene	U		0.0368	0.100	1	07/16/2020 02:11	WG1509623
4-Chlorotoluene	U		0.0452	0.200	1	07/16/2020 02:11	WG1509623
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	07/16/2020 02:11	WG1509623
1,2-Dibromoethane	U		0.0210	0.100	1	07/16/2020 02:11	WG1509623
Dibromomethane	U		0.0400	0.200	1	07/16/2020 02:11	WG1509623
1,2-Dichlorobenzene	U		0.0580	0.200	1	07/16/2020 02:11	WG1509623
1,3-Dichlorobenzene	U		0.0680	0.200	1	07/16/2020 02:11	WG1509623
1,4-Dichlorobenzene	U		0.0788	0.200	1	07/16/2020 02:11	WG1509623
Dichlorodifluoromethane	U		0.0327	0.100	1	07/16/2020 02:11	WG1509623
1,1-Dichloroethane	U		0.0230	0.100	1	07/16/2020 02:11	WG1509623
1,2-Dichloroethane	U		0.0190	0.100	1	07/16/2020 02:11	WG1509623
1,1-Dichloroethene	0.253		0.0200	0.100	1	07/16/2020 02:11	WG1509623
cis-1,2-Dichloroethene	40.8		0.0276	0.100	1	07/16/2020 02:11	WG1509623
trans-1,2-Dichloroethene	3.78		0.0572	0.200	1	07/16/2020 02:11	WG1509623
1,2-Dichloropropane	U		0.0508	0.200	1	07/16/2020 02:11	WG1509623
1,1-Dichloropropene	U		0.0280	0.100	1	07/16/2020 02:11	WG1509623
1,3-Dichloropropane	U		0.0700	0.200	1	07/16/2020 02:11	WG1509623
cis-1,3-Dichloropropene	U		0.0271	0.100	1	07/16/2020 02:11	WG1509623
trans-1,3-Dichloropropene	U		0.0612	0.200	1	07/16/2020 02:11	WG1509623
2,2-Dichloropropane	U		0.0317	0.100	1	07/16/2020 02:11	WG1509623
Di-isopropyl ether	U		0.0140	0.0400	1	07/16/2020 02:11	WG1509623
Ethylbenzene	U		0.0212	0.100	1	07/16/2020 02:11	WG1509623
Hexachloro-1,3-butadiene	U		0.508	1.00	1	07/16/2020 02:11	WG1509623
Isopropylbenzene	U		0.0345	0.100	1	07/16/2020 02:11	WG1509623
p-Isopropyltoluene	U		0.0932	0.200	1	07/16/2020 02:11	WG1509623
2-Butanone (MEK)	U		0.500	1.00	1	07/16/2020 02:11	WG1509623
Methylene Chloride	U		0.265	1.00	1	07/16/2020 02:11	WG1509623
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	07/16/2020 02:11	WG1509623
Methyl tert-butyl ether	U		0.0118	0.0400	1	07/16/2020 02:11	WG1509623
Naphthalene	U		0.124	0.500	1	07/16/2020 02:11	WG1509623
n-Propylbenzene	U		0.0472	0.200	1	07/16/2020 02:11	WG1509623
Styrene	U		0.109	0.500	1	07/16/2020 02:11	WG1509623
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	07/16/2020 02:11	WG1509623
1,1,2,2-Tetrachloroethane	U UJ	J0	0.0156	0.100	1	07/16/2020 02:11	WG1509623
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	07/16/2020 02:11	WG1509623
Tetrachloroethene	0.130		0.0280	0.100	1	07/16/2020 02:11	WG1509623
Toluene	0.389		0.0500	0.200	1	07/16/2020 02:11	WG1509623
1,2,3-Trichlorobenzene	U		0.0250	0.500	1	07/16/2020 02:11	WG1509623
1,2,4-Trichlorobenzene	U		0.193	0.500	1	07/16/2020 02:11	WG1509623
1,1,1-Trichloroethane	U		0.0110	0.100	1	07/16/2020 02:11	WG1509623
1,1,2-Trichloroethane	U		0.0353	0.100	1	07/16/2020 02:11	WG1509623
Trichloroethene	0.250		0.0160	0.0400	1	07/16/2020 02:11	WG1509623
Trichlorofluoromethane	U		0.0200	0.100	1	07/16/2020 02:11	WG1509623
1,2,3-Trichloropropane	U		0.204	0.500	1	07/16/2020 02:11	WG1509623
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	07/16/2020 02:11	WG1509623
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	07/16/2020 02:11	WG1509623
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	07/16/2020 02:11	WG1509623
Vinyl chloride	77.3		0.0273	0.100	1	07/16/2020 02:11	WG1509623
Xylenes, Total	U		0.191	0.260	1	07/16/2020 02:11	WG1509623
Ethyl Ether	U		0.0170	0.100	1	07/16/2020 02:11	WG1509623
Tetrahydrofuran	U		0.0900	0.500	1	07/16/2020 02:11	WG1509623
Iodomethane	U		0.242	0.500	1	07/16/2020 02:11	WG1509623
Allyl chloride	U		0.580	1.00	1	07/16/2020 02:11	WG1509623

JC 8/18/2020

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Volatile Organic Compounds (GC/MS) by Method 8260D

	Result		Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l			ug/l	ug/l		date / time	
Trans-1,4-Dichloro-2-butene	U	UJ	J0	0.0560	0.200	1	07/16/2020 02:11	WG1509623
(S) Toluene-d8	*95.8*				*75.0-131*		*07/16/2020 02:11*	WG1509623
(S) 4-Bromofluorobenzene	*99.5*				*67.0-138*		*07/16/2020 02:11*	WG1509623
(S) 1,2-Dichloroethane-d4	*108*				*70.0-130*		*07/16/2020 02:11*	WG1509623

JC 8/18/2020

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Wet Chemistry by Method 2320 B-2011

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Alkalinity	256000		8450	20000	1	07/15/2020 19:53	WG1508214

Sample Narrative:

L1238175-06 WG1508214: Endpoint pH 4.5

Wet Chemistry by Method 9056A

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Chloride	12000		379	1000	1	07/10/2020 18:23	WG1506965
Nitrate	U		48.0	100	1	07/10/2020 18:23	WG1506965
Sulfate	U		594	5000	1	07/10/2020 18:23	WG1506965

Wet Chemistry by Method 9060A

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
TOC (Total Organic Carbon)	2160	~~B~~	102	1000	1	07/11/2020 20:58	WG1507487

Metals (ICPMS) by Method 6020B

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Iron	7060		48.9	100	1	07/14/2020 02:17	WG1507540
Manganese	319		1.32	5.00	1	07/14/2020 02:17	WG1507540

Volatile Organic Compounds (GC) by Method NWTPHGX

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Gasoline Range Organics-NWTPH	U		31.6	100	1	07/13/2020 15:45	WG1508114
(S) a,a,a-Trifluorotoluene(FID)	*101*			*78.0-120*		*07/13/2020 15:45*	WG1508114

Volatile Organic Compounds (GC) by Method RSK175

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Methane	1600		0.287	0.678	1	07/11/2020 15:51	WG1507440
Ethane	U		0.296	1.29	1	07/11/2020 15:51	WG1507440
Ethene	18.1		0.422	1.27	1	07/11/2020 15:51	WG1507440

Volatile Organic Compounds (GC/MS) by Method 8260D

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Acetone	8.47		0.548	1.00	1	07/16/2020 02:30	WG1509623
Acrylonitrile	U		0.0760	0.500	1	07/16/2020 02:30	WG1509623
Benzene	U		0.0160	0.0400	1	07/16/2020 02:30	WG1509623
Bromobenzene	U		0.0420	0.500	1	07/16/2020 02:30	WG1509623
Bromodichloromethane	U		0.0315	0.100	1	07/16/2020 02:30	WG1509623
Bromoform	U		0.239	1.00	1	07/16/2020 02:30	WG1509623
Bromomethane	U		0.148	0.500	1	07/16/2020 02:30	WG1509623
n-Butylbenzene	U		0.153	0.500	1	07/16/2020 02:30	WG1509623
sec-Butylbenzene	U		0.101	0.500	1	07/16/2020 02:30	WG1509623
tert-Butylbenzene	U		0.0620	0.200	1	07/16/2020 02:30	WG1509623
Carbon tetrachloride	U		0.0432	0.200	1	07/16/2020 02:30	WG1509623
Chlorobenzene	U		0.0229	0.100	1	07/16/2020 02:30	WG1509623
Chlorodibromomethane	U		0.0180	0.100	1	07/16/2020 02:30	WG1509623

JC 8/18/2020

MW-168-070920

Collected date/time: 07/09/20 11:40

SAMPLE RESULTS - 06

L1238175

Volatile Organic Compounds (GC/MS) by Method 8260D

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Chloroethane	U		0.0432	0.200	1	07/16/2020 02:30	WG1509623
Chloroform	U		0.0166	0.100	1	07/16/2020 02:30	WG1509623
Chloromethane	U		0.0556	0.500	1	07/16/2020 02:30	WG1509623
2-Chlorotoluene	U		0.0368	0.100	1	07/16/2020 02:30	WG1509623
4-Chlorotoluene	U		0.0452	0.200	1	07/16/2020 02:30	WG1509623
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	07/16/2020 02:30	WG1509623
1,2-Dibromoethane	U		0.0210	0.100	1	07/16/2020 02:30	WG1509623
Dibromomethane	U		0.0400	0.200	1	07/16/2020 02:30	WG1509623
1,2-Dichlorobenzene	U		0.0580	0.200	1	07/16/2020 02:30	WG1509623
1,3-Dichlorobenzene	U		0.0680	0.200	1	07/16/2020 02:30	WG1509623
1,4-Dichlorobenzene	U		0.0788	0.200	1	07/16/2020 02:30	WG1509623
Dichlorodifluoromethane	U		0.0327	0.100	1	07/16/2020 02:30	WG1509623
1,1-Dichloroethane	U		0.0230	0.100	1	07/16/2020 02:30	WG1509623
1,2-Dichloroethane	U		0.0190	0.100	1	07/16/2020 02:30	WG1509623
1,1-Dichloroethene	U		0.0200	0.100	1	07/16/2020 02:30	WG1509623
cis-1,2-Dichloroethene	0.175		0.0276	0.100	1	07/16/2020 02:30	WG1509623
trans-1,2-Dichloroethene	U		0.0572	0.200	1	07/16/2020 02:30	WG1509623
1,2-Dichloropropane	U		0.0508	0.200	1	07/16/2020 02:30	WG1509623
1,1-Dichloropropene	U		0.0280	0.100	1	07/16/2020 02:30	WG1509623
1,3-Dichloropropane	U		0.0700	0.200	1	07/16/2020 02:30	WG1509623
cis-1,3-Dichloropropene	U		0.0271	0.100	1	07/16/2020 02:30	WG1509623
trans-1,3-Dichloropropene	U		0.0612	0.200	1	07/16/2020 02:30	WG1509623
2,2-Dichloropropane	U		0.0317	0.100	1	07/16/2020 02:30	WG1509623
Di-isopropyl ether	U		0.0140	0.0400	1	07/16/2020 02:30	WG1509623
Ethylbenzene	U		0.0212	0.100	1	07/16/2020 02:30	WG1509623
Hexachloro-1,3-butadiene	U		0.508	1.00	1	07/16/2020 02:30	WG1509623
Isopropylbenzene	U		0.0345	0.100	1	07/16/2020 02:30	WG1509623
p-Isopropyltoluene	U		0.0932	0.200	1	07/16/2020 02:30	WG1509623
2-Butanone (MEK)	U		0.500	1.00	1	07/16/2020 02:30	WG1509623
Methylene Chloride	U		0.265	1.00	1	07/16/2020 02:30	WG1509623
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	07/16/2020 02:30	WG1509623
Methyl tert-butyl ether	U		0.0118	0.0400	1	07/16/2020 02:30	WG1509623
Naphthalene	U		0.124	0.500	1	07/16/2020 02:30	WG1509623
n-Propylbenzene	U		0.0472	0.200	1	07/16/2020 02:30	WG1509623
Styrene	U		0.109	0.500	1	07/16/2020 02:30	WG1509623
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	07/16/2020 02:30	WG1509623
1,1,2,2-Tetrachloroethane	U UJ	J0	0.0156	0.100	1	07/16/2020 02:30	WG1509623
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	07/16/2020 02:30	WG1509623
Tetrachloroethene	0.147		0.0280	0.100	1	07/16/2020 02:30	WG1509623
Toluene	2.61		0.0500	0.200	1	07/16/2020 02:30	WG1509623
1,2,3-Trichlorobenzene	U		0.0250	0.500	1	07/16/2020 02:30	WG1509623
1,2,4-Trichlorobenzene	U		0.193	0.500	1	07/16/2020 02:30	WG1509623
1,1,1-Trichloroethane	U		0.0110	0.100	1	07/16/2020 02:30	WG1509623
1,1,2-Trichloroethane	U		0.0353	0.100	1	07/16/2020 02:30	WG1509623
Trichloroethene	U		0.0160	0.0400	1	07/16/2020 02:30	WG1509623
Trichlorofluoromethane	U		0.0200	0.100	1	07/16/2020 02:30	WG1509623
1,2,3-Trichloropropane	U		0.204	0.500	1	07/16/2020 02:30	WG1509623
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	07/16/2020 02:30	WG1509623
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	07/16/2020 02:30	WG1509623
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	07/16/2020 02:30	WG1509623
Vinyl chloride	U		0.0273	0.100	1	07/16/2020 02:30	WG1509623
Xylenes, Total	1.20		0.191	0.260	1	07/16/2020 02:30	WG1509623
Ethyl Ether	U		0.0170	0.100	1	07/16/2020 02:30	WG1509623
Tetrahydrofuran	U		0.0900	0.500	1	07/16/2020 02:30	WG1509623
Iodomethane	U		0.242	0.500	1	07/16/2020 02:30	WG1509623
Allyl chloride	U		0.580	1.00	1	07/16/2020 02:30	WG1509623

JC 8/18/2020

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l		Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Trans-1,4-Dichloro-2-butene	U	UJ	J0	0.0560	0.200	1	07/16/2020 02:30	WG1509623
(S) Toluene-d8	*95.2*				*75.0-131*		*07/16/2020 02:30*	WG1509623
(S) 4-Bromofluorobenzene	*98.8*				*67.0-138*		*07/16/2020 02:30*	WG1509623
(S) 1,2-Dichloroethane-d4	*108*				*70.0-130*		*07/16/2020 02:30*	WG1509623

JC 8/18/2020

Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Alkalinity	717000		8450	20000	1	07/15/2020 20:02	WG1508214

Sample Narrative:

L1238175-07 WG1508214: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chloride	55800		379	1000	1	07/10/2020 18:57	WG1506965
Nitrate	U		48.0	100	1	07/10/2020 18:57	WG1506965
Sulfate	U		594	5000	1	07/10/2020 18:57	WG1506965

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
TOC (Total Organic Carbon)	19300		102	1000	1	07/11/2020 22:14	WG1507487

Metals (ICPMS) by Method 6020B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Iron	18900		48.9	100	1	07/14/2020 02:20	WG1507540
Manganese	1340		1.32	5.00	1	07/14/2020 02:20	WG1507540

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Gasoline Range Organics-NWTPH	U		31.6	100	1	07/13/2020 16:31	WG1508114
(S) a,a,a-Trifluorotoluene(FID)	*101*			*78.0-120*		*07/13/2020 16:31*	WG1508114

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Methane	30000		2.87	6.78	10	07/14/2020 13:03	WG1508536
Ethane	505		0.296	1.29	1	07/11/2020 15:53	WG1507440
Ethene	158		0.422	1.27	1	07/11/2020 15:53	WG1507440

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	4.04	J	0.548	1.00	1	07/16/2020 02:49	WG1509623
Acrylonitrile	U		0.0760	0.500	1	07/16/2020 02:49	WG1509623
Benzene	0.0460		0.0160	0.0400	1	07/16/2020 02:49	WG1509623
Bromobenzene	U		0.0420	0.500	1	07/16/2020 02:49	WG1509623
Bromodichloromethane	U		0.0315	0.100	1	07/16/2020 02:49	WG1509623
Bromoform	U		0.239	1.00	1	07/16/2020 02:49	WG1509623
Bromomethane	U		0.148	0.500	1	07/16/2020 02:49	WG1509623
n-Butylbenzene	U		0.153	0.500	1	07/16/2020 02:49	WG1509623
sec-Butylbenzene	U		0.101	0.500	1	07/16/2020 02:49	WG1509623
tert-Butylbenzene	U		0.0620	0.200	1	07/16/2020 02:49	WG1509623
Carbon tetrachloride	U		0.0432	0.200	1	07/16/2020 02:49	WG1509623
Chlorobenzene	U		0.0229	0.100	1	07/16/2020 02:49	WG1509623
Chlorodibromomethane	U		0.0180	0.100	1	07/16/2020 02:49	WG1509623

JC 8/18/2020

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloroethane	U		0.0432	0.200	1	07/16/2020 02:49	WG1509623
Chloroform	U		0.0166	0.100	1	07/16/2020 02:49	WG1509623
Chloromethane	U		0.0556	0.500	1	07/16/2020 02:49	WG1509623
2-Chlorotoluene	U		0.0368	0.100	1	07/16/2020 02:49	WG1509623
4-Chlorotoluene	U		0.0452	0.200	1	07/16/2020 02:49	WG1509623
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	07/16/2020 02:49	WG1509623
1,2-Dibromoethane	U		0.0210	0.100	1	07/16/2020 02:49	WG1509623
Dibromomethane	U		0.0400	0.200	1	07/16/2020 02:49	WG1509623
1,2-Dichlorobenzene	U		0.0580	0.200	1	07/16/2020 02:49	WG1509623
1,3-Dichlorobenzene	U		0.0680	0.200	1	07/16/2020 02:49	WG1509623
1,4-Dichlorobenzene	U		0.0788	0.200	1	07/16/2020 02:49	WG1509623
Dichlorodifluoromethane	U		0.0327	0.100	1	07/16/2020 02:49	WG1509623
1,1-Dichloroethane	U		0.0230	0.100	1	07/16/2020 02:49	WG1509623
1,2-Dichloroethane	U		0.0190	0.100	1	07/16/2020 02:49	WG1509623
1,1-Dichloroethene	U		0.0200	0.100	1	07/16/2020 02:49	WG1509623
cis-1,2-Dichloroethene	24.3		0.0276	0.100	1	07/16/2020 02:49	WG1509623
trans-1,2-Dichloroethene	1.50		0.0572	0.200	1	07/16/2020 02:49	WG1509623
1,2-Dichloropropane	U		0.0508	0.200	1	07/16/2020 02:49	WG1509623
1,1-Dichloropropene	U		0.0280	0.100	1	07/16/2020 02:49	WG1509623
1,3-Dichloropropane	U		0.0700	0.200	1	07/16/2020 02:49	WG1509623
cis-1,3-Dichloropropene	U		0.0271	0.100	1	07/16/2020 02:49	WG1509623
trans-1,3-Dichloropropene	U		0.0612	0.200	1	07/16/2020 02:49	WG1509623
2,2-Dichloropropane	U		0.0317	0.100	1	07/16/2020 02:49	WG1509623
Di-isopropyl ether	U		0.0140	0.0400	1	07/16/2020 02:49	WG1509623
Ethylbenzene	U		0.0212	0.100	1	07/16/2020 02:49	WG1509623
Hexachloro-1,3-butadiene	U		0.508	1.00	1	07/16/2020 02:49	WG1509623
Isopropylbenzene	U		0.0345	0.100	1	07/16/2020 02:49	WG1509623
p-Isopropyltoluene	U		0.0932	0.200	1	07/16/2020 02:49	WG1509623
2-Butanone (MEK)	U		0.500	1.00	1	07/16/2020 02:49	WG1509623
Methylene Chloride	U		0.265	1.00	1	07/16/2020 02:49	WG1509623
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	07/16/2020 02:49	WG1509623
Methyl tert-butyl ether	U		0.0118	0.0400	1	07/16/2020 02:49	WG1509623
Naphthalene	U		0.124	0.500	1	07/16/2020 02:49	WG1509623
n-Propylbenzene	U		0.0472	0.200	1	07/16/2020 02:49	WG1509623
Styrene	U		0.109	0.500	1	07/16/2020 02:49	WG1509623
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	07/16/2020 02:49	WG1509623
1,1,2,2-Tetrachloroethane	U	UJ J0	0.0156	0.100	1	07/16/2020 02:49	WG1509623
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	07/16/2020 02:49	WG1509623
Tetrachloroethene	0.130		0.0280	0.100	1	07/16/2020 02:49	WG1509623
Toluene	1.04		0.0500	0.200	1	07/16/2020 02:49	WG1509623
1,2,3-Trichlorobenzene	U		0.0250	0.500	1	07/16/2020 02:49	WG1509623
1,2,4-Trichlorobenzene	U		0.193	0.500	1	07/16/2020 02:49	WG1509623
1,1,1-Trichloroethane	U		0.0110	0.100	1	07/16/2020 02:49	WG1509623
1,1,2-Trichloroethane	U		0.0353	0.100	1	07/16/2020 02:49	WG1509623
Trichloroethene	0.0930		0.0160	0.0400	1	07/16/2020 02:49	WG1509623
Trichlorofluoromethane	U		0.0200	0.100	1	07/16/2020 02:49	WG1509623
1,2,3-Trichloropropane	U		0.204	0.500	1	07/16/2020 02:49	WG1509623
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	07/16/2020 02:49	WG1509623
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	07/16/2020 02:49	WG1509623
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	07/16/2020 02:49	WG1509623
Vinyl chloride	45.1		0.0273	0.100	1	07/16/2020 02:49	WG1509623
Xylenes, Total	0.602		0.191	0.260	1	07/16/2020 02:49	WG1509623
Ethyl Ether	U		0.0170	0.100	1	07/16/2020 02:49	WG1509623
Tetrahydrofuran	2.24		0.0900	0.500	1	07/16/2020 02:49	WG1509623
Iodomethane	U		0.242	0.500	1	07/16/2020 02:49	WG1509623
Allyl chloride	U		0.580	1.00	1	07/16/2020 02:49	WG1509623

JC
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1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Trans-1,4-Dichloro-2-butene	U UJ	J0	0.0560	0.200	1	07/16/2020 02:49	WG1509623
(S) Toluene-d8	*96.3*			*75.0-131*		*07/16/2020 02:49*	WG1509623
(S) 4-Bromofluorobenzene	*99.2*			*67.0-138*		*07/16/2020 02:49*	WG1509623
(S) 1,2-Dichloroethane-d4	*108*			*70.0-130*		*07/16/2020 02:49*	WG1509623

JC 8/18/2020

/ 8 1 / 8 C J 0 2 0 2 / 8 1 / 8 C J

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	356000		8450	20000	1	07/16/2020 12:12	WG1508215

Sample Narrative:

L1238175-08 WG1508215: Endpoint pH 4.5 HEADSPACE

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	33500		379	1000	1	07/10/2020 19:14	WG1506965
Nitrate	U		48.0	100	1	07/10/2020 19:14	WG1506965
Sulfate	879	J	594	5000	1	07/10/2020 19:14	WG1506965

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	7420		102	1000	1	07/11/2020 22:36	WG1507487

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	14300		48.9	100	1	07/14/2020 02:23	WG1507540
Manganese	239		1.32	5.00	1	07/14/2020 02:23	WG1507540

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	U		31.6	100	1	07/13/2020 16:53	WG1508114
(S) a,a,a-Trifluorotoluene(FID)	*101*			*78.0-120*		*07/13/2020 16:53*	WG1508114

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	10500		2.87	6.78	10	07/14/2020 13:06	WG1508536
Ethane	93.0		0.296	1.29	1	07/11/2020 15:56	WG1507440
Ethene	U		0.422	1.27	1	07/11/2020 15:56	WG1507440

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	4.16		0.548	1.00	1	07/17/2020 07:34	WG1510563
Acrylonitrile	U		0.0760	0.500	1	07/17/2020 07:34	WG1510563
Benzene	0.0440		0.0160	0.0400	1	07/17/2020 07:34	WG1510563
Bromobenzene	U		0.0420	0.500	1	07/17/2020 07:34	WG1510563
Bromodichloromethane	U		0.0315	0.100	1	07/17/2020 07:34	WG1510563
Bromoform	U		0.239	1.00	1	07/17/2020 07:34	WG1510563
Bromomethane	U		0.148	0.500	1	07/17/2020 07:34	WG1510563
n-Butylbenzene	U	UJ J0	0.153	0.500	1	07/17/2020 07:34	WG1510563
sec-Butylbenzene	U		0.101	0.500	1	07/17/2020 07:34	WG1510563
tert-Butylbenzene	U		0.0620	0.200	1	07/17/2020 07:34	WG1510563
Carbon tetrachloride	U		0.0432	0.200	1	07/17/2020 07:34	WG1510563
Chlorobenzene	U		0.0229	0.100	1	07/17/2020 07:34	WG1510563
Chlorodibromomethane	U		0.0180	0.100	1	07/17/2020 07:34	WG1510563

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Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloroethane	U		0.0432	0.200	1	07/17/2020 07:34	WG1510563
Chloroform	U		0.0166	0.100	1	07/17/2020 07:34	WG1510563
Chloromethane	U		0.0556	0.500	1	07/17/2020 07:34	WG1510563
2-Chlorotoluene	U		0.0368	0.100	1	07/17/2020 07:34	WG1510563
4-Chlorotoluene	U		0.0452	0.200	1	07/17/2020 07:34	WG1510563
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	07/17/2020 07:34	WG1510563
1,2-Dibromoethane	U		0.0210	0.100	1	07/17/2020 07:34	WG1510563
Dibromomethane	U		0.0400	0.200	1	07/17/2020 07:34	WG1510563
1,2-Dichlorobenzene	U UJ	J4	0.0580	0.200	1	07/17/2020 07:34	WG1510563
1,3-Dichlorobenzene	U		0.0680	0.200	1	07/17/2020 07:34	WG1510563
1,4-Dichlorobenzene	U		0.0788	0.200	1	07/17/2020 07:34	WG1510563
Dichlorodifluoromethane	U		0.0327	0.100	1	07/17/2020 07:34	WG1510563
1,1-Dichloroethane	U		0.0230	0.100	1	07/17/2020 07:34	WG1510563
1,2-Dichloroethane	U		0.0190	0.100	1	07/17/2020 07:34	WG1510563
1,1-Dichloroethene	U		0.0200	0.100	1	07/17/2020 07:34	WG1510563
cis-1,2-Dichloroethene	0.473		0.0276	0.100	1	07/17/2020 07:34	WG1510563
trans-1,2-Dichloroethene	U		0.0572	0.200	1	07/17/2020 07:34	WG1510563
1,2-Dichloropropane	U		0.0508	0.200	1	07/17/2020 07:34	WG1510563
1,1-Dichloropropene	U		0.0280	0.100	1	07/17/2020 07:34	WG1510563
1,3-Dichloropropane	U		0.0700	0.200	1	07/17/2020 07:34	WG1510563
cis-1,3-Dichloropropene	U		0.0271	0.100	1	07/17/2020 07:34	WG1510563
trans-1,3-Dichloropropene	U		0.0612	0.200	1	07/17/2020 07:34	WG1510563
2,2-Dichloropropane	U		0.0317	0.100	1	07/17/2020 07:34	WG1510563
Di-isopropyl ether	U		0.0140	0.0400	1	07/17/2020 07:34	WG1510563
Ethylbenzene	0.0870	J	0.0212	0.100	1	07/17/2020 07:34	WG1510563
Hexachloro-1,3-butadiene	U		0.508	1.00	1	07/17/2020 07:34	WG1510563
Isopropylbenzene	0.0650	J	0.0345	0.100	1	07/17/2020 07:34	WG1510563
p-Isopropyltoluene	U		0.0932	0.200	1	07/17/2020 07:34	WG1510563
2-Butanone (MEK)	U		0.500	1.00	1	07/17/2020 07:34	WG1510563
Methylene Chloride	U		0.265	1.00	1	07/17/2020 07:34	WG1510563
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	07/17/2020 07:34	WG1510563
Methyl tert-butyl ether	U		0.0118	0.0400	1	07/17/2020 07:34	WG1510563
Naphthalene	U		0.124	0.500	1	07/17/2020 07:34	WG1510563
n-Propylbenzene	U		0.0472	0.200	1	07/17/2020 07:34	WG1510563
Styrene	U		0.109	0.500	1	07/17/2020 07:34	WG1510563
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	07/17/2020 07:34	WG1510563
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	07/17/2020 07:34	WG1510563
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	07/17/2020 07:34	WG1510563
Tetrachloroethene	U		0.0280	0.100	1	07/17/2020 07:34	WG1510563
Toluene	2.23		0.0500	0.200	1	07/17/2020 07:34	WG1510563
1,2,3-Trichlorobenzene	U		0.0250	0.500	1	07/17/2020 07:34	WG1510563
1,2,4-Trichlorobenzene	U		0.193	0.500	1	07/17/2020 07:34	WG1510563
1,1,1-Trichloroethane	U		0.0110	0.100	1	07/17/2020 07:34	WG1510563
1,1,2-Trichloroethane	U		0.0353	0.100	1	07/17/2020 07:34	WG1510563
Trichloroethene	0.0670		0.0160	0.0400	1	07/17/2020 07:34	WG1510563
Trichlorofluoromethane	U		0.0200	0.100	1	07/17/2020 07:34	WG1510563
1,2,3-Trichloropropane	U		0.204	0.500	1	07/17/2020 07:34	WG1510563
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	07/17/2020 07:34	WG1510563
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	07/17/2020 07:34	WG1510563
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	07/17/2020 07:34	WG1510563
Vinyl chloride	0.948		0.0273	0.100	1	07/17/2020 07:34	WG1510563
Xylenes, Total	0.926		0.191	0.260	1	07/17/2020 07:34	WG1510563
Ethyl Ether	U		0.0170	0.100	1	07/17/2020 07:34	WG1510563
Tetrahydrofuran	0.721		0.0900	0.500	1	07/17/2020 07:34	WG1510563
Iodomethane	U		0.242	0.500	1	07/17/2020 07:34	WG1510563
Allyl chloride	U		0.580	1.00	1	07/17/2020 07:34	WG1510563

JC 8/18/2020

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l		Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Trans-1,4-Dichloro-2-butene	U	UJ	J0	0.0560	0.200	1	07/17/2020 07:34	WG1510563
(S) Toluene-d8	*95.1*				*75.0-131*		*07/17/2020 07:34*	WG1510563
(S) 4-Bromofluorobenzene	*99.7*				*67.0-138*		*07/17/2020 07:34*	WG1510563
(S) 1,2-Dichloroethane-d4	*107*				*70.0-130*		*07/17/2020 07:34*	WG1510563

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Wet Chemistry by Method 2320 B-2011

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Alkalinity	701000		8450	20000	1	07/16/2020 12:22	WG1508215

Sample Narrative:

L1238175-09 WG1508215: Endpoint pH 4.5 HEADSPACE

Wet Chemistry by Method 9056A

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Chloride	55300		379	1000	1	07/10/2020 20:22	WG1506965
Nitrate	U		48.0	100	1	07/10/2020 20:22	WG1506965
Sulfate	U		594	5000	1	07/10/2020 20:22	WG1506965

Wet Chemistry by Method 9060A

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
TOC (Total Organic Carbon)	18800		102	1000	1	07/11/2020 22:59	WG1507487

Metals (ICPMS) by Method 6020B

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Iron	18700		48.9	100	1	07/14/2020 02:26	WG1507540
Manganese	1350		1.32	5.00	1	07/14/2020 02:26	WG1507540

Volatile Organic Compounds (GC) by Method NWTPHGX

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Gasoline Range Organics-NWTPH	U		31.6	100	1	07/13/2020 17:15	WG1508114
(S) a,a,a-Trifluorotoluene(FID)	*101*			*78.0-120*		*07/13/2020 17:15*	WG1508114

Volatile Organic Compounds (GC) by Method RSK175

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Methane	39200		2.87	6.78	10	07/14/2020 13:09	WG1508536
Ethane	431		0.296	1.29	1	07/11/2020 15:59	WG1507440
Ethene	132		0.422	1.27	1	07/11/2020 15:59	WG1507440

Volatile Organic Compounds (GC/MS) by Method 8260D

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Acetone	2.73	J	0.548	1.00	1	07/17/2020 07:53	WG1510563
Acrylonitrile	U		0.0760	0.500	1	07/17/2020 07:53	WG1510563
Benzene	0.0400	J	0.0160	0.0400	1	07/17/2020 07:53	WG1510563
Bromobenzene	U		0.0420	0.500	1	07/17/2020 07:53	WG1510563
Bromodichloromethane	U		0.0315	0.100	1	07/17/2020 07:53	WG1510563
Bromoform	U		0.239	1.00	1	07/17/2020 07:53	WG1510563
Bromomethane	U		0.148	0.500	1	07/17/2020 07:53	WG1510563
n-Butylbenzene	U	UJ J0	0.153	0.500	1	07/17/2020 07:53	WG1510563
sec-Butylbenzene	U		0.101	0.500	1	07/17/2020 07:53	WG1510563
tert-Butylbenzene	U		0.0620	0.200	1	07/17/2020 07:53	WG1510563
Carbon tetrachloride	U		0.0432	0.200	1	07/17/2020 07:53	WG1510563
Chlorobenzene	U		0.0229	0.100	1	07/17/2020 07:53	WG1510563
Chlorodibromomethane	U		0.0180	0.100	1	07/17/2020 07:53	WG1510563

JC 8/18/2020

MW-166-070920

Collected date/time: 07/09/20 12:55

SAMPLE RESULTS - 09

L1238175

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch	
Chloroethane	U		0.0432	0.200	1	07/17/2020 07:53	WG1510563	
Chloroform	U		0.0166	0.100	1	07/17/2020 07:53	WG1510563	
Chloromethane	U		0.0556	0.500	1	07/17/2020 07:53	WG1510563	
2-Chlorotoluene	U		0.0368	0.100	1	07/17/2020 07:53	WG1510563	
4-Chlorotoluene	U		0.0452	0.200	1	07/17/2020 07:53	WG1510563	
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	07/17/2020 07:53	WG1510563	
1,2-Dibromoethane	U		0.0210	0.100	1	07/17/2020 07:53	WG1510563	
Dibromomethane	U		0.0400	0.200	1	07/17/2020 07:53	WG1510563	
1,2-Dichlorobenzene	U	UJ J4	0.0580	0.200	1	07/17/2020 07:53	WG1510563	
1,3-Dichlorobenzene	U		0.0680	0.200	1	07/17/2020 07:53	WG1510563	
1,4-Dichlorobenzene	U		0.0788	0.200	1	07/17/2020 07:53	WG1510563	
Dichlorodifluoromethane	U		0.0327	0.100	1	07/17/2020 07:53	WG1510563	
1,1-Dichloroethane	U		0.0230	0.100	1	07/17/2020 07:53	WG1510563	
1,2-Dichloroethane	U		0.0190	0.100	1	07/17/2020 07:53	WG1510563	
1,1-Dichloroethene	0.0420	J	0.0200	0.100	1	07/17/2020 07:53	WG1510563	
cis-1,2-Dichloroethene	21.7		0.0276	0.100	1	07/17/2020 07:53	WG1510563	
trans-1,2-Dichloroethene	1.41		0.0572	0.200	1	07/17/2020 07:53	WG1510563	
1,2-Dichloropropane	U		0.0508	0.200	1	07/17/2020 07:53	WG1510563	
1,1-Dichloropropene	U		0.0280	0.100	1	07/17/2020 07:53	WG1510563	
1,3-Dichloropropane	U		0.0700	0.200	1	07/17/2020 07:53	WG1510563	
cis-1,3-Dichloropropene	U		0.0271	0.100	1	07/17/2020 07:53	WG1510563	
trans-1,3-Dichloropropene	U		0.0612	0.200	1	07/17/2020 07:53	WG1510563	
2,2-Dichloropropane	U		0.0317	0.100	1	07/17/2020 07:53	WG1510563	
Di-isopropyl ether	U		0.0140	0.0400	1	07/17/2020 07:53	WG1510563	
Ethylbenzene	0.0510	J	0.0212	0.100	1	07/17/2020 07:53	WG1510563	
Hexachloro-1,3-butadiene	U		0.508	1.00	1	07/17/2020 07:53	WG1510563	
Isopropylbenzene	U		0.0345	0.100	1	07/17/2020 07:53	WG1510563	
p-Isopropyltoluene	U		0.0932	0.200	1	07/17/2020 07:53	WG1510563	
2-Butanone (MEK)	U		0.500	1.00	1	07/17/2020 07:53	WG1510563	
Methylene Chloride	U		0.265	1.00	1	07/17/2020 07:53	WG1510563	
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	07/17/2020 07:53	WG1510563	
Methyl tert-butyl ether	U		0.0118	0.0400	1	07/17/2020 07:53	WG1510563	
Naphthalene	U		0.124	0.500	1	07/17/2020 07:53	WG1510563	
n-Propylbenzene	U		0.0472	0.200	1	07/17/2020 07:53	WG1510563	
Styrene	U		0.109	0.500	1	07/17/2020 07:53	WG1510563	
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	07/17/2020 07:53	WG1510563	
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	07/17/2020 07:53	WG1510563	
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	07/17/2020 07:53	WG1510563	
Tetrachloroethene	U		0.0280	0.100	1	07/17/2020 07:53	WG1510563	
Toluene	1.13		0.0500	0.200	1	07/17/2020 07:53	WG1510563	
1,2,3-Trichlorobenzene	U		0.0250	0.500	1	07/17/2020 07:53	WG1510563	
1,2,4-Trichlorobenzene	U		0.193	0.500	1	07/17/2020 07:53	WG1510563	
1,1,1-Trichloroethane	U		0.0110	0.100	1	07/17/2020 07:53	WG1510563	
1,1,2-Trichloroethane	U		0.0353	0.100	1	07/17/2020 07:53	WG1510563	
Trichloroethene	0.0520		0.0160	0.0400	1	07/17/2020 07:53	WG1510563	
Trichlorofluoromethane	U		0.0200	0.100	1	07/17/2020 07:53	WG1510563	
1,2,3-Trichloropropane	U		0.204	0.500	1	07/17/2020 07:53	WG1510563	
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	07/17/2020 07:53	WG1510563	
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	07/17/2020 07:53	WG1510563	
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	07/17/2020 07:53	WG1510563	
Vinyl chloride	42.3		0.0273	0.100	1	07/17/2020 07:53	WG1510563	
Xylenes, Total	0.605		0.191	0.260	1	07/17/2020 07:53	WG1510563	
Ethyl Ether	U		0.0170	0.100	1	07/17/2020 07:53	WG1510563	
Tetrahydrofuran	2.31		0.0900	0.500	1	07/17/2020 07:53	WG1510563	
Iodomethane	U		0.242	0.500	1	07/17/2020 07:53	WG1510563	JC 8/18/2020
Allyl chloride	U		0.580	1.00	1	07/17/2020 07:53	WG1510563	

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Trans-1,4-Dichloro-2-butene	U UJ	J0	0.0560	0.200	1	07/17/2020 07:53	WG1510563
(S) Toluene-d8	*96.3*			*75.0-131*		*07/17/2020 07:53*	WG1510563
(S) 4-Bromofluorobenzene	*100*			*67.0-138*		*07/17/2020 07:53*	WG1510563
(S) 1,2-Dichloroethane-d4	*110*			*70.0-130*		*07/17/2020 07:53*	WG1510563

JC 8/18/2020

Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	627000		8450	20000	1	07/17/2020 02:36	WG1508221

Sample Narrative:

L1238602-01 WG1508221: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	149000		1900	5000	5	07/11/2020 15:47	WG1507470
Nitrate	U		48.0	100	1	07/12/2020 01:10	WG1507470
Sulfate	U		594	5000	1	07/12/2020 01:10	WG1507470

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	16900		102	1000	1	07/13/2020 19:17	WG1508116

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	11300		48.9	100	1	07/15/2020 11:02	WG1507541
Manganese	883		1.32	5.00	1	07/15/2020 11:02	WG1507541

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	2400	Z, J+ ~~B~~	158	500	5	07/15/2020 17:58	WG1509433
(S) a,a,a-Trifluorotoluene(FID)	*114*			*78.0-120*		*07/15/2020 17:58*	WG1509433

Sample Narrative:

L1238602-01 WG1509433: No discernable petroleum pattern

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	21600		2.87	6.78	10	07/15/2020 13:53	WG1509488
Ethane	393		0.296	1.29	1	07/14/2020 15:59	WG1508537
Ethene	866		0.422	1.27	1	07/14/2020 15:59	WG1508537

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch	
Acetone	U		0.548	1.00	1	07/17/2020 08:12	WG1510563	
Acrylonitrile	U		0.0760	0.500	1	07/17/2020 08:12	WG1510563	
Benzene	0.0830		0.0160	0.0400	1	07/17/2020 08:12	WG1510563	
Bromobenzene	U		0.0420	0.500	1	07/17/2020 08:12	WG1510563	
Bromodichloromethane	U		0.0315	0.100	1	07/17/2020 08:12	WG1510563	
Bromoform	U		0.239	1.00	1	07/17/2020 08:12	WG1510563	
Bromomethane	U		0.148	0.500	1	07/17/2020 08:12	WG1510563	
n-Butylbenzene	U	UJ JO	0.153	0.500	1	07/17/2020 08:12	WG1510563	JC 8/18/2020
sec-Butylbenzene	U		0.101	0.500	1	07/17/2020 08:12	WG1510563	
tert-Butylbenzene	U		0.0620	0.200	1	07/17/2020 08:12	WG1510563	

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Carbon tetrachloride	U		0.0432	0.200	1	07/17/2020 08:12	WG1510563
Chlorobenzene	U		0.0229	0.100	1	07/17/2020 08:12	WG1510563
Chlorodibromomethane	U		0.0180	0.100	1	07/17/2020 08:12	WG1510563
Chloroethane	U		0.0432	0.200	1	07/17/2020 08:12	WG1510563
Chloroform	U		0.0166	0.100	1	07/17/2020 08:12	WG1510563
Chloromethane	U		0.0556	0.500	1	07/17/2020 08:12	WG1510563
2-Chlorotoluene	U		0.0368	0.100	1	07/17/2020 08:12	WG1510563
4-Chlorotoluene	U		0.0452	0.200	1	07/17/2020 08:12	WG1510563
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	07/17/2020 08:12	WG1510563
1,2-Dibromoethane	U		0.0210	0.100	1	07/17/2020 08:12	WG1510563
Dibromomethane	U		0.0400	0.200	1	07/17/2020 08:12	WG1510563
1,2-Dichlorobenzene	U	UJ J4	0.0580	0.200	1	07/17/2020 08:12	WG1510563
1,3-Dichlorobenzene	U		0.0680	0.200	1	07/17/2020 08:12	WG1510563
1,4-Dichlorobenzene	U		0.0788	0.200	1	07/17/2020 08:12	WG1510563
Dichlorodifluoromethane	U		0.0327	0.100	1	07/17/2020 08:12	WG1510563
1,1-Dichloroethane	U		0.0230	0.100	1	07/17/2020 08:12	WG1510563
1,2-Dichloroethane	U		0.0190	0.100	1	07/17/2020 08:12	WG1510563
1,1-Dichloroethene	U		0.0200	0.100	1	07/17/2020 08:12	WG1510563
cis-1,2-Dichloroethene	0.194		0.0276	0.100	1	07/17/2020 08:12	WG1510563
trans-1,2-Dichloroethene	3.06		0.0572	0.200	1	07/17/2020 08:12	WG1510563
1,2-Dichloropropane	U		0.0508	0.200	1	07/17/2020 08:12	WG1510563
1,1-Dichloropropene	U		0.0280	0.100	1	07/17/2020 08:12	WG1510563
1,3-Dichloropropane	U		0.0700	0.200	1	07/17/2020 08:12	WG1510563
cis-1,3-Dichloropropene	U		0.0271	0.100	1	07/17/2020 08:12	WG1510563
trans-1,3-Dichloropropene	U		0.0612	0.200	1	07/17/2020 08:12	WG1510563
2,2-Dichloropropane	U		0.0317	0.100	1	07/17/2020 08:12	WG1510563
Di-isopropyl ether	U		0.0140	0.0400	1	07/17/2020 08:12	WG1510563
Ethylbenzene	0.105		0.0212	0.100	1	07/17/2020 08:12	WG1510563
Hexachloro-1,3-butadiene	U		0.508	1.00	1	07/17/2020 08:12	WG1510563
Isopropylbenzene	U		0.0345	0.100	1	07/17/2020 08:12	WG1510563
p-Isopropyltoluene	U		0.0932	0.200	1	07/17/2020 08:12	WG1510563
2-Butanone (MEK)	U		0.500	1.00	1	07/17/2020 08:12	WG1510563
Methylene Chloride	U		0.265	1.00	1	07/17/2020 08:12	WG1510563
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	07/17/2020 08:12	WG1510563
Methyl tert-butyl ether	U		0.0118	0.0400	1	07/17/2020 08:12	WG1510563
Naphthalene	U		0.124	0.500	1	07/17/2020 08:12	WG1510563
n-Propylbenzene	U		0.0472	0.200	1	07/17/2020 08:12	WG1510563
Styrene	U		0.109	0.500	1	07/17/2020 08:12	WG1510563
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	07/17/2020 08:12	WG1510563
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	07/17/2020 08:12	WG1510563
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	07/17/2020 08:12	WG1510563
Tetrachloroethene	0.0390	J	0.0280	0.100	1	07/17/2020 08:12	WG1510563
Toluene	1.01		0.0500	0.200	1	07/17/2020 08:12	WG1510563
1,2,3-Trichlorobenzene	U		0.0250	0.500	1	07/17/2020 08:12	WG1510563
1,2,4-Trichlorobenzene	U		0.193	0.500	1	07/17/2020 08:12	WG1510563
1,1,1-Trichloroethane	U		0.0110	0.100	1	07/17/2020 08:12	WG1510563
1,1,2-Trichloroethane	U		0.0353	0.100	1	07/17/2020 08:12	WG1510563
Trichloroethene	0.0490		0.0160	0.0400	1	07/17/2020 08:12	WG1510563
Trichlorofluoromethane	U		0.0200	0.100	1	07/17/2020 08:12	WG1510563
1,2,3-Trichloropropane	U		0.204	0.500	1	07/17/2020 08:12	WG1510563
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	07/17/2020 08:12	WG1510563
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	07/17/2020 08:12	WG1510563
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	07/17/2020 08:12	WG1510563
Vinyl chloride	77.9		0.0273	0.100	1	07/17/2020 08:12	WG1510563
Xylenes, Total	0.834		0.191	0.260	1	07/17/2020 08:12	WG1510563
Ethyl Ether	U		0.0170	0.100	1	07/17/2020 08:12	WG1510563

JC 8/18/2020

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Tetrahydrofuran	0.265	J	0.0900	0.500	1	07/17/2020 08:12	WG1510563
Iodomethane	U		0.242	0.500	1	07/17/2020 08:12	WG1510563
Allyl chloride	U		0.580	1.00	1	07/17/2020 08:12	WG1510563
Trans-1,4-Dichloro-2-butene	U UJ	J0	0.0560	0.200	1	07/17/2020 08:12	WG1510563
(S) Toluene-d8	*96.2*			*75.0-131*		*07/17/2020 08:12*	WG1510563
(S) 4-Bromofluorobenzene	*102*			*67.0-138*		*07/17/2020 08:12*	WG1510563
(S) 1,2-Dichloroethane-d4	*109*			*70.0-130*		*07/17/2020 08:12*	WG1510563

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Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	286000		8450	20000	1	07/17/2020 02:45	WG1508221

Sample Narrative:

L1238602-02 WG1508221: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	23600		379	1000	1	07/11/2020 16:04	WG1507470
Nitrate	U		48.0	100	1	07/11/2020 16:04	WG1507470
Sulfate	15600		594	5000	1	07/11/2020 16:04	WG1507470

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	1970	B	102	1000	1	07/13/2020 19:32	WG1508116

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	6510		48.9	100	1	07/15/2020 11:19	WG1507541
Manganese	943		1.32	5.00	1	07/15/2020 11:19	WG1507541

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	47.5		0.287	0.678	1	07/14/2020 16:05	WG1508537
Ethane	U		0.296	1.29	1	07/14/2020 16:05	WG1508537
Ethene	U		0.422	1.27	1	07/14/2020 16:05	WG1508537

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U		0.548	1.00	1	07/17/2020 08:31	WG1510563
Acrylonitrile	U		0.0760	0.500	1	07/17/2020 08:31	WG1510563
Benzene	U		0.0160	0.0400	1	07/17/2020 08:31	WG1510563
Bromobenzene	U		0.0420	0.500	1	07/17/2020 08:31	WG1510563
Bromodichloromethane	U		0.0315	0.100	1	07/17/2020 08:31	WG1510563
Bromoform	U		0.239	1.00	1	07/17/2020 08:31	WG1510563
Bromomethane	U		0.148	0.500	1	07/17/2020 08:31	WG1510563
n-Butylbenzene	U	UJ J0	0.153	0.500	1	07/17/2020 08:31	WG1510563
sec-Butylbenzene	U		0.101	0.500	1	07/17/2020 08:31	WG1510563
tert-Butylbenzene	U		0.0620	0.200	1	07/17/2020 08:31	WG1510563
Carbon tetrachloride	U		0.0432	0.200	1	07/17/2020 08:31	WG1510563
Chlorobenzene	U		0.0229	0.100	1	07/17/2020 08:31	WG1510563
Chlorodibromomethane	U		0.0180	0.100	1	07/17/2020 08:31	WG1510563
Chloroethane	U		0.0432	0.200	1	07/17/2020 08:31	WG1510563
Chloroform	U		0.0166	0.100	1	07/17/2020 08:31	WG1510563
Chloromethane	U		0.0556	0.500	1	07/17/2020 08:31	WG1510563
2-Chlorotoluene	U		0.0368	0.100	1	07/17/2020 08:31	WG1510563
4-Chlorotoluene	U		0.0452	0.200	1	07/17/2020 08:31	WG1510563
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	07/17/2020 08:31	WG1510563
1,2-Dibromoethane	U		0.0210	0.100	1	07/17/2020 08:31	WG1510563

JC 8/18/2020

MW106-071020

Collected date/time: 07/10/20 10:05

SAMPLE RESULTS - 02

L1238602

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Dibromomethane	U		0.0400	0.200	1	07/17/2020 08:31	WG1510563
1,2-Dichlorobenzene	U	UJ J4	0.0580	0.200	1	07/17/2020 08:31	WG1510563
1,3-Dichlorobenzene	U		0.0680	0.200	1	07/17/2020 08:31	WG1510563
1,4-Dichlorobenzene	U		0.0788	0.200	1	07/17/2020 08:31	WG1510563
Dichlorodifluoromethane	U		0.0327	0.100	1	07/17/2020 08:31	WG1510563
1,1-Dichloroethane	U		0.0230	0.100	1	07/17/2020 08:31	WG1510563
1,2-Dichloroethane	U		0.0190	0.100	1	07/17/2020 08:31	WG1510563
1,1-Dichloroethene	U		0.0200	0.100	1	07/17/2020 08:31	WG1510563
cis-1,2-Dichloroethene	U		0.0276	0.100	1	07/17/2020 08:31	WG1510563
trans-1,2-Dichloroethene	U		0.0572	0.200	1	07/17/2020 08:31	WG1510563
1,2-Dichloropropane	U		0.0508	0.200	1	07/17/2020 08:31	WG1510563
1,1-Dichloropropene	U		0.0280	0.100	1	07/17/2020 08:31	WG1510563
1,3-Dichloropropane	U		0.0700	0.200	1	07/17/2020 08:31	WG1510563
cis-1,3-Dichloropropene	U		0.0271	0.100	1	07/17/2020 08:31	WG1510563
trans-1,3-Dichloropropene	U		0.0612	0.200	1	07/17/2020 08:31	WG1510563
2,2-Dichloropropane	U		0.0317	0.100	1	07/17/2020 08:31	WG1510563
Di-isopropyl ether	U		0.0140	0.0400	1	07/17/2020 08:31	WG1510563
Ethylbenzene	U		0.0212	0.100	1	07/17/2020 08:31	WG1510563
Hexachloro-1,3-butadiene	U		0.508	1.00	1	07/17/2020 08:31	WG1510563
Isopropylbenzene	U		0.0345	0.100	1	07/17/2020 08:31	WG1510563
p-Isopropyltoluene	U		0.0932	0.200	1	07/17/2020 08:31	WG1510563
2-Butanone (MEK)	U		0.500	1.00	1	07/17/2020 08:31	WG1510563
Methylene Chloride	U		0.265	1.00	1	07/17/2020 08:31	WG1510563
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	07/17/2020 08:31	WG1510563
Methyl tert-butyl ether	U		0.0118	0.0400	1	07/17/2020 08:31	WG1510563
Naphthalene	U		0.124	0.500	1	07/17/2020 08:31	WG1510563
n-Propylbenzene	U		0.0472	0.200	1	07/17/2020 08:31	WG1510563
Styrene	U		0.109	0.500	1	07/17/2020 08:31	WG1510563
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	07/17/2020 08:31	WG1510563
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	07/17/2020 08:31	WG1510563
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	07/17/2020 08:31	WG1510563
Tetrachloroethene	U		0.0280	0.100	1	07/17/2020 08:31	WG1510563
Toluene	1.74		0.0500	0.200	1	07/17/2020 08:31	WG1510563
1,2,3-Trichlorobenzene	U		0.0250	0.500	1	07/17/2020 08:31	WG1510563
1,2,4-Trichlorobenzene	U		0.193	0.500	1	07/17/2020 08:31	WG1510563
1,1,1-Trichloroethane	U		0.0110	0.100	1	07/17/2020 08:31	WG1510563
1,1,2-Trichloroethane	U		0.0353	0.100	1	07/17/2020 08:31	WG1510563
Trichloroethene	U		0.0160	0.0400	1	07/17/2020 08:31	WG1510563
Trichlorofluoromethane	U		0.0200	0.100	1	07/17/2020 08:31	WG1510563
1,2,3-Trichloropropane	U		0.204	0.500	1	07/17/2020 08:31	WG1510563
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	07/17/2020 08:31	WG1510563
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	07/17/2020 08:31	WG1510563
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	07/17/2020 08:31	WG1510563
Vinyl chloride	U		0.0273	0.100	1	07/17/2020 08:31	WG1510563
Xylenes, Total	U		0.191	0.260	1	07/17/2020 08:31	WG1510563
Ethyl Ether	U		0.0170	0.100	1	07/17/2020 08:31	WG1510563
Tetrahydrofuran	U		0.0900	0.500	1	07/17/2020 08:31	WG1510563
Iodomethane	U		0.242	0.500	1	07/17/2020 08:31	WG1510563
Allyl chloride	U		0.580	1.00	1	07/17/2020 08:31	WG1510563
Trans-1,4-Dichloro-2-butene	U	UJ J0	0.0560	0.200	1	07/17/2020 08:31	WG1510563
(S) Toluene-d8	*96.3*			*75.0-131*		*07/17/2020 08:31*	WG1510563
(S) 4-Bromofluorobenzene	*101*			*67.0-138*		*07/17/2020 08:31*	WG1510563
(S) 1,2-Dichloroethane-d4	*109*			*70.0-130*		*07/17/2020 08:31*	WG1510563

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Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	1420000		8450	20000	1	07/17/2020 02:54	WG1508221

Sample Narrative:

L1238602-03 WG1508221: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	149000		1900	5000	5	07/11/2020 16:53	WG1507470
Nitrate	U		48.0	100	1	07/11/2020 16:36	WG1507470
Sulfate	32900		594	5000	1	07/11/2020 16:36	WG1507470

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	68500		102	1000	1	07/13/2020 20:13	WG1508116

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	36200		48.9	100	1	07/15/2020 11:22	WG1507541
Manganese	7680		1.32	5.00	1	07/15/2020 11:22	WG1507541

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	924	Z, J+	31.6	100	1	07/15/2020 14:54	WG1509433
(S) a,a,a-Trifluorotoluene(FID)	*113*			*78.0-120*		*07/15/2020 14:54*	WG1509433

Sample Narrative:

L1238602-03 WG1509433: No discernable petroleum pattern

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	22200		2.87	6.78	10	07/15/2020 13:55	WG1509488
Ethane	4.30		0.296	1.29	1	07/14/2020 16:08	WG1508537
Ethene	U		0.422	1.27	1	07/14/2020 16:08	WG1508537

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U		11.0	20.0	20	07/17/2020 12:00	WG1510563
Acrylonitrile	U		1.52	10.0	20	07/17/2020 12:00	WG1510563
Benzene	U		0.320	0.800	20	07/17/2020 12:00	WG1510563
Bromobenzene	U		0.840	10.0	20	07/17/2020 12:00	WG1510563
Bromodichloromethane	U		0.630	2.00	20	07/17/2020 12:00	WG1510563
Bromoform	U		4.78	20.0	20	07/17/2020 12:00	WG1510563
Bromomethane	U		2.96	10.0	20	07/17/2020 12:00	WG1510563
n-Butylbenzene	U	UJ JO	3.06	10.0	20	07/17/2020 12:00	WG1510563
sec-Butylbenzene	U		2.02	10.0	20	07/17/2020 12:00	WG1510563
tert-Butylbenzene	U		1.24	4.00	20	07/17/2020 12:00	WG1510563

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Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Carbon tetrachloride	U		0.864	4.00	20	07/17/2020 12:00	WG1510563
Chlorobenzene	U		0.458	2.00	20	07/17/2020 12:00	WG1510563
Chlorodibromomethane	U		0.360	2.00	20	07/17/2020 12:00	WG1510563
Chloroethane	23.9		0.864	4.00	20	07/17/2020 12:00	WG1510563
Chloroform	U		0.332	2.00	20	07/17/2020 12:00	WG1510563
Chloromethane	U		1.11	10.0	20	07/17/2020 12:00	WG1510563
2-Chlorotoluene	U		0.736	2.00	20	07/17/2020 12:00	WG1510563
4-Chlorotoluene	U		0.904	4.00	20	07/17/2020 12:00	WG1510563
1,2-Dibromo-3-Chloropropane	U		4.08	20.0	20	07/17/2020 12:00	WG1510563
1,2-Dibromoethane	U		0.420	2.00	20	07/17/2020 12:00	WG1510563
Dibromomethane	U		0.800	4.00	20	07/17/2020 12:00	WG1510563
1,2-Dichlorobenzene	U	UJ J4	1.16	4.00	20	07/17/2020 12:00	WG1510563
1,3-Dichlorobenzene	U		1.36	4.00	20	07/17/2020 12:00	WG1510563
1,4-Dichlorobenzene	U		1.58	4.00	20	07/17/2020 12:00	WG1510563
Dichlorodifluoromethane	U		0.654	2.00	20	07/17/2020 12:00	WG1510563
1,1-Dichloroethane	U		0.460	2.00	20	07/17/2020 12:00	WG1510563
1,2-Dichloroethane	U		0.380	2.00	20	07/17/2020 12:00	WG1510563
1,1-Dichloroethene	2.06		0.400	2.00	20	07/17/2020 12:00	WG1510563
cis-1,2-Dichloroethene	939		0.552	2.00	20	07/17/2020 12:00	WG1510563
trans-1,2-Dichloroethene	7.40		1.14	4.00	20	07/17/2020 12:00	WG1510563
1,2-Dichloropropane	U		1.02	4.00	20	07/17/2020 12:00	WG1510563
1,1-Dichloropropene	U		0.560	2.00	20	07/17/2020 12:00	WG1510563
1,3-Dichloropropane	U		1.40	4.00	20	07/17/2020 12:00	WG1510563
cis-1,3-Dichloropropene	U		0.542	2.00	20	07/17/2020 12:00	WG1510563
trans-1,3-Dichloropropene	U		1.22	4.00	20	07/17/2020 12:00	WG1510563
2,2-Dichloropropane	U		0.634	2.00	20	07/17/2020 12:00	WG1510563
Di-isopropyl ether	U		0.280	0.800	20	07/17/2020 12:00	WG1510563
Ethylbenzene	U		0.424	2.00	20	07/17/2020 12:00	WG1510563
Hexachloro-1,3-butadiene	U		10.2	20.0	20	07/17/2020 12:00	WG1510563
Isopropylbenzene	U		0.690	2.00	20	07/17/2020 12:00	WG1510563
p-Isopropyltoluene	U		1.86	4.00	20	07/17/2020 12:00	WG1510563
2-Butanone (MEK)	U		10.0	20.0	20	07/17/2020 12:00	WG1510563
Methylene Chloride	U		5.30	20.0	20	07/17/2020 12:00	WG1510563
4-Methyl-2-pentanone (MIBK)	U		8.00	20.0	20	07/17/2020 12:00	WG1510563
Methyl tert-butyl ether	U		0.236	0.800	20	07/17/2020 12:00	WG1510563
Naphthalene	U		2.48	10.0	20	07/17/2020 12:00	WG1510563
n-Propylbenzene	U		0.944	4.00	20	07/17/2020 12:00	WG1510563
Styrene	U		2.18	10.0	20	07/17/2020 12:00	WG1510563
1,1,1,2-Tetrachloroethane	U		0.400	2.00	20	07/17/2020 12:00	WG1510563
1,1,2,2-Tetrachloroethane	U		0.312	2.00	20	07/17/2020 12:00	WG1510563
1,1,2-Trichlorotrifluoroethane	U		0.540	2.00	20	07/17/2020 12:00	WG1510563
Tetrachloroethene	27.3		0.560	2.00	20	07/17/2020 12:00	WG1510563
Toluene	U		1.00	4.00	20	07/17/2020 12:00	WG1510563
1,2,3-Trichlorobenzene	U		0.500	10.0	20	07/17/2020 12:00	WG1510563
1,2,4-Trichlorobenzene	U		3.86	10.0	20	07/17/2020 12:00	WG1510563
1,1,1-Trichloroethane	U		0.220	2.00	20	07/17/2020 12:00	WG1510563
1,1,2-Trichloroethane	U		0.706	2.00	20	07/17/2020 12:00	WG1510563
Trichloroethene	19.6		0.320	0.800	20	07/17/2020 12:00	WG1510563
Trichlorofluoromethane	U		0.400	2.00	20	07/17/2020 12:00	WG1510563
1,2,3-Trichloropropane	U		4.08	10.0	20	07/17/2020 12:00	WG1510563
1,2,4-Trimethylbenzene	U		0.928	4.00	20	07/17/2020 12:00	WG1510563
1,2,3-Trimethylbenzene	U		0.920	4.00	20	07/17/2020 12:00	WG1510563
1,3,5-Trimethylbenzene	U		0.864	4.00	20	07/17/2020 12:00	WG1510563
Vinyl chloride	105		0.546	2.00	20	07/17/2020 12:00	WG1510563
Xylenes, Total	U		3.82	5.20	20	07/17/2020 12:00	WG1510563
Ethyl Ether	U		0.340	2.00	20	07/17/2020 12:00	WG1510563

JC 8/18/2020

MW-179-071020

Collected date/time: 07/10/20 10:25

SAMPLE RESULTS - 03

L1238602

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Tetrahydrofuran	3.40	J	1.80	10.0	20	07/17/2020 12:00	WG1510563
Iodomethane	U		4.84	10.0	20	07/17/2020 12:00	WG1510563
Allyl chloride	U		11.6	20.0	20	07/17/2020 12:00	WG1510563
Trans-1,4-Dichloro-2-butene	U UJ	J0	1.12	4.00	20	07/17/2020 12:00	WG1510563
(S) Toluene-d8	*96.9*			*75.0-131*		*07/17/2020 12:00*	WG1510563
(S) 4-Bromofluorobenzene	*101*			*67.0-138*		*07/17/2020 12:00*	WG1510563
(S) 1,2-Dichloroethane-d4	*109*			*70.0-130*		*07/17/2020 12:00*	WG1510563

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

JC 8/18/2020

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Wet Chemistry by Method 2320 B-2011

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Alkalinity	397000		8450	20000	1	07/17/2020 03:55	WG1508221

Sample Narrative:

L1238602-04 WG1508221: Endpoint pH 4.5

Wet Chemistry by Method 9056A

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Chloride	31800		379	1000	1	07/11/2020 17:46	WG1507470
Nitrate	U		48.0	100	1	07/11/2020 17:46	WG1507470
Sulfate	63100		594	5000	1	07/11/2020 17:46	WG1507470

Wet Chemistry by Method 9060A

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
TOC (Total Organic Carbon)	23100		102	1000	1	07/13/2020 20:36	WG1508116

Metals (ICPMS) by Method 6020B

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Iron	20100		48.9	100	1	07/15/2020 11:26	WG1507541
Manganese	3170		1.32	5.00	1	07/15/2020 11:26	WG1507541

Volatile Organic Compounds (GC) by Method NWTPHGX

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Gasoline Range Organics-NWTPH	122	Z, J+ ~~B~~	31.6	100	1	07/15/2020 15:17	WG1509433
(S) a,a,a-Trifluorotoluene(FID)	*113*			*78.0-120*		*07/15/2020 15:17*	WG1509433

Sample Narrative:

L1238602-04 WG1509433: No discernable petroleum pattern

Volatile Organic Compounds (GC) by Method RSK175

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Methane	13600		2.87	6.78	10	07/15/2020 13:57	WG1509488
Ethane	U		0.296	1.29	1	07/14/2020 16:10	WG1508537
Ethene	U		0.422	1.27	1	07/14/2020 16:10	WG1508537

Volatile Organic Compounds (GC/MS) by Method 8260D

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Acetone	U		0.548	1.00	1	07/17/2020 08:50	WG1510563
Acrylonitrile	U		0.0760	0.500	1	07/17/2020 08:50	WG1510563
Benzene	U		0.0160	0.0400	1	07/17/2020 08:50	WG1510563
Bromobenzene	U		0.0420	0.500	1	07/17/2020 08:50	WG1510563
Bromodichloromethane	U		0.0315	0.100	1	07/17/2020 08:50	WG1510563
Bromoform	U		0.239	1.00	1	07/17/2020 08:50	WG1510563
Bromomethane	U		0.148	0.500	1	07/17/2020 08:50	WG1510563
n-Butylbenzene	U	UJ J0	0.153	0.500	1	07/17/2020 08:50	WG1510563
sec-Butylbenzene	U		0.101	0.500	1	07/17/2020 08:50	WG1510563
tert-Butylbenzene	U		0.0620	0.200	1	07/17/2020 08:50	WG1510563

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Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Carbon tetrachloride	U		0.0432	0.200	1	07/17/2020 08:50	WG1510563
Chlorobenzene	U		0.0229	0.100	1	07/17/2020 08:50	WG1510563
Chlorodibromomethane	U		0.0180	0.100	1	07/17/2020 08:50	WG1510563
Chloroethane	3.23		0.0432	0.200	1	07/17/2020 08:50	WG1510563
Chloroform	U		0.0166	0.100	1	07/17/2020 08:50	WG1510563
Chloromethane	U		0.0556	0.500	1	07/17/2020 08:50	WG1510563
2-Chlorotoluene	U		0.0368	0.100	1	07/17/2020 08:50	WG1510563
4-Chlorotoluene	U		0.0452	0.200	1	07/17/2020 08:50	WG1510563
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	07/17/2020 08:50	WG1510563
1,2-Dibromoethane	U		0.0210	0.100	1	07/17/2020 08:50	WG1510563
Dibromomethane	U		0.0400	0.200	1	07/17/2020 08:50	WG1510563
1,2-Dichlorobenzene	U UJ	J4	0.0580	0.200	1	07/17/2020 08:50	WG1510563
1,3-Dichlorobenzene	U		0.0680	0.200	1	07/17/2020 08:50	WG1510563
1,4-Dichlorobenzene	U		0.0788	0.200	1	07/17/2020 08:50	WG1510563
Dichlorodifluoromethane	U		0.0327	0.100	1	07/17/2020 08:50	WG1510563
1,1-Dichloroethane	U		0.0230	0.100	1	07/17/2020 08:50	WG1510563
1,2-Dichloroethane	U		0.0190	0.100	1	07/17/2020 08:50	WG1510563
1,1-Dichloroethene	0.163		0.0200	0.100	1	07/17/2020 08:50	WG1510563
cis-1,2-Dichloroethene	50.7		0.0276	0.100	1	07/17/2020 08:50	WG1510563
trans-1,2-Dichloroethene	0.628		0.0572	0.200	1	07/17/2020 08:50	WG1510563
1,2-Dichloropropane	U		0.0508	0.200	1	07/17/2020 08:50	WG1510563
1,1-Dichloropropene	U		0.0280	0.100	1	07/17/2020 08:50	WG1510563
1,3-Dichloropropane	U		0.0700	0.200	1	07/17/2020 08:50	WG1510563
cis-1,3-Dichloropropene	U		0.0271	0.100	1	07/17/2020 08:50	WG1510563
trans-1,3-Dichloropropene	U		0.0612	0.200	1	07/17/2020 08:50	WG1510563
2,2-Dichloropropane	U		0.0317	0.100	1	07/17/2020 08:50	WG1510563
Di-isopropyl ether	U		0.0140	0.0400	1	07/17/2020 08:50	WG1510563
Ethylbenzene	U		0.0212	0.100	1	07/17/2020 08:50	WG1510563
Hexachloro-1,3-butadiene	U		0.508	1.00	1	07/17/2020 08:50	WG1510563
Isopropylbenzene	U		0.0345	0.100	1	07/17/2020 08:50	WG1510563
p-Isopropyltoluene	U		0.0932	0.200	1	07/17/2020 08:50	WG1510563
2-Butanone (MEK)	U		0.500	1.00	1	07/17/2020 08:50	WG1510563
Methylene Chloride	U		0.265	1.00	1	07/17/2020 08:50	WG1510563
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	07/17/2020 08:50	WG1510563
Methyl tert-butyl ether	U		0.0118	0.0400	1	07/17/2020 08:50	WG1510563
Naphthalene	U		0.124	0.500	1	07/17/2020 08:50	WG1510563
n-Propylbenzene	U		0.0472	0.200	1	07/17/2020 08:50	WG1510563
Styrene	U		0.109	0.500	1	07/17/2020 08:50	WG1510563
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	07/17/2020 08:50	WG1510563
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	07/17/2020 08:50	WG1510563
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	07/17/2020 08:50	WG1510563
Tetrachloroethene	0.614		0.0280	0.100	1	07/17/2020 08:50	WG1510563
Toluene	U		0.0500	0.200	1	07/17/2020 08:50	WG1510563
1,2,3-Trichlorobenzene	U		0.0250	0.500	1	07/17/2020 08:50	WG1510563
1,2,4-Trichlorobenzene	U		0.193	0.500	1	07/17/2020 08:50	WG1510563
1,1,1-Trichloroethane	U		0.0110	0.100	1	07/17/2020 08:50	WG1510563
1,1,2-Trichloroethane	U		0.0353	0.100	1	07/17/2020 08:50	WG1510563
Trichloroethene	1.58		0.0160	0.0400	1	07/17/2020 08:50	WG1510563
Trichlorofluoromethane	U		0.0200	0.100	1	07/17/2020 08:50	WG1510563
1,2,3-Trichloropropane	U		0.204	0.500	1	07/17/2020 08:50	WG1510563
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	07/17/2020 08:50	WG1510563
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	07/17/2020 08:50	WG1510563
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	07/17/2020 08:50	WG1510563
Vinyl chloride	17.8		0.0273	0.100	1	07/17/2020 08:50	WG1510563
Xylenes, Total	U		0.191	0.260	1	07/17/2020 08:50	WG1510563
Ethyl Ether	U		0.0170	0.100	1	07/17/2020 08:50	WG1510563

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Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Tetrahydrofuran	0.187	J	0.0900	0.500	1	07/17/2020 08:50	WG1510563
Iodomethane	U		0.242	0.500	1	07/17/2020 08:50	WG1510563
Allyl chloride	U		0.580	1.00	1	07/17/2020 08:50	WG1510563
Trans-1,4-Dichloro-2-butene	U UJ	J0	0.0560	0.200	1	07/17/2020 08:50	WG1510563
(S) Toluene-d8	*97.4*			*75.0-131*		*07/17/2020 08:50*	WG1510563
(S) 4-Bromofluorobenzene	*95.7*			*67.0-138*		*07/17/2020 08:50*	WG1510563
(S) 1,2-Dichloroethane-d4	*106*			*70.0-130*		*07/17/2020 08:50*	WG1510563

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MW-177-071020

Collected date/time: 07/10/20 12:35

SAMPLE RESULTS - 05

L1238602

Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	670000		8450	20000	1	07/17/2020 04:03	WG1508221

Sample Narrative:

L1238602-05 WG1508221: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	254000		1900	5000	5	07/11/2020 18:19	WG1507470
Nitrate	U		48.0	100	1	07/11/2020 18:03	WG1507470
Sulfate	90400		594	5000	1	07/11/2020 18:03	WG1507470

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	30300		102	1000	1	07/13/2020 21:01	WG1508116

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	17500		48.9	100	1	07/15/2020 11:52	WG1507541
Manganese	3170		1.32	5.00	1	07/15/2020 11:52	WG1507541

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	92500	Z, J+	1580	5000	50	07/15/2020 18:21	WG1509433
(S) a,a,a-Trifluorotoluene(FID)	*114*			*78.0-120*		*07/15/2020 18:21*	WG1509433

Sample Narrative:

L1238602-05 WG1509433: No discernable petroleum pattern

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	25700		2.87	6.78	10	07/15/2020 14:06	WG1509488
Ethane	129		0.296	1.29	1	07/14/2020 16:13	WG1508537
Ethene	2080		0.422	1.27	1	07/14/2020 16:13	WG1508537

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U		2740	5000	5000	07/17/2020 12:19	WG1510563
Acrylonitrile	U		380	2500	5000	07/17/2020 12:19	WG1510563
Benzene	U		80.0	200	5000	07/17/2020 12:19	WG1510563
Bromobenzene	U		210	2500	5000	07/17/2020 12:19	WG1510563
Bromodichloromethane	U		158	500	5000	07/17/2020 12:19	WG1510563
Bromoform	U		1200	5000	5000	07/17/2020 12:19	WG1510563
Bromomethane	U		740	2500	5000	07/17/2020 12:19	WG1510563
n-Butylbenzene	U	UJ J0	765	2500	5000	07/17/2020 12:19	WG1510563
sec-Butylbenzene	U		505	2500	5000	07/17/2020 12:19	WG1510563
tert-Butylbenzene	U		310	1000	5000	07/17/2020 12:19	WG1510563

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Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Carbon tetrachloride	U		216	1000	5000	07/17/2020 12:19	WG1510563
Chlorobenzene	U		115	500	5000	07/17/2020 12:19	WG1510563
Chlorodibromomethane	U		90.0	500	5000	07/17/2020 12:19	WG1510563
Chloroethane	U		216	1000	5000	07/17/2020 12:19	WG1510563
Chloroform	U		83.0	500	5000	07/17/2020 12:19	WG1510563
Chloromethane	U		278	2500	5000	07/17/2020 12:19	WG1510563
2-Chlorotoluene	U		184	500	5000	07/17/2020 12:19	WG1510563
4-Chlorotoluene	U		226	1000	5000	07/17/2020 12:19	WG1510563
1,2-Dibromo-3-Chloropropane	U		1020	5000	5000	07/17/2020 12:19	WG1510563
1,2-Dibromoethane	U		105	500	5000	07/17/2020 12:19	WG1510563
Dibromomethane	U		200	1000	5000	07/17/2020 12:19	WG1510563
1,2-Dichlorobenzene	U UJ	J4	290	1000	5000	07/17/2020 12:19	WG1510563
1,3-Dichlorobenzene	U		340	1000	5000	07/17/2020 12:19	WG1510563
1,4-Dichlorobenzene	U		394	1000	5000	07/17/2020 12:19	WG1510563
Dichlorodifluoromethane	U		164	500	5000	07/17/2020 12:19	WG1510563
1,1-Dichloroethane	U		115	500	5000	07/17/2020 12:19	WG1510563
1,2-Dichloroethane	U		95.0	500	5000	07/17/2020 12:19	WG1510563
1,1-Dichloroethene	U		100	500	5000	07/17/2020 12:19	WG1510563
cis-1,2-Dichloroethene	76100		138	500	5000	07/17/2020 12:19	WG1510563
trans-1,2-Dichloroethene	345	J	286	1000	5000	07/17/2020 12:19	WG1510563
1,2-Dichloropropane	U		254	1000	5000	07/17/2020 12:19	WG1510563
1,1-Dichloropropene	U		140	500	5000	07/17/2020 12:19	WG1510563
1,3-Dichloropropane	U		350	1000	5000	07/17/2020 12:19	WG1510563
cis-1,3-Dichloropropene	U		136	500	5000	07/17/2020 12:19	WG1510563
trans-1,3-Dichloropropene	U		306	1000	5000	07/17/2020 12:19	WG1510563
2,2-Dichloropropane	U		159	500	5000	07/17/2020 12:19	WG1510563
Di-isopropyl ether	U		70.0	200	5000	07/17/2020 12:19	WG1510563
Ethylbenzene	U		106	500	5000	07/17/2020 12:19	WG1510563
Hexachloro-1,3-butadiene	U		2540	5000	5000	07/17/2020 12:19	WG1510563
Isopropylbenzene	U		172	500	5000	07/17/2020 12:19	WG1510563
p-Isopropyltoluene	U		466	1000	5000	07/17/2020 12:19	WG1510563
2-Butanone (MEK)	U		2500	5000	5000	07/17/2020 12:19	WG1510563
Methylene Chloride	U		1330	5000	5000	07/17/2020 12:19	WG1510563
4-Methyl-2-pentanone (MIBK)	U		2000	5000	5000	07/17/2020 12:19	WG1510563
Methyl tert-butyl ether	U		59.0	200	5000	07/17/2020 12:19	WG1510563
Naphthalene	U		620	2500	5000	07/17/2020 12:19	WG1510563
n-Propylbenzene	U		236	1000	5000	07/17/2020 12:19	WG1510563
Styrene	U		545	2500	5000	07/17/2020 12:19	WG1510563
1,1,1,2-Tetrachloroethane	U		100	500	5000	07/17/2020 12:19	WG1510563
1,1,2,2-Tetrachloroethane	U		78.0	500	5000	07/17/2020 12:19	WG1510563
1,1,2-Trichlorotrifluoroethane	U		135	500	5000	07/17/2020 12:19	WG1510563
Tetrachloroethene	29400		140	500	5000	07/17/2020 12:19	WG1510563
Toluene	U		250	1000	5000	07/17/2020 12:19	WG1510563
1,2,3-Trichlorobenzene	U		125	2500	5000	07/17/2020 12:19	WG1510563
1,2,4-Trichlorobenzene	U		965	2500	5000	07/17/2020 12:19	WG1510563
1,1,1-Trichloroethane	U		55.0	500	5000	07/17/2020 12:19	WG1510563
1,1,2-Trichloroethane	U		177	500	5000	07/17/2020 12:19	WG1510563
Trichloroethene	6520		80.0	200	5000	07/17/2020 12:19	WG1510563
Trichlorofluoromethane	U		100	500	5000	07/17/2020 12:19	WG1510563
1,2,3-Trichloropropane	U		1020	2500	5000	07/17/2020 12:19	WG1510563
1,2,4-Trimethylbenzene	U		232	1000	5000	07/17/2020 12:19	WG1510563
1,2,3-Trimethylbenzene	U		230	1000	5000	07/17/2020 12:19	WG1510563
1,3,5-Trimethylbenzene	U		216	1000	5000	07/17/2020 12:19	WG1510563
Vinyl chloride	9450		137	500	5000	07/17/2020 12:19	WG1510563
Xylenes, Total	U		955	1300	5000	07/17/2020 12:19	WG1510563
Ethyl Ether	U		85.0	500	5000	07/17/2020 12:19	WG1510563

JC 8/18/2020

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Tetrahydrofuran	U		450	2500	5000	07/17/2020 12:19	WG1510563
Iodomethane	U		1210	2500	5000	07/17/2020 12:19	WG1510563
Allyl chloride	U		2900	5000	5000	07/17/2020 12:19	WG1510563
Trans-1,4-Dichloro-2-butene	U UJ	J0	280	1000	5000	07/17/2020 12:19	WG1510563
(S) Toluene-d8	*96.8*			*75.0-131*		*07/17/2020 12:19*	WG1510563
(S) 4-Bromofluorobenzene	*99.7*			*67.0-138*		*07/17/2020 12:19*	WG1510563
(S) 1,2-Dichloroethane-d4	*110*			*70.0-130*		*07/17/2020 12:19*	WG1510563

JC 8/18/2020

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Wet Chemistry by Method 2320 B-2011

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Alkalinity	346000		8450	20000	1	07/17/2020 03:28	WG1508221

Sample Narrative:

L1238602-06 WG1508221: Endpoint pH 4.5

Wet Chemistry by Method 9056A

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Chloride	37500		379	1000	1	07/11/2020 18:36	WG1507470
Nitrate	U		48.0	100	1	07/11/2020 18:36	WG1507470
Sulfate	85800		594	5000	1	07/11/2020 18:36	WG1507470

Wet Chemistry by Method 9060A

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
TOC (Total Organic Carbon)	2210	B	102	1000	1	07/13/2020 21:19	WG1508116

Metals (ICPMS) by Method 6020B

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Iron	12900		48.9	100	1	07/15/2020 11:55	WG1507541
Manganese	511		1.32	5.00	1	07/15/2020 11:55	WG1507541

Volatile Organic Compounds (GC) by Method RSK175

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Methane	195		0.287	0.678	1	07/15/2020 14:46	WG1508539
Ethane	13.6		0.296	1.29	1	07/15/2020 14:46	WG1508539
Ethene	U		0.422	1.27	1	07/15/2020 14:46	WG1508539

Volatile Organic Compounds (GC/MS) by Method 8260D

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Acetone	U		0.548	1.00	1	07/18/2020 11:23	WG1511065
Acrylonitrile	U		0.0760	0.500	1	07/18/2020 11:23	WG1511065
Benzene	U		0.0160	0.0400	1	07/18/2020 11:23	WG1511065
Bromobenzene	U		0.0420	0.500	1	07/18/2020 11:23	WG1511065
Bromodichloromethane	U		0.0315	0.100	1	07/18/2020 11:23	WG1511065
Bromoform	U		0.239	1.00	1	07/18/2020 11:23	WG1511065
Bromomethane	U		0.148	0.500	1	07/18/2020 11:23	WG1511065
n-Butylbenzene	U		0.153	0.500	1	07/18/2020 11:23	WG1511065
sec-Butylbenzene	U		0.101	0.500	1	07/18/2020 11:23	WG1511065
tert-Butylbenzene	U		0.0620	0.200	1	07/18/2020 11:23	WG1511065
Carbon tetrachloride	U		0.0432	0.200	1	07/18/2020 11:23	WG1511065
Chlorobenzene	U		0.0229	0.100	1	07/18/2020 11:23	WG1511065
Chlorodibromomethane	U		0.0180	0.100	1	07/18/2020 11:23	WG1511065
Chloroethane	U		0.0432	0.200	1	07/18/2020 11:23	WG1511065
Chloroform	U		0.0166	0.100	1	07/18/2020 11:23	WG1511065
Chloromethane	U		0.0556	0.500	1	07/18/2020 11:23	WG1511065
2-Chlorotoluene	U		0.0368	0.100	1	07/18/2020 11:23	WG1511065
4-Chlorotoluene	U		0.0452	0.200	1	07/18/2020 11:23	WG1511065
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	07/18/2020 11:23	WG1511065
1,2-Dibromoethane	U		0.0210	0.100	1	07/18/2020 11:23	WG1511065

JC 8/18/2020

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Dibromomethane	U		0.0400	0.200	1	07/18/2020 11:23	WG1511065
1,2-Dichlorobenzene	U		0.0580	0.200	1	07/18/2020 11:23	WG1511065
1,3-Dichlorobenzene	U		0.0680	0.200	1	07/18/2020 11:23	WG1511065
1,4-Dichlorobenzene	U		0.0788	0.200	1	07/18/2020 11:23	WG1511065
Dichlorodifluoromethane	U	~~J3~~	0.0327	0.100	1	07/18/2020 11:23	WG1511065
1,1-Dichloroethane	U		0.0230	0.100	1	07/18/2020 11:23	WG1511065
1,2-Dichloroethane	U		0.0190	0.100	1	07/18/2020 11:23	WG1511065
1,1-Dichloroethene	0.331		0.0200	0.100	1	07/18/2020 11:23	WG1511065
cis-1,2-Dichloroethene	92.5		0.0276	0.100	1	07/18/2020 11:23	WG1511065
trans-1,2-Dichloroethene	0.224		0.0572	0.200	1	07/18/2020 11:23	WG1511065
1,2-Dichloropropane	U		0.0508	0.200	1	07/18/2020 11:23	WG1511065
1,1-Dichloropropene	U		0.0280	0.100	1	07/18/2020 11:23	WG1511065
1,3-Dichloropropane	U		0.0700	0.200	1	07/18/2020 11:23	WG1511065
cis-1,3-Dichloropropene	U		0.0271	0.100	1	07/18/2020 11:23	WG1511065
trans-1,3-Dichloropropene	U		0.0612	0.200	1	07/18/2020 11:23	WG1511065
2,2-Dichloropropane	U	~~J3~~	0.0317	0.100	1	07/18/2020 11:23	WG1511065
Di-isopropyl ether	U		0.0140	0.0400	1	07/18/2020 11:23	WG1511065
Ethylbenzene	U		0.0212	0.100	1	07/18/2020 11:23	WG1511065
Hexachloro-1,3-butadiene	U	~~J3~~	0.508	1.00	1	07/18/2020 11:23	WG1511065
Isopropylbenzene	U		0.0345	0.100	1	07/18/2020 11:23	WG1511065
p-Isopropyltoluene	U		0.0932	0.200	1	07/18/2020 11:23	WG1511065
2-Butanone (MEK)	U		0.500	1.00	1	07/18/2020 11:23	WG1511065
Methylene Chloride	U		0.265	1.00	1	07/18/2020 11:23	WG1511065
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	07/18/2020 11:23	WG1511065
Methyl tert-butyl ether	U		0.0118	0.0400	1	07/18/2020 11:23	WG1511065
Naphthalene	U		0.124	0.500	1	07/18/2020 11:23	WG1511065
n-Propylbenzene	U		0.0472	0.200	1	07/18/2020 11:23	WG1511065
Styrene	U		0.109	0.500	1	07/18/2020 11:23	WG1511065
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	07/18/2020 11:23	WG1511065
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	07/18/2020 11:23	WG1511065
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	07/18/2020 11:23	WG1511065
Tetrachloroethene	10.8		0.0280	0.100	1	07/18/2020 11:23	WG1511065
Toluene	1.47		0.0500	0.200	1	07/18/2020 11:23	WG1511065
1,2,3-Trichlorobenzene	U	~~J3~~	0.0250	0.500	1	07/18/2020 11:23	WG1511065
1,2,4-Trichlorobenzene	U	~~J3~~	0.193	0.500	1	07/18/2020 11:23	WG1511065
1,1,1-Trichloroethane	U		0.0110	0.100	1	07/18/2020 11:23	WG1511065
1,1,2-Trichloroethane	U		0.0353	0.100	1	07/18/2020 11:23	WG1511065
Trichloroethene	27.1		0.0160	0.0400	1	07/18/2020 11:23	WG1511065
Trichlorofluoromethane	U	~~J3 J4~~	0.0200	0.100	1	07/18/2020 11:23	WG1511065
1,2,3-Trichloropropane	U		0.204	0.500	1	07/18/2020 11:23	WG1511065
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	07/18/2020 11:23	WG1511065
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	07/18/2020 11:23	WG1511065
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	07/18/2020 11:23	WG1511065
Vinyl chloride	0.430		0.0273	0.100	1	07/18/2020 11:23	WG1511065
Xylenes, Total	U		0.191	0.260	1	07/18/2020 11:23	WG1511065
Ethyl Ether	U		0.0170	0.100	1	07/18/2020 11:23	WG1511065
Tetrahydrofuran	0.155	J	0.0900	0.500	1	07/18/2020 11:23	WG1511065
Iodomethane	U		0.242	0.500	1	07/18/2020 11:23	WG1511065
Allyl chloride	U		0.580	1.00	1	07/18/2020 11:23	WG1511065
Trans-1,4-Dichloro-2-butene	U	UJ J0 J3	0.0560	0.200	1	07/18/2020 11:23	WG1511065
(S) Toluene-d8	*104*			*75.0-131*		*07/18/2020 11:23*	WG1511065
(S) 4-Bromofluorobenzene	*99.9*			*67.0-138*		*07/18/2020 11:23*	WG1511065
(S) 1,2-Dichloroethane-d4	*98.0*			*70.0-130*		*07/18/2020 11:23*	WG1511065

JC 8/18/2020

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Wet Chemistry by Method 2320 B-2011

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Alkalinity	2040000		8450	20000	1	07/17/2020 03:37	WG1508221

Sample Narrative:

L1238602-07 WG1508221: Endpoint pH 4.5

Wet Chemistry by Method 9056A

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Chloride	201000		1900	5000	5	07/11/2020 19:08	WG1507470
Nitrate	U		48.0	100	1	07/11/2020 18:52	WG1507470
Sulfate	U		594	5000	1	07/11/2020 18:52	WG1507470

Wet Chemistry by Method 9060A

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
TOC (Total Organic Carbon)	68300		102	1000	1	07/13/2020 21:45	WG1508116

Metals (ICPMS) by Method 6020B

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Iron	58800		48.9	100	1	07/15/2020 11:59	WG1507541
Manganese	2490		1.32	5.00	1	07/15/2020 11:59	WG1507541

Volatile Organic Compounds (GC) by Method NWTPHGX

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Gasoline Range Organics-NWTPH	66.6	U ~~B J~~	31.6	100	1	07/20/2020 13:32	WG1511658
(S) a,a,a-Trifluorotoluene(FID)	*116*			*78.0-120*		*07/20/2020 13:32*	WG1511658

Volatile Organic Compounds (GC) by Method RSK175

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Methane	22200		2.87	6.78	10	07/16/2020 14:40	WG1509976
Ethane	679		0.296	1.29	1	07/16/2020 12:46	WG1509974
Ethene	U		0.422	1.27	1	07/16/2020 12:46	WG1509974

Volatile Organic Compounds (GC/MS) by Method 8260D

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Acetone	6.27		0.548	1.00	1	07/17/2020 09:09	WG1510563
Acrylonitrile	U		0.0760	0.500	1	07/17/2020 09:09	WG1510563
Benzene	0.0510		0.0160	0.0400	1	07/17/2020 09:09	WG1510563
Bromobenzene	U		0.0420	0.500	1	07/17/2020 09:09	WG1510563
Bromodichloromethane	U		0.0315	0.100	1	07/17/2020 09:09	WG1510563
Bromoform	U		0.239	1.00	1	07/17/2020 09:09	WG1510563
Bromomethane	U		0.148	0.500	1	07/17/2020 09:09	WG1510563
n-Butylbenzene	U	UJ J0	0.153	0.500	1	07/17/2020 09:09	WG1510563
sec-Butylbenzene	U		0.101	0.500	1	07/17/2020 09:09	WG1510563
tert-Butylbenzene	U		0.0620	0.200	1	07/17/2020 09:09	WG1510563
Carbon tetrachloride	U		0.0432	0.200	1	07/17/2020 09:09	WG1510563
Chlorobenzene	U		0.0229	0.100	1	07/17/2020 09:09	WG1510563
Chlorodibromomethane	U		0.0180	0.100	1	07/17/2020 09:09	WG1510563

JC 8/18/2020

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloroethane	0.492		0.0432	0.200	1	07/17/2020 09:09	WG1510563
Chloroform	U		0.0166	0.100	1	07/17/2020 09:09	WG1510563
Chloromethane	U		0.0556	0.500	1	07/17/2020 09:09	WG1510563
2-Chlorotoluene	U		0.0368	0.100	1	07/17/2020 09:09	WG1510563
4-Chlorotoluene	U		0.0452	0.200	1	07/17/2020 09:09	WG1510563
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	07/17/2020 09:09	WG1510563
1,2-Dibromoethane	U		0.0210	0.100	1	07/17/2020 09:09	WG1510563
Dibromomethane	U		0.0400	0.200	1	07/17/2020 09:09	WG1510563
1,2-Dichlorobenzene	U UJ	J4	0.0580	0.200	1	07/17/2020 09:09	WG1510563
1,3-Dichlorobenzene	U		0.0680	0.200	1	07/17/2020 09:09	WG1510563
1,4-Dichlorobenzene	U		0.0788	0.200	1	07/17/2020 09:09	WG1510563
Dichlorodifluoromethane	U		0.0327	0.100	1	07/17/2020 09:09	WG1510563
1,1-Dichloroethane	U		0.0230	0.100	1	07/17/2020 09:09	WG1510563
1,2-Dichloroethane	U		0.0190	0.100	1	07/17/2020 09:09	WG1510563
1,1-Dichloroethene	U		0.0200	0.100	1	07/17/2020 09:09	WG1510563
cis-1,2-Dichloroethene	U		0.0276	0.100	1	07/17/2020 09:09	WG1510563
trans-1,2-Dichloroethene	3.35		0.0572	0.200	1	07/17/2020 09:09	WG1510563
1,2-Dichloropropane	U		0.0508	0.200	1	07/17/2020 09:09	WG1510563
1,1-Dichloropropene	U		0.0280	0.100	1	07/17/2020 09:09	WG1510563
1,3-Dichloropropane	U		0.0700	0.200	1	07/17/2020 09:09	WG1510563
cis-1,3-Dichloropropene	U		0.0271	0.100	1	07/17/2020 09:09	WG1510563
trans-1,3-Dichloropropene	U		0.0612	0.200	1	07/17/2020 09:09	WG1510563
2,2-Dichloropropane	U		0.0317	0.100	1	07/17/2020 09:09	WG1510563
Di-isopropyl ether	U		0.0140	0.0400	1	07/17/2020 09:09	WG1510563
Ethylbenzene	0.102		0.0212	0.100	1	07/17/2020 09:09	WG1510563
Hexachloro-1,3-butadiene	U		0.508	1.00	1	07/17/2020 09:09	WG1510563
Isopropylbenzene	U		0.0345	0.100	1	07/17/2020 09:09	WG1510563
p-Isopropyltoluene	U		0.0932	0.200	1	07/17/2020 09:09	WG1510563
2-Butanone (MEK)	U		0.500	1.00	1	07/17/2020 09:09	WG1510563
Methylene Chloride	U		0.265	1.00	1	07/17/2020 09:09	WG1510563
4-Methyl-2-pentanone (MIBK)	1.32		0.400	1.00	1	07/17/2020 09:09	WG1510563
Methyl tert-butyl ether	0.0560		0.0118	0.0400	1	07/17/2020 09:09	WG1510563
Naphthalene	U		0.124	0.500	1	07/17/2020 09:09	WG1510563
n-Propylbenzene	U		0.0472	0.200	1	07/17/2020 09:09	WG1510563
Styrene	U		0.109	0.500	1	07/17/2020 09:09	WG1510563
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	07/17/2020 09:09	WG1510563
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	07/17/2020 09:09	WG1510563
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	07/17/2020 09:09	WG1510563
Tetrachloroethene	U		0.0280	0.100	1	07/17/2020 09:09	WG1510563
Toluene	1.12		0.0500	0.200	1	07/17/2020 09:09	WG1510563
1,2,3-Trichlorobenzene	U		0.0250	0.500	1	07/17/2020 09:09	WG1510563
1,2,4-Trichlorobenzene	U		0.193	0.500	1	07/17/2020 09:09	WG1510563
1,1,1-Trichloroethane	U		0.0110	0.100	1	07/17/2020 09:09	WG1510563
1,1,2-Trichloroethane	U		0.0353	0.100	1	07/17/2020 09:09	WG1510563
Trichloroethene	0.0750		0.0160	0.0400	1	07/17/2020 09:09	WG1510563
Trichlorofluoromethane	U		0.0200	0.100	1	07/17/2020 09:09	WG1510563
1,2,3-Trichloropropane	U		0.204	0.500	1	07/17/2020 09:09	WG1510563
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	07/17/2020 09:09	WG1510563
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	07/17/2020 09:09	WG1510563
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	07/17/2020 09:09	WG1510563
Vinyl chloride	0.562		0.0273	0.100	1	07/17/2020 09:09	WG1510563
Xylenes, Total	0.749		0.191	0.260	1	07/17/2020 09:09	WG1510563
Ethyl Ether	U		0.0170	0.100	1	07/17/2020 09:09	WG1510563
Tetrahydrofuran	0.784		0.0900	0.500	1	07/17/2020 09:09	WG1510563
Iodomethane	U		0.242	0.500	1	07/17/2020 09:09	WG1510563
Allyl chloride	U		0.580	1.00	1	07/17/2020 09:09	WG1510563

JC 8/18/2020

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l		Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Trans-1,4-Dichloro-2-butene	U	UJ	J0	0.0560	0.200	1	07/17/2020 09:09	WG1510563
(S) Toluene-d8	*96.5*				*75.0-131*		*07/17/2020 09:09*	WG1510563
(S) 4-Bromofluorobenzene	*103*				*67.0-138*		*07/17/2020 09:09*	WG1510563
(S) 1,2-Dichloroethane-d4	*107*				*70.0-130*		*07/17/2020 09:09*	WG1510563

JC 8/18/2020

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	297000		8450	20000	1	07/17/2020 03:46	WG1508221

Sample Narrative:

L1238602-08 WG1508221: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	23300		379	1000	1	07/11/2020 19:25	WG1507470
Nitrate	1390		48.0	100	1	07/11/2020 19:25	WG1507470
Sulfate	69500		594	5000	1	07/11/2020 19:25	WG1507470

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	1180	B	102	1000	1	07/13/2020 23:09	WG1508116

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	89.7	J	48.9	100	1	07/15/2020 12:02	WG1507541
Manganese	81.7		1.32	5.00	1	07/15/2020 12:02	WG1507541

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	U		0.287	0.678	1	07/15/2020 14:48	WG1508539
Ethane	U		0.296	1.29	1	07/15/2020 14:48	WG1508539
Ethene	U		0.422	1.27	1	07/15/2020 14:48	WG1508539

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U		0.548	1.00	1	07/17/2020 09:28	WG1510563
Acrylonitrile	U		0.0760	0.500	1	07/17/2020 09:28	WG1510563
Benzene	U		0.0160	0.0400	1	07/17/2020 09:28	WG1510563
Bromobenzene	U		0.0420	0.500	1	07/17/2020 09:28	WG1510563
Bromodichloromethane	U		0.0315	0.100	1	07/17/2020 09:28	WG1510563
Bromoform	U		0.239	1.00	1	07/17/2020 09:28	WG1510563
Bromomethane	U		0.148	0.500	1	07/17/2020 09:28	WG1510563
n-Butylbenzene	U UJ	J0	0.153	0.500	1	07/17/2020 09:28	WG1510563
sec-Butylbenzene	U		0.101	0.500	1	07/17/2020 09:28	WG1510563
tert-Butylbenzene	U		0.0620	0.200	1	07/17/2020 09:28	WG1510563
Carbon tetrachloride	U		0.0432	0.200	1	07/17/2020 09:28	WG1510563
Chlorobenzene	U		0.0229	0.100	1	07/17/2020 09:28	WG1510563
Chlorodibromomethane	U		0.0180	0.100	1	07/17/2020 09:28	WG1510563
Chloroethane	U		0.0432	0.200	1	07/17/2020 09:28	WG1510563
Chloroform	U		0.0166	0.100	1	07/17/2020 09:28	WG1510563
Chloromethane	U		0.0556	0.500	1	07/17/2020 09:28	WG1510563
2-Chlorotoluene	U		0.0368	0.100	1	07/17/2020 09:28	WG1510563
4-Chlorotoluene	U		0.0452	0.200	1	07/17/2020 09:28	WG1510563
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	07/17/2020 09:28	WG1510563
1,2-Dibromoethane	U		0.0210	0.100	1	07/17/2020 09:28	WG1510563

JC 8/18/2020

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Dibromomethane	U		0.0400	0.200	1	07/17/2020 09:28	WG1510563
1,2-Dichlorobenzene	U	UJ J4	0.0580	0.200	1	07/17/2020 09:28	WG1510563
1,3-Dichlorobenzene	U		0.0680	0.200	1	07/17/2020 09:28	WG1510563
1,4-Dichlorobenzene	U		0.0788	0.200	1	07/17/2020 09:28	WG1510563
Dichlorodifluoromethane	U		0.0327	0.100	1	07/17/2020 09:28	WG1510563
1,1-Dichloroethane	U		0.0230	0.100	1	07/17/2020 09:28	WG1510563
1,2-Dichloroethane	U		0.0190	0.100	1	07/17/2020 09:28	WG1510563
1,1-Dichloroethene	U		0.0200	0.100	1	07/17/2020 09:28	WG1510563
cis-1,2-Dichloroethene	1.83		0.0276	0.100	1	07/17/2020 09:28	WG1510563
trans-1,2-Dichloroethene	U		0.0572	0.200	1	07/17/2020 09:28	WG1510563
1,2-Dichloropropane	U		0.0508	0.200	1	07/17/2020 09:28	WG1510563
1,1-Dichloropropene	U		0.0280	0.100	1	07/17/2020 09:28	WG1510563
1,3-Dichloropropane	U		0.0700	0.200	1	07/17/2020 09:28	WG1510563
cis-1,3-Dichloropropene	U		0.0271	0.100	1	07/17/2020 09:28	WG1510563
trans-1,3-Dichloropropene	U		0.0612	0.200	1	07/17/2020 09:28	WG1510563
2,2-Dichloropropane	U		0.0317	0.100	1	07/17/2020 09:28	WG1510563
Di-isopropyl ether	U		0.0140	0.0400	1	07/17/2020 09:28	WG1510563
Ethylbenzene	U		0.0212	0.100	1	07/17/2020 09:28	WG1510563
Hexachloro-1,3-butadiene	U		0.508	1.00	1	07/17/2020 09:28	WG1510563
Isopropylbenzene	U		0.0345	0.100	1	07/17/2020 09:28	WG1510563
p-Isopropyltoluene	U		0.0932	0.200	1	07/17/2020 09:28	WG1510563
2-Butanone (MEK)	U		0.500	1.00	1	07/17/2020 09:28	WG1510563
Methylene Chloride	U		0.265	1.00	1	07/17/2020 09:28	WG1510563
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	07/17/2020 09:28	WG1510563
Methyl tert-butyl ether	U		0.0118	0.0400	1	07/17/2020 09:28	WG1510563
Naphthalene	U		0.124	0.500	1	07/17/2020 09:28	WG1510563
n-Propylbenzene	U		0.0472	0.200	1	07/17/2020 09:28	WG1510563
Styrene	U		0.109	0.500	1	07/17/2020 09:28	WG1510563
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	07/17/2020 09:28	WG1510563
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	07/17/2020 09:28	WG1510563
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	07/17/2020 09:28	WG1510563
Tetrachloroethene	10.9		0.0280	0.100	1	07/17/2020 09:28	WG1510563
Toluene	0.771		0.0500	0.200	1	07/17/2020 09:28	WG1510563
1,2,3-Trichlorobenzene	U		0.0250	0.500	1	07/17/2020 09:28	WG1510563
1,2,4-Trichlorobenzene	U		0.193	0.500	1	07/17/2020 09:28	WG1510563
1,1,1-Trichloroethane	U		0.0110	0.100	1	07/17/2020 09:28	WG1510563
1,1,2-Trichloroethane	U		0.0353	0.100	1	07/17/2020 09:28	WG1510563
Trichloroethene	0.786		0.0160	0.0400	1	07/17/2020 09:28	WG1510563
Trichlorofluoromethane	U		0.0200	0.100	1	07/17/2020 09:28	WG1510563
1,2,3-Trichloropropane	U		0.204	0.500	1	07/17/2020 09:28	WG1510563
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	07/17/2020 09:28	WG1510563
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	07/17/2020 09:28	WG1510563
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	07/17/2020 09:28	WG1510563
Vinyl chloride	U		0.0273	0.100	1	07/17/2020 09:28	WG1510563
Xylenes, Total	U		0.191	0.260	1	07/17/2020 09:28	WG1510563
Ethyl Ether	U		0.0170	0.100	1	07/17/2020 09:28	WG1510563
Tetrahydrofuran	U		0.0900	0.500	1	07/17/2020 09:28	WG1510563
Iodomethane	U		0.242	0.500	1	07/17/2020 09:28	WG1510563
Allyl chloride	U		0.580	1.00	1	07/17/2020 09:28	WG1510563
Trans-1,4-Dichloro-2-butene	U	UJ J0	0.0560	0.200	1	07/17/2020 09:28	WG1510563
(S) Toluene-d8	*97.5*			*75.0-131*		*07/17/2020 09:28*	WG1510563
(S) 4-Bromofluorobenzene	*99.4*			*67.0-138*		*07/17/2020 09:28*	WG1510563
(S) 1,2-Dichloroethane-d4	*107*			*70.0-130*		*07/17/2020 09:28*	WG1510563

JC 8/18/2020

MW-8-071420

Collected date/time: 07/14/20 10:10

SAMPLE RESULTS - 01

L1239455

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U		0.548	1.00	1	07/17/2020 09:47	WG1510563
Acrylonitrile	U		0.0760	0.500	1	07/17/2020 09:47	WG1510563
Benzene	U		0.0160	0.0400	1	07/17/2020 09:47	WG1510563
Bromobenzene	U		0.0420	0.500	1	07/17/2020 09:47	WG1510563
Bromodichloromethane	U		0.0315	0.100	1	07/17/2020 09:47	WG1510563
Bromoform	U		0.239	1.00	1	07/17/2020 09:47	WG1510563
Bromomethane	U		0.148	0.500	1	07/17/2020 09:47	WG1510563
n-Butylbenzene	U UJ	J0	0.153	0.500	1	07/17/2020 09:47	WG1510563
sec-Butylbenzene	U		0.101	0.500	1	07/17/2020 09:47	WG1510563
tert-Butylbenzene	U		0.0620	0.200	1	07/17/2020 09:47	WG1510563
Carbon tetrachloride	U		0.0432	0.200	1	07/17/2020 09:47	WG1510563
Chlorobenzene	U		0.0229	0.100	1	07/17/2020 09:47	WG1510563
Chlorodibromomethane	U		0.0180	0.100	1	07/17/2020 09:47	WG1510563
Chloroethane	U		0.0432	0.200	1	07/17/2020 09:47	WG1510563
Chloroform	U		0.0166	0.100	1	07/17/2020 09:47	WG1510563
Chloromethane	U		0.0556	0.500	1	07/17/2020 09:47	WG1510563
2-Chlorotoluene	U		0.0368	0.100	1	07/17/2020 09:47	WG1510563
4-Chlorotoluene	U		0.0452	0.200	1	07/17/2020 09:47	WG1510563
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	07/17/2020 09:47	WG1510563
1,2-Dibromoethane	U		0.0210	0.100	1	07/17/2020 09:47	WG1510563
Dibromomethane	U		0.0400	0.200	1	07/17/2020 09:47	WG1510563
1,2-Dichlorobenzene	U UJ	J4	0.0580	0.200	1	07/17/2020 09:47	WG1510563
1,3-Dichlorobenzene	U		0.0680	0.200	1	07/17/2020 09:47	WG1510563
1,4-Dichlorobenzene	U		0.0788	0.200	1	07/17/2020 09:47	WG1510563
Dichlorodifluoromethane	U		0.0327	0.100	1	07/17/2020 09:47	WG1510563
1,1-Dichloroethane	U		0.0230	0.100	1	07/17/2020 09:47	WG1510563
1,2-Dichloroethane	U		0.0190	0.100	1	07/17/2020 09:47	WG1510563
1,1-Dichloroethene	U		0.0200	0.100	1	07/17/2020 09:47	WG1510563
cis-1,2-Dichloroethene	U		0.0276	0.100	1	07/17/2020 09:47	WG1510563
trans-1,2-Dichloroethene	U		0.0572	0.200	1	07/17/2020 09:47	WG1510563
1,2-Dichloropropane	U		0.0508	0.200	1	07/17/2020 09:47	WG1510563
1,1-Dichloropropene	U		0.0280	0.100	1	07/17/2020 09:47	WG1510563
1,3-Dichloropropane	U		0.0700	0.200	1	07/17/2020 09:47	WG1510563
cis-1,3-Dichloropropene	U		0.0271	0.100	1	07/17/2020 09:47	WG1510563
trans-1,3-Dichloropropene	U		0.0612	0.200	1	07/17/2020 09:47	WG1510563
2,2-Dichloropropane	U		0.0317	0.100	1	07/17/2020 09:47	WG1510563
Di-isopropyl ether	U		0.0140	0.0400	1	07/17/2020 09:47	WG1510563
Ethylbenzene	U		0.0212	0.100	1	07/17/2020 09:47	WG1510563
Hexachloro-1,3-butadiene	U		0.508	1.00	1	07/17/2020 09:47	WG1510563
Isopropylbenzene	U		0.0345	0.100	1	07/17/2020 09:47	WG1510563
p-Isopropyltoluene	U		0.0932	0.200	1	07/17/2020 09:47	WG1510563
2-Butanone (MEK)	U		0.500	1.00	1	07/17/2020 09:47	WG1510563
Methylene Chloride	U		0.265	1.00	1	07/17/2020 09:47	WG1510563
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	07/17/2020 09:47	WG1510563
Methyl tert-butyl ether	U		0.0118	0.0400	1	07/17/2020 09:47	WG1510563
Naphthalene	U		0.124	0.500	1	07/17/2020 09:47	WG1510563
n-Propylbenzene	U		0.0472	0.200	1	07/17/2020 09:47	WG1510563
Styrene	U		0.109	0.500	1	07/17/2020 09:47	WG1510563
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	07/17/2020 09:47	WG1510563
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	07/17/2020 09:47	WG1510563
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	07/17/2020 09:47	WG1510563
Tetrachloroethene	U		0.0280	0.100	1	07/17/2020 09:47	WG1510563
Toluene	0.161	J	0.0500	0.200	1	07/17/2020 09:47	WG1510563
1,2,3-Trichlorobenzene	U		0.0250	0.500	1	07/17/2020 09:47	WG1510563
1,2,4-Trichlorobenzene	U		0.193	0.500	1	07/17/2020 09:47	WG1510563
1,1,1-Trichloroethane	U		0.0110	0.100	1	07/17/2020 09:47	WG1510563

Volatile Organic Compounds (GC/MS) by Method 8260D

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
1,1,2-Trichloroethane	U		0.0353	0.100	1	07/17/2020 09:47	WG1510563
Trichloroethene	U		0.0160	0.0400	1	07/17/2020 09:47	WG1510563
Trichlorofluoromethane	U		0.0200	0.100	1	07/17/2020 09:47	WG1510563
1,2,3-Trichloropropane	U		0.204	0.500	1	07/17/2020 09:47	WG1510563
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	07/17/2020 09:47	WG1510563
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	07/17/2020 09:47	WG1510563
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	07/17/2020 09:47	WG1510563
Vinyl chloride	U		0.0273	0.100	1	07/17/2020 09:47	WG1510563
Xylenes, Total	U		0.191	0.260	1	07/17/2020 09:47	WG1510563
Ethyl Ether	U		0.0170	0.100	1	07/17/2020 09:47	WG1510563
Tetrahydrofuran	U		0.0900	0.500	1	07/17/2020 09:47	WG1510563
Iodomethane	U		0.242	0.500	1	07/17/2020 09:47	WG1510563
Allyl chloride	U		0.580	1.00	1	07/17/2020 09:47	WG1510563
Trans-1,4-Dichloro-2-butene	U UJ	J0	0.0560	0.200	1	07/17/2020 09:47	WG1510563
(S) Toluene-d8	*98.3*			*75.0-131*		*07/17/2020 09:47*	WG1510563
(S) 4-Bromofluorobenzene	*97.5*			*67.0-138*		*07/17/2020 09:47*	WG1510563
(S) 1,2-Dichloroethane-d4	*108*			*70.0-130*		*07/17/2020 09:47*	WG1510563

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Wet Chemistry by Method 2320 B-2011

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Alkalinity	138000		8450	20000	1	07/20/2020 03:42	WG1511467

Sample Narrative:

L1239455-02 WG1511467: Endpoint pH 4.5

Wet Chemistry by Method 9056A

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Chloride	23700		379	1000	1	07/15/2020 16:38	WG1509213
Nitrate	1470		48.0	100	1	07/15/2020 16:38	WG1509213
Sulfate	62600		594	5000	1	07/15/2020 16:38	WG1509213

Wet Chemistry by Method 9060A

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
TOC (Total Organic Carbon)	972	U ~~B J~~	102	1000	1	07/15/2020 16:30	WG1509588

Metals (ICPMS) by Method 6020B

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Iron	7520		48.9	100	1	07/16/2020 01:22	WG1509671
Manganese	217		1.32	5.00	1	07/16/2020 01:22	WG1509671

Volatile Organic Compounds (GC) by Method RSK175

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Methane	U		0.287	0.678	1	07/16/2020 12:53	WG1509974
Ethane	U		0.296	1.29	1	07/16/2020 12:53	WG1509974
Ethene	U		0.422	1.27	1	07/16/2020 12:53	WG1509974

Volatile Organic Compounds (GC/MS) by Method 8260D

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Acetone	U		0.548	1.00	1	07/17/2020 10:06	WG1510563
Acrylonitrile	U		0.0760	0.500	1	07/17/2020 10:06	WG1510563
Benzene	U		0.0160	0.0400	1	07/17/2020 10:06	WG1510563
Bromobenzene	U		0.0420	0.500	1	07/17/2020 10:06	WG1510563
Bromodichloromethane	U		0.0315	0.100	1	07/17/2020 10:06	WG1510563
Bromoform	U		0.239	1.00	1	07/17/2020 10:06	WG1510563
Bromomethane	U		0.148	0.500	1	07/17/2020 10:06	WG1510563
n-Butylbenzene	U	UJ J0	0.153	0.500	1	07/17/2020 10:06	WG1510563
sec-Butylbenzene	U		0.101	0.500	1	07/17/2020 10:06	WG1510563
tert-Butylbenzene	U		0.0620	0.200	1	07/17/2020 10:06	WG1510563
Carbon tetrachloride	U		0.0432	0.200	1	07/17/2020 10:06	WG1510563
Chlorobenzene	U		0.0229	0.100	1	07/17/2020 10:06	WG1510563
Chlorodibromomethane	U		0.0180	0.100	1	07/17/2020 10:06	WG1510563
Chloroethane	U		0.0432	0.200	1	07/17/2020 10:06	WG1510563
Chloroform	U		0.0166	0.100	1	07/17/2020 10:06	WG1510563
Chloromethane	U		0.0556	0.500	1	07/17/2020 10:06	WG1510563
2-Chlorotoluene	U		0.0368	0.100	1	07/17/2020 10:06	WG1510563
4-Chlorotoluene	U		0.0452	0.200	1	07/17/2020 10:06	WG1510563
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	07/17/2020 10:06	WG1510563
1,2-Dibromoethane	U		0.0210	0.100	1	07/17/2020 10:06	WG1510563

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Dibromomethane	U		0.0400	0.200	1	07/17/2020 10:06	WG1510563
1,2-Dichlorobenzene	U	UJ J4	0.0580	0.200	1	07/17/2020 10:06	WG1510563
1,3-Dichlorobenzene	U		0.0680	0.200	1	07/17/2020 10:06	WG1510563
1,4-Dichlorobenzene	U		0.0788	0.200	1	07/17/2020 10:06	WG1510563
Dichlorodifluoromethane	U		0.0327	0.100	1	07/17/2020 10:06	WG1510563
1,1-Dichloroethane	0.421		0.0230	0.100	1	07/17/2020 10:06	WG1510563
1,2-Dichloroethane	U		0.0190	0.100	1	07/17/2020 10:06	WG1510563
1,1-Dichloroethene	0.0620	J	0.0200	0.100	1	07/17/2020 10:06	WG1510563
cis-1,2-Dichloroethene	0.683		0.0276	0.100	1	07/17/2020 10:06	WG1510563
trans-1,2-Dichloroethene	U		0.0572	0.200	1	07/17/2020 10:06	WG1510563
1,2-Dichloropropane	0.0970	J	0.0508	0.200	1	07/17/2020 10:06	WG1510563
1,1-Dichloropropene	U		0.0280	0.100	1	07/17/2020 10:06	WG1510563
1,3-Dichloropropane	U		0.0700	0.200	1	07/17/2020 10:06	WG1510563
cis-1,3-Dichloropropene	U		0.0271	0.100	1	07/17/2020 10:06	WG1510563
trans-1,3-Dichloropropene	U		0.0612	0.200	1	07/17/2020 10:06	WG1510563
2,2-Dichloropropane	U		0.0317	0.100	1	07/17/2020 10:06	WG1510563
Di-isopropyl ether	U		0.0140	0.0400	1	07/17/2020 10:06	WG1510563
Ethylbenzene	U		0.0212	0.100	1	07/17/2020 10:06	WG1510563
Hexachloro-1,3-butadiene	U		0.508	1.00	1	07/17/2020 10:06	WG1510563
Isopropylbenzene	U		0.0345	0.100	1	07/17/2020 10:06	WG1510563
p-Isopropyltoluene	U		0.0932	0.200	1	07/17/2020 10:06	WG1510563
2-Butanone (MEK)	U		0.500	1.00	1	07/17/2020 10:06	WG1510563
Methylene Chloride	U		0.265	1.00	1	07/17/2020 10:06	WG1510563
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	07/17/2020 10:06	WG1510563
Methyl tert-butyl ether	U		0.0118	0.0400	1	07/17/2020 10:06	WG1510563
Naphthalene	U		0.124	0.500	1	07/17/2020 10:06	WG1510563
n-Propylbenzene	U		0.0472	0.200	1	07/17/2020 10:06	WG1510563
Styrene	U		0.109	0.500	1	07/17/2020 10:06	WG1510563
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	07/17/2020 10:06	WG1510563
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	07/17/2020 10:06	WG1510563
1,1,2-Trichlorotrifluoroethane	0.477		0.0270	0.100	1	07/17/2020 10:06	WG1510563
Tetrachloroethene	U		0.0280	0.100	1	07/17/2020 10:06	WG1510563
Toluene	0.360		0.0500	0.200	1	07/17/2020 10:06	WG1510563
1,2,3-Trichlorobenzene	U		0.0250	0.500	1	07/17/2020 10:06	WG1510563
1,2,4-Trichlorobenzene	U		0.193	0.500	1	07/17/2020 10:06	WG1510563
1,1,1-Trichloroethane	0.136		0.0110	0.100	1	07/17/2020 10:06	WG1510563
1,1,2-Trichloroethane	U		0.0353	0.100	1	07/17/2020 10:06	WG1510563
Trichloroethene	U		0.0160	0.0400	1	07/17/2020 10:06	WG1510563
Trichlorofluoromethane	U		0.0200	0.100	1	07/17/2020 10:06	WG1510563
1,2,3-Trichloropropane	U		0.204	0.500	1	07/17/2020 10:06	WG1510563
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	07/17/2020 10:06	WG1510563
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	07/17/2020 10:06	WG1510563
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	07/17/2020 10:06	WG1510563
Vinyl chloride	0.0790	J	0.0273	0.100	1	07/17/2020 10:06	WG1510563
Xylenes, Total	U		0.191	0.260	1	07/17/2020 10:06	WG1510563
Ethyl Ether	U		0.0170	0.100	1	07/17/2020 10:06	WG1510563
Tetrahydrofuran	0.274	J	0.0900	0.500	1	07/17/2020 10:06	WG1510563
Iodomethane	U		0.242	0.500	1	07/17/2020 10:06	WG1510563
Allyl chloride	U		0.580	1.00	1	07/17/2020 10:06	WG1510563
Trans-1,4-Dichloro-2-butene	U	UJ J0	0.0560	0.200	1	07/17/2020 10:06	WG1510563
(S) Toluene-d8	*99.2*			*75.0-131*		*07/17/2020 10:06*	WG1510563
(S) 4-Bromofluorobenzene	*98.4*			*67.0-138*		*07/17/2020 10:06*	WG1510563
(S) 1,2-Dichloroethane-d4	*108*			*70.0-130*		*07/17/2020 10:06*	WG1510563

Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	134000		8450	20000	1	07/20/2020 03:49	WG1511467

Sample Narrative:

L1239455-03 WG1511467: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	23800		379	1000	1	07/15/2020 16:55	WG1509213
Nitrate	1480		48.0	100	1	07/15/2020 16:55	WG1509213
Sulfate	62800		594	5000	1	07/15/2020 16:55	WG1509213

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	964	U ~~B J~~	102	1000	1	07/15/2020 16:52	WG1509588

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	8040		48.9	100	1	07/16/2020 01:25	WG1509671
Manganese	221		1.32	5.00	1	07/16/2020 01:25	WG1509671

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	U		0.287	0.678	1	07/16/2020 13:04	WG1509974
Ethane	U		0.296	1.29	1	07/16/2020 13:04	WG1509974
Ethene	U		0.422	1.27	1	07/16/2020 13:04	WG1509974

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U		0.548	1.00	1	07/17/2020 10:25	WG1510563
Acrylonitrile	U		0.0760	0.500	1	07/17/2020 10:25	WG1510563
Benzene	U		0.0160	0.0400	1	07/17/2020 10:25	WG1510563
Bromobenzene	U		0.0420	0.500	1	07/17/2020 10:25	WG1510563
Bromodichloromethane	U		0.0315	0.100	1	07/17/2020 10:25	WG1510563
Bromoform	U		0.239	1.00	1	07/17/2020 10:25	WG1510563
Bromomethane	U		0.148	0.500	1	07/17/2020 10:25	WG1510563
n-Butylbenzene	U	UJ J0	0.153	0.500	1	07/17/2020 10:25	WG1510563
sec-Butylbenzene	U		0.101	0.500	1	07/17/2020 10:25	WG1510563
tert-Butylbenzene	U		0.0620	0.200	1	07/17/2020 10:25	WG1510563
Carbon tetrachloride	U		0.0432	0.200	1	07/17/2020 10:25	WG1510563
Chlorobenzene	U		0.0229	0.100	1	07/17/2020 10:25	WG1510563
Chlorodibromomethane	U		0.0180	0.100	1	07/17/2020 10:25	WG1510563
Chloroethane	U		0.0432	0.200	1	07/17/2020 10:25	WG1510563
Chloroform	U		0.0166	0.100	1	07/17/2020 10:25	WG1510563
Chloromethane	U		0.0556	0.500	1	07/17/2020 10:25	WG1510563
2-Chlorotoluene	U		0.0368	0.100	1	07/17/2020 10:25	WG1510563
4-Chlorotoluene	U		0.0452	0.200	1	07/17/2020 10:25	WG1510563
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	07/17/2020 10:25	WG1510563
1,2-Dibromoethane	U		0.0210	0.100	1	07/17/2020 10:25	WG1510563

MW-934-071420

Collected date/time: 07/14/20 11:00

SAMPLE RESULTS - 03

L1239455

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Dibromomethane	U		0.0400	0.200	1	07/17/2020 10:25	WG1510563
1,2-Dichlorobenzene	U UJ	J4	0.0580	0.200	1	07/17/2020 10:25	WG1510563
1,3-Dichlorobenzene	U		0.0680	0.200	1	07/17/2020 10:25	WG1510563
1,4-Dichlorobenzene	U		0.0788	0.200	1	07/17/2020 10:25	WG1510563
Dichlorodifluoromethane	U		0.0327	0.100	1	07/17/2020 10:25	WG1510563
1,1-Dichloroethane	0.420		0.0230	0.100	1	07/17/2020 10:25	WG1510563
1,2-Dichloroethane	U		0.0190	0.100	1	07/17/2020 10:25	WG1510563
1,1-Dichloroethene	0.0770	J	0.0200	0.100	1	07/17/2020 10:25	WG1510563
cis-1,2-Dichloroethene	0.662		0.0276	0.100	1	07/17/2020 10:25	WG1510563
trans-1,2-Dichloroethene	U		0.0572	0.200	1	07/17/2020 10:25	WG1510563
1,2-Dichloropropane	0.0860	J	0.0508	0.200	1	07/17/2020 10:25	WG1510563
1,1-Dichloropropene	U		0.0280	0.100	1	07/17/2020 10:25	WG1510563
1,3-Dichloropropane	U		0.0700	0.200	1	07/17/2020 10:25	WG1510563
cis-1,3-Dichloropropene	U		0.0271	0.100	1	07/17/2020 10:25	WG1510563
trans-1,3-Dichloropropene	U		0.0612	0.200	1	07/17/2020 10:25	WG1510563
2,2-Dichloropropane	U		0.0317	0.100	1	07/17/2020 10:25	WG1510563
Di-isopropyl ether	U		0.0140	0.0400	1	07/17/2020 10:25	WG1510563
Ethylbenzene	U		0.0212	0.100	1	07/17/2020 10:25	WG1510563
Hexachloro-1,3-butadiene	U		0.508	1.00	1	07/17/2020 10:25	WG1510563
Isopropylbenzene	U		0.0345	0.100	1	07/17/2020 10:25	WG1510563
p-Isopropyltoluene	U		0.0932	0.200	1	07/17/2020 10:25	WG1510563
2-Butanone (MEK)	U		0.500	1.00	1	07/17/2020 10:25	WG1510563
Methylene Chloride	U		0.265	1.00	1	07/17/2020 10:25	WG1510563
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	07/17/2020 10:25	WG1510563
Methyl tert-butyl ether	U		0.0118	0.0400	1	07/17/2020 10:25	WG1510563
Naphthalene	U		0.124	0.500	1	07/17/2020 10:25	WG1510563
n-Propylbenzene	U		0.0472	0.200	1	07/17/2020 10:25	WG1510563
Styrene	U		0.109	0.500	1	07/17/2020 10:25	WG1510563
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	07/17/2020 10:25	WG1510563
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	07/17/2020 10:25	WG1510563
1,1,2-Trichlorotrifluoroethane	0.500		0.0270	0.100	1	07/17/2020 10:25	WG1510563
Tetrachloroethene	U		0.0280	0.100	1	07/17/2020 10:25	WG1510563
Toluene	0.375		0.0500	0.200	1	07/17/2020 10:25	WG1510563
1,2,3-Trichlorobenzene	U		0.0250	0.500	1	07/17/2020 10:25	WG1510563
1,2,4-Trichlorobenzene	U		0.193	0.500	1	07/17/2020 10:25	WG1510563
1,1,1-Trichloroethane	0.148		0.0110	0.100	1	07/17/2020 10:25	WG1510563
1,1,2-Trichloroethane	U		0.0353	0.100	1	07/17/2020 10:25	WG1510563
Trichloroethene	U		0.0160	0.0400	1	07/17/2020 10:25	WG1510563
Trichlorofluoromethane	U		0.0200	0.100	1	07/17/2020 10:25	WG1510563
1,2,3-Trichloropropane	U		0.204	0.500	1	07/17/2020 10:25	WG1510563
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	07/17/2020 10:25	WG1510563
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	07/17/2020 10:25	WG1510563
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	07/17/2020 10:25	WG1510563
Vinyl chloride	0.0730	J	0.0273	0.100	1	07/17/2020 10:25	WG1510563
Xylenes, Total	U		0.191	0.260	1	07/17/2020 10:25	WG1510563
Ethyl Ether	U		0.0170	0.100	1	07/17/2020 10:25	WG1510563
Tetrahydrofuran	0.304	J	0.0900	0.500	1	07/17/2020 10:25	WG1510563
Iodomethane	U		0.242	0.500	1	07/17/2020 10:25	WG1510563
Allyl chloride	U		0.580	1.00	1	07/17/2020 10:25	WG1510563
Trans-1,4-Dichloro-2-butene	U UJ	J0	0.0560	0.200	1	07/17/2020 10:25	WG1510563
(S) Toluene-d8	*98.3*			*75.0-131*		*07/17/2020 10:25*	WG1510563
(S) 4-Bromofluorobenzene	*94.9*			*67.0-138*		*07/17/2020 10:25*	WG1510563
(S) 1,2-Dichloroethane-d4	*107*			*70.0-130*		*07/17/2020 10:25*	WG1510563

Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	291000		8450	20000	1	07/20/2020 03:55	WG1511467

Sample Narrative:

L1239455-04 WG1511467: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	20500		379	1000	1	07/15/2020 17:45	WG1509213
Nitrate	U		48.0	100	1	07/15/2020 17:45	WG1509213
Sulfate	106000		2970	25000	5	07/15/2020 18:02	WG1509213

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	2300	~~B~~	102	1000	1	07/15/2020 17:30	WG1509588

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	4400		48.9	100	1	07/16/2020 01:28	WG1509671
Manganese	731		1.32	5.00	1	07/16/2020 01:28	WG1509671

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	277		0.287	0.678	1	07/16/2020 13:07	WG1509974
Ethane	U		0.296	1.29	1	07/16/2020 13:07	WG1509974
Ethene	U		0.422	1.27	1	07/16/2020 13:07	WG1509974

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U		0.548	1.00	1	07/17/2020 10:44	WG1510563
Acrylonitrile	U		0.0760	0.500	1	07/17/2020 10:44	WG1510563
Benzene	0.0680		0.0160	0.0400	1	07/17/2020 10:44	WG1510563
Bromobenzene	U		0.0420	0.500	1	07/17/2020 10:44	WG1510563
Bromodichloromethane	U		0.0315	0.100	1	07/17/2020 10:44	WG1510563
Bromoform	U		0.239	1.00	1	07/17/2020 10:44	WG1510563
Bromomethane	U		0.148	0.500	1	07/17/2020 10:44	WG1510563
n-Butylbenzene	U	UJ J0	0.153	0.500	1	07/17/2020 10:44	WG1510563
sec-Butylbenzene	U		0.101	0.500	1	07/17/2020 10:44	WG1510563
tert-Butylbenzene	U		0.0620	0.200	1	07/17/2020 10:44	WG1510563
Carbon tetrachloride	U		0.0432	0.200	1	07/17/2020 10:44	WG1510563
Chlorobenzene	U		0.0229	0.100	1	07/17/2020 10:44	WG1510563
Chlorodibromomethane	U		0.0180	0.100	1	07/17/2020 10:44	WG1510563
Chloroethane	U		0.0432	0.200	1	07/17/2020 10:44	WG1510563
Chloroform	U		0.0166	0.100	1	07/17/2020 10:44	WG1510563
Chloromethane	U		0.0556	0.500	1	07/17/2020 10:44	WG1510563
2-Chlorotoluene	U		0.0368	0.100	1	07/17/2020 10:44	WG1510563
4-Chlorotoluene	U		0.0452	0.200	1	07/17/2020 10:44	WG1510563
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	07/17/2020 10:44	WG1510563
1,2-Dibromoethane	U		0.0210	0.100	1	07/17/2020 10:44	WG1510563

MW120-071420

Collected date/time: 07/14/20 14:00

SAMPLE RESULTS - 04

L1239455

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Dibromomethane	U		0.0400	0.200	1	07/17/2020 10:44	WG1510563
1,2-Dichlorobenzene	U UJ	J4	0.0580	0.200	1	07/17/2020 10:44	WG1510563
1,3-Dichlorobenzene	U		0.0680	0.200	1	07/17/2020 10:44	WG1510563
1,4-Dichlorobenzene	U		0.0788	0.200	1	07/17/2020 10:44	WG1510563
Dichlorodifluoromethane	U		0.0327	0.100	1	07/17/2020 10:44	WG1510563
1,1-Dichloroethane	1.37		0.0230	0.100	1	07/17/2020 10:44	WG1510563
1,2-Dichloroethane	0.895		0.0190	0.100	1	07/17/2020 10:44	WG1510563
1,1-Dichloroethene	0.412		0.0200	0.100	1	07/17/2020 10:44	WG1510563
cis-1,2-Dichloroethene	28.8		0.0276	0.100	1	07/17/2020 10:44	WG1510563
trans-1,2-Dichloroethene	0.249		0.0572	0.200	1	07/17/2020 10:44	WG1510563
1,2-Dichloropropane	1.11		0.0508	0.200	1	07/17/2020 10:44	WG1510563
1,1-Dichloropropene	U		0.0280	0.100	1	07/17/2020 10:44	WG1510563
1,3-Dichloropropane	U		0.0700	0.200	1	07/17/2020 10:44	WG1510563
cis-1,3-Dichloropropene	U		0.0271	0.100	1	07/17/2020 10:44	WG1510563
trans-1,3-Dichloropropene	U		0.0612	0.200	1	07/17/2020 10:44	WG1510563
2,2-Dichloropropane	U		0.0317	0.100	1	07/17/2020 10:44	WG1510563
Di-isopropyl ether	U		0.0140	0.0400	1	07/17/2020 10:44	WG1510563
Ethylbenzene	U		0.0212	0.100	1	07/17/2020 10:44	WG1510563
Hexachloro-1,3-butadiene	U		0.508	1.00	1	07/17/2020 10:44	WG1510563
Isopropylbenzene	U		0.0345	0.100	1	07/17/2020 10:44	WG1510563
p-Isopropyltoluene	U		0.0932	0.200	1	07/17/2020 10:44	WG1510563
2-Butanone (MEK)	U		0.500	1.00	1	07/17/2020 10:44	WG1510563
Methylene Chloride	U		0.265	1.00	1	07/17/2020 10:44	WG1510563
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	07/17/2020 10:44	WG1510563
Methyl tert-butyl ether	U		0.0118	0.0400	1	07/17/2020 10:44	WG1510563
Naphthalene	U		0.124	0.500	1	07/17/2020 10:44	WG1510563
n-Propylbenzene	U		0.0472	0.200	1	07/17/2020 10:44	WG1510563
Styrene	U		0.109	0.500	1	07/17/2020 10:44	WG1510563
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	07/17/2020 10:44	WG1510563
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	07/17/2020 10:44	WG1510563
1,1,2-Trichlorotrifluoroethane	0.0870	J	0.0270	0.100	1	07/17/2020 10:44	WG1510563
Tetrachloroethene	44.0		0.0280	0.100	1	07/17/2020 10:44	WG1510563
Toluene	0.511		0.0500	0.200	1	07/17/2020 10:44	WG1510563
1,2,3-Trichlorobenzene	U		0.0250	0.500	1	07/17/2020 10:44	WG1510563
1,2,4-Trichlorobenzene	U		0.193	0.500	1	07/17/2020 10:44	WG1510563
1,1,1-Trichloroethane	U		0.0110	0.100	1	07/17/2020 10:44	WG1510563
1,1,2-Trichloroethane	U		0.0353	0.100	1	07/17/2020 10:44	WG1510563
Trichloroethene	16.2		0.0160	0.0400	1	07/17/2020 10:44	WG1510563
Trichlorofluoromethane	U		0.0200	0.100	1	07/17/2020 10:44	WG1510563
1,2,3-Trichloropropane	U		0.204	0.500	1	07/17/2020 10:44	WG1510563
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	07/17/2020 10:44	WG1510563
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	07/17/2020 10:44	WG1510563
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	07/17/2020 10:44	WG1510563
Vinyl chloride	2.78		0.0273	0.100	1	07/17/2020 10:44	WG1510563
Xylenes, Total	U		0.191	0.260	1	07/17/2020 10:44	WG1510563
Ethyl Ether	U		0.0170	0.100	1	07/17/2020 10:44	WG1510563
Tetrahydrofuran	0.154	J	0.0900	0.500	1	07/17/2020 10:44	WG1510563
Iodomethane	U		0.242	0.500	1	07/17/2020 10:44	WG1510563
Allyl chloride	U		0.580	1.00	1	07/17/2020 10:44	WG1510563
Trans-1,4-Dichloro-2-butene	U UJ	J0	0.0560	0.200	1	07/17/2020 10:44	WG1510563
(S) Toluene-d8	*100*			*75.0-131*		*07/17/2020 10:44*	WG1510563
(S) 4-Bromofluorobenzene	*96.5*			*67.0-138*		*07/17/2020 10:44*	WG1510563
(S) 1,2-Dichloroethane-d4	*104*			*70.0-130*		*07/17/2020 10:44*	WG1510563

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	U		8450	20000	1	07/20/2020 04:02	WG1511467

Sample Narrative:

L1239455-05 WG1511467: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	U		379	1000	1	07/15/2020 18:19	WG1509213
Nitrate	U		48.0	100	1	07/15/2020 18:19	WG1509213
Sulfate	U		594	5000	1	07/15/2020 18:19	WG1509213

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	352	B J	102	1000	1	07/15/2020 18:45	WG1509588

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	U		48.9	100	1	07/16/2020 01:41	WG1509671
Manganese	U		1.32	5.00	1	07/16/2020 01:41	WG1509671

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	62.8	B J	31.6	100	1	07/17/2020 12:20	WG1510803
(S) a,a,a-Trifluorotoluene(FID)	*117*			*78.0-120*		*07/17/2020 12:20*	WG1510803

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	15.2		0.287	0.678	1	07/16/2020 13:10	WG1509974
Ethane	U		0.296	1.29	1	07/16/2020 13:10	WG1509974
Ethene	U		0.422	1.27	1	07/16/2020 13:10	WG1509974

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	4.77		0.548	1.00	1	07/17/2020 05:03	WG1510563
Acrylonitrile	U		0.0760	0.500	1	07/17/2020 05:03	WG1510563
Benzene	0.0700		0.0160	0.0400	1	07/17/2020 05:03	WG1510563
Bromobenzene	U		0.0420	0.500	1	07/17/2020 05:03	WG1510563
Bromodichloromethane	U		0.0315	0.100	1	07/17/2020 05:03	WG1510563
Bromoform	U		0.239	1.00	1	07/17/2020 05:03	WG1510563
Bromomethane	U		0.148	0.500	1	07/17/2020 05:03	WG1510563
n-Butylbenzene	U	UJ J0	0.153	0.500	1	07/17/2020 05:03	WG1510563
sec-Butylbenzene	U		0.101	0.500	1	07/17/2020 05:03	WG1510563
tert-Butylbenzene	U		0.0620	0.200	1	07/17/2020 05:03	WG1510563
Carbon tetrachloride	U		0.0432	0.200	1	07/17/2020 05:03	WG1510563
Chlorobenzene	U		0.0229	0.100	1	07/17/2020 05:03	WG1510563
Chlorodibromomethane	U		0.0180	0.100	1	07/17/2020 05:03	WG1510563

SAMPLE RESULTS - 05

L1239455

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloroethane	U		0.0432	0.200	1	07/17/2020 05:03	WG1510563
Chloroform	U		0.0166	0.100	1	07/17/2020 05:03	WG1510563
Chloromethane	U		0.0556	0.500	1	07/17/2020 05:03	WG1510563
2-Chlorotoluene	U		0.0368	0.100	1	07/17/2020 05:03	WG1510563
4-Chlorotoluene	U		0.0452	0.200	1	07/17/2020 05:03	WG1510563
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	07/17/2020 05:03	WG1510563
1,2-Dibromoethane	U		0.0210	0.100	1	07/17/2020 05:03	WG1510563
Dibromomethane	U		0.0400	0.200	1	07/17/2020 05:03	WG1510563
1,2-Dichlorobenzene	U UJ	J4	0.0580	0.200	1	07/17/2020 05:03	WG1510563
1,3-Dichlorobenzene	U		0.0680	0.200	1	07/17/2020 05:03	WG1510563
1,4-Dichlorobenzene	U		0.0788	0.200	1	07/17/2020 05:03	WG1510563
Dichlorodifluoromethane	U		0.0327	0.100	1	07/17/2020 05:03	WG1510563
1,1-Dichloroethane	U		0.0230	0.100	1	07/17/2020 05:03	WG1510563
1,2-Dichloroethane	U		0.0190	0.100	1	07/17/2020 05:03	WG1510563
1,1-Dichloroethene	U		0.0200	0.100	1	07/17/2020 05:03	WG1510563
cis-1,2-Dichloroethene	U		0.0276	0.100	1	07/17/2020 05:03	WG1510563
trans-1,2-Dichloroethene	U		0.0572	0.200	1	07/17/2020 05:03	WG1510563
1,2-Dichloropropane	U		0.0508	0.200	1	07/17/2020 05:03	WG1510563
1,1-Dichloropropene	U		0.0280	0.100	1	07/17/2020 05:03	WG1510563
1,3-Dichloropropane	U		0.0700	0.200	1	07/17/2020 05:03	WG1510563
cis-1,3-Dichloropropene	U		0.0271	0.100	1	07/17/2020 05:03	WG1510563
trans-1,3-Dichloropropene	U		0.0612	0.200	1	07/17/2020 05:03	WG1510563
2,2-Dichloropropane	U		0.0317	0.100	1	07/17/2020 05:03	WG1510563
Di-isopropyl ether	U		0.0140	0.0400	1	07/17/2020 05:03	WG1510563
Ethylbenzene	U		0.0212	0.100	1	07/17/2020 05:03	WG1510563
Hexachloro-1,3-butadiene	U		0.508	1.00	1	07/17/2020 05:03	WG1510563
Isopropylbenzene	U		0.0345	0.100	1	07/17/2020 05:03	WG1510563
p-Isopropyltoluene	U		0.0932	0.200	1	07/17/2020 05:03	WG1510563
2-Butanone (MEK)	U		0.500	1.00	1	07/17/2020 05:03	WG1510563
Methylene Chloride	U		0.265	1.00	1	07/17/2020 05:03	WG1510563
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	07/17/2020 05:03	WG1510563
Methyl tert-butyl ether	U		0.0118	0.0400	1	07/17/2020 05:03	WG1510563
Naphthalene	U		0.124	0.500	1	07/17/2020 05:03	WG1510563
n-Propylbenzene	U		0.0472	0.200	1	07/17/2020 05:03	WG1510563
Styrene	U		0.109	0.500	1	07/17/2020 05:03	WG1510563
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	07/17/2020 05:03	WG1510563
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	07/17/2020 05:03	WG1510563
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	07/17/2020 05:03	WG1510563
Tetrachloroethene	U		0.0280	0.100	1	07/17/2020 05:03	WG1510563
Toluene	0.167	J	0.0500	0.200	1	07/17/2020 05:03	WG1510563
1,2,3-Trichlorobenzene	U		0.0250	0.500	1	07/17/2020 05:03	WG1510563
1,2,4-Trichlorobenzene	U		0.193	0.500	1	07/17/2020 05:03	WG1510563
1,1,1-Trichloroethane	U		0.0110	0.100	1	07/17/2020 05:03	WG1510563
1,1,2-Trichloroethane	U		0.0353	0.100	1	07/17/2020 05:03	WG1510563
Trichloroethene	U		0.0160	0.0400	1	07/17/2020 05:03	WG1510563
Trichlorofluoromethane	U		0.0200	0.100	1	07/17/2020 05:03	WG1510563
1,2,3-Trichloropropane	U		0.204	0.500	1	07/17/2020 05:03	WG1510563
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	07/17/2020 05:03	WG1510563
1,2,3-Trimethylbenzene	0.0810	J	0.0460	0.200	1	07/17/2020 05:03	WG1510563
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	07/17/2020 05:03	WG1510563
Vinyl chloride	U		0.0273	0.100	1	07/17/2020 05:03	WG1510563
Xylenes, Total	U		0.191	0.260	1	07/17/2020 05:03	WG1510563
Ethyl Ether	U		0.0170	0.100	1	07/17/2020 05:03	WG1510563
Tetrahydrofuran	U		0.0900	0.500	1	07/17/2020 05:03	WG1510563
Iodomethane	U		0.242	0.500	1	07/17/2020 05:03	WG1510563
Allyl chloride	U		0.580	1.00	1	07/17/2020 05:03	WG1510563

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Trans-1,4-Dichloro-2-butene	U UJ	J0	0.0560	0.200	1	07/17/2020 05:03	WG1510563
(S) Toluene-d8	*96.0*			*75.0-131*		*07/17/2020 05:03*	WG1510563
(S) 4-Bromofluorobenzene	*104*			*67.0-138*		*07/17/2020 05:03*	WG1510563
(S) 1,2-Dichloroethane-d4	*109*			*70.0-130*		*07/17/2020 05:03*	WG1510563

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	323000		8450	20000	1	07/21/2020 21:52	WG1511470

Sample Narrative:

L1240037-01 WG1511470: Endpoint pH 4.5 headspace

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	24000		379	1000	1	07/16/2020 22:48	WG1510095
Nitrate	U		48.0	100	1	07/16/2020 22:48	WG1510095
Sulfate	16600		594	5000	1	07/16/2020 22:48	WG1510095

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	2990	~~B~~	102	1000	1	07/17/2020 13:13	WG1510700

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	7460		48.9	100	1	07/21/2020 09:01	WG1511299
Manganese	422		1.32	5.00	1	07/21/2020 09:01	WG1511299

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	91.2		0.287	0.678	1	07/17/2020 13:11	WG1510667
Ethane	U		0.296	1.29	1	07/17/2020 13:11	WG1510667
Ethene	U		0.422	1.27	1	07/17/2020 13:11	WG1510667

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U	~~J3~~	0.548	1.00	1	07/19/2020 23:36	WG1511418
Acrylonitrile	U		0.0760	0.500	1	07/19/2020 23:36	WG1511418
Benzene	0.0520		0.0160	0.0400	1	07/19/2020 23:36	WG1511418
Bromobenzene	U		0.0420	0.500	1	07/19/2020 23:36	WG1511418
Bromodichloromethane	U		0.0315	0.100	1	07/19/2020 23:36	WG1511418
Bromoform	U		0.239	1.00	1	07/19/2020 23:36	WG1511418
Bromomethane	U		0.148	0.500	1	07/19/2020 23:36	WG1511418
n-Butylbenzene	U		0.153	0.500	1	07/19/2020 23:36	WG1511418
sec-Butylbenzene	U		0.101	0.500	1	07/19/2020 23:36	WG1511418
tert-Butylbenzene	U		0.0620	0.200	1	07/19/2020 23:36	WG1511418
Carbon tetrachloride	U		0.0432	0.200	1	07/19/2020 23:36	WG1511418
Chlorobenzene	U		0.0229	0.100	1	07/19/2020 23:36	WG1511418
Chlorodibromomethane	U		0.0180	0.100	1	07/19/2020 23:36	WG1511418
Chloroethane	U		0.0432	0.200	1	07/19/2020 23:36	WG1511418
Chloroform	U		0.0166	0.100	1	07/19/2020 23:36	WG1511418
Chloromethane	U		0.0556	0.500	1	07/19/2020 23:36	WG1511418
2-Chlorotoluene	U		0.0368	0.100	1	07/19/2020 23:36	WG1511418
4-Chlorotoluene	U		0.0452	0.200	1	07/19/2020 23:36	WG1511418
1,2-Dibromo-3-Chloropropane	U	UJ J0	0.204	1.00	1	07/19/2020 23:36	WG1511418
1,2-Dibromoethane	U		0.0210	0.100	1	07/19/2020 23:36	WG1511418

JC 8/18/2020

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Dibromomethane	U		0.0400	0.200	1	07/19/2020 23:36	WG1511418
1,2-Dichlorobenzene	U	J4	0.0580	0.200	1	07/19/2020 23:36	WG1511418
1,3-Dichlorobenzene	U		0.0680	0.200	1	07/19/2020 23:36	WG1511418
1,4-Dichlorobenzene	U		0.0788	0.200	1	07/19/2020 23:36	WG1511418
Dichlorodifluoromethane	U		0.0327	0.100	1	07/19/2020 23:36	WG1511418
1,1-Dichloroethane	U		0.0230	0.100	1	07/19/2020 23:36	WG1511418
1,2-Dichloroethane	U		0.0190	0.100	1	07/19/2020 23:36	WG1511418
1,1-Dichloroethene	U		0.0200	0.100	1	07/19/2020 23:36	WG1511418
cis-1,2-Dichloroethene	0.379		0.0276	0.100	1	07/19/2020 23:36	WG1511418
trans-1,2-Dichloroethene	U	J4	0.0572	0.200	1	07/19/2020 23:36	WG1511418
1,2-Dichloropropane	U		0.0508	0.200	1	07/19/2020 23:36	WG1511418
1,1-Dichloropropene	U		0.0280	0.100	1	07/19/2020 23:36	WG1511418
1,3-Dichloropropane	U		0.0700	0.200	1	07/19/2020 23:36	WG1511418
cis-1,3-Dichloropropene	U		0.0271	0.100	1	07/19/2020 23:36	WG1511418
trans-1,3-Dichloropropene	U		0.0612	0.200	1	07/19/2020 23:36	WG1511418
2,2-Dichloropropane	U		0.0317	0.100	1	07/19/2020 23:36	WG1511418
Di-isopropyl ether	U		0.0140	0.0400	1	07/19/2020 23:36	WG1511418
Ethylbenzene	U		0.0212	0.100	1	07/19/2020 23:36	WG1511418
Hexachloro-1,3-butadiene	U		0.508	1.00	1	07/19/2020 23:36	WG1511418
Isopropylbenzene	U		0.0345	0.100	1	07/19/2020 23:36	WG1511418
p-Isopropyltoluene	U		0.0932	0.200	1	07/19/2020 23:36	WG1511418
2-Butanone (MEK)	U		0.500	1.00	1	07/19/2020 23:36	WG1511418
Methylene Chloride	U		0.265	1.00	1	07/19/2020 23:36	WG1511418
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	07/19/2020 23:36	WG1511418
Methyl tert-butyl ether	U		0.0118	0.0400	1	07/19/2020 23:36	WG1511418
Naphthalene	U		0.124	0.500	1	07/19/2020 23:36	WG1511418
n-Propylbenzene	U		0.0472	0.200	1	07/19/2020 23:36	WG1511418
Styrene	U		0.109	0.500	1	07/19/2020 23:36	WG1511418
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	07/19/2020 23:36	WG1511418
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	07/19/2020 23:36	WG1511418
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	07/19/2020 23:36	WG1511418
Tetrachloroethene	U		0.0280	0.100	1	07/19/2020 23:36	WG1511418
Toluene	1.11		0.0500	0.200	1	07/19/2020 23:36	WG1511418
1,2,3-Trichlorobenzene	U		0.0250	0.500	1	07/19/2020 23:36	WG1511418
1,2,4-Trichlorobenzene	U		0.193	0.500	1	07/19/2020 23:36	WG1511418
1,1,1-Trichloroethane	U		0.0110	0.100	1	07/19/2020 23:36	WG1511418
1,1,2-Trichloroethane	U		0.0353	0.100	1	07/19/2020 23:36	WG1511418
Trichloroethene	0.247		0.0160	0.0400	1	07/19/2020 23:36	WG1511418
Trichlorofluoromethane	U		0.0200	0.100	1	07/19/2020 23:36	WG1511418
1,2,3-Trichloropropane	U		0.204	0.500	1	07/19/2020 23:36	WG1511418
1,2,4-Trimethylbenzene	0.0660	J	0.0464	0.200	1	07/19/2020 23:36	WG1511418
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	07/19/2020 23:36	WG1511418
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	07/19/2020 23:36	WG1511418
Vinyl chloride	0.882		0.0273	0.100	1	07/19/2020 23:36	WG1511418
Xylenes, Total	0.366		0.191	0.260	1	07/19/2020 23:36	WG1511418
Ethyl Ether	U		0.0170	0.100	1	07/19/2020 23:36	WG1511418
Tetrahydrofuran	U		0.0900	0.500	1	07/19/2020 23:36	WG1511418
Iodomethane	U		0.242	0.500	1	07/19/2020 23:36	WG1511418
Allyl chloride	U		0.580	1.00	1	07/19/2020 23:36	WG1511418
Trans-1,4-Dichloro-2-butene	U	UJ J0	0.0560	0.200	1	07/19/2020 23:36	WG1511418
(S) Toluene-d8	*97.4*			*75.0-131*		*07/19/2020 23:36*	WG1511418
(S) 4-Bromofluorobenzene	*96.4*			*67.0-138*		*07/19/2020 23:36*	WG1511418
(S) 1,2-Dichloroethane-d4	*104*			*70.0-130*		*07/19/2020 23:36*	WG1511418

JC 8/18/2020

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	491000		8450	20000	1	07/21/2020 21:59	WG1511470

Sample Narrative:

L1240037-02 WG1511470: Endpoint pH 4.5 headspace

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	40700		379	1000	1	07/16/2020 23:05	WG1510095
Nitrate	U		48.0	100	1	07/16/2020 23:05	WG1510095
Sulfate	45500		594	5000	1	07/16/2020 23:05	WG1510095

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	13700		102	1000	1	07/17/2020 14:33	WG1510700

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	4860		48.9	100	1	07/21/2020 09:14	WG1511299
Manganese	1540		1.32	5.00	1	07/21/2020 09:14	WG1511299

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	6000		0.287	0.678	1	07/17/2020 13:17	WG1510667
Ethane	94.2		0.296	1.29	1	07/17/2020 13:17	WG1510667
Ethene	149		0.422	1.27	1	07/17/2020 13:17	WG1510667

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U	~~J3~~	11.0	20.0	20	07/20/2020 02:45	WG1511418
Acrylonitrile	U		1.52	10.0	20	07/20/2020 02:45	WG1511418
Benzene	0.480	J	0.320	0.800	20	07/20/2020 02:45	WG1511418
Bromobenzene	U		0.840	10.0	20	07/20/2020 02:45	WG1511418
Bromodichloromethane	U		0.630	2.00	20	07/20/2020 02:45	WG1511418
Bromoform	U		4.78	20.0	20	07/20/2020 02:45	WG1511418
Bromomethane	U		2.96	10.0	20	07/20/2020 02:45	WG1511418
n-Butylbenzene	U		3.06	10.0	20	07/20/2020 02:45	WG1511418
sec-Butylbenzene	U		2.02	10.0	20	07/20/2020 02:45	WG1511418
tert-Butylbenzene	U		1.24	4.00	20	07/20/2020 02:45	WG1511418
Carbon tetrachloride	U		0.864	4.00	20	07/20/2020 02:45	WG1511418
Chlorobenzene	U		0.458	2.00	20	07/20/2020 02:45	WG1511418
Chlorodibromomethane	U		0.360	2.00	20	07/20/2020 02:45	WG1511418
Chloroethane	U		0.864	4.00	20	07/20/2020 02:45	WG1511418
Chloroform	U		0.332	2.00	20	07/20/2020 02:45	WG1511418
Chloromethane	U		1.11	10.0	20	07/20/2020 02:45	WG1511418
2-Chlorotoluene	U		0.736	2.00	20	07/20/2020 02:45	WG1511418
4-Chlorotoluene	U		0.904	4.00	20	07/20/2020 02:45	WG1511418
1,2-Dibromo-3-Chloropropane	U UJ	J0	4.08	20.0	20	07/20/2020 02:45	WG1511418
1,2-Dibromoethane	U		0.420	2.00	20	07/20/2020 02:45	WG1511418

JC 8/18/2020

MW-157-071520

Collected date/time: 07/15/20 11:30

SAMPLE RESULTS - 02

L1240037

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Dibromomethane	U		0.800	4.00	20	07/20/2020 02:45	WG1511418
1,2-Dichlorobenzene	U	~~J4~~	1.16	4.00	20	07/20/2020 02:45	WG1511418
1,3-Dichlorobenzene	U		1.36	4.00	20	07/20/2020 02:45	WG1511418
1,4-Dichlorobenzene	U		1.58	4.00	20	07/20/2020 02:45	WG1511418
Dichlorodifluoromethane	U		0.654	2.00	20	07/20/2020 02:45	WG1511418
1,1-Dichloroethane	U		0.460	2.00	20	07/20/2020 02:45	WG1511418
1,2-Dichloroethane	U		0.380	2.00	20	07/20/2020 02:45	WG1511418
1,1-Dichloroethene	3.28		0.400	2.00	20	07/20/2020 02:45	WG1511418
cis-1,2-Dichloroethene	888		0.552	2.00	20	07/20/2020 02:45	WG1511418
trans-1,2-Dichloroethene	7.20	~~J4~~	1.14	4.00	20	07/20/2020 02:45	WG1511418
1,2-Dichloropropane	U		1.02	4.00	20	07/20/2020 02:45	WG1511418
1,1-Dichloropropene	U		0.560	2.00	20	07/20/2020 02:45	WG1511418
1,3-Dichloropropane	U		1.40	4.00	20	07/20/2020 02:45	WG1511418
cis-1,3-Dichloropropene	U		0.542	2.00	20	07/20/2020 02:45	WG1511418
trans-1,3-Dichloropropene	U		1.22	4.00	20	07/20/2020 02:45	WG1511418
2,2-Dichloropropane	U		0.634	2.00	20	07/20/2020 02:45	WG1511418
Di-isopropyl ether	U		0.280	0.800	20	07/20/2020 02:45	WG1511418
Ethylbenzene	U		0.424	2.00	20	07/20/2020 02:45	WG1511418
Hexachloro-1,3-butadiene	U		10.2	20.0	20	07/20/2020 02:45	WG1511418
Isopropylbenzene	U		0.690	2.00	20	07/20/2020 02:45	WG1511418
p-Isopropyltoluene	U		1.86	4.00	20	07/20/2020 02:45	WG1511418
2-Butanone (MEK)	U		10.0	20.0	20	07/20/2020 02:45	WG1511418
Methylene Chloride	U		5.30	20.0	20	07/20/2020 02:45	WG1511418
4-Methyl-2-pentanone (MIBK)	U		8.00	20.0	20	07/20/2020 02:45	WG1511418
Methyl tert-butyl ether	U		0.236	0.800	20	07/20/2020 02:45	WG1511418
Naphthalene	U		2.48	10.0	20	07/20/2020 02:45	WG1511418
n-Propylbenzene	U		0.944	4.00	20	07/20/2020 02:45	WG1511418
Styrene	U		2.18	10.0	20	07/20/2020 02:45	WG1511418
1,1,1,2-Tetrachloroethane	U		0.400	2.00	20	07/20/2020 02:45	WG1511418
1,1,2,2-Tetrachloroethane	U		0.312	2.00	20	07/20/2020 02:45	WG1511418
1,1,2-Trichlorotrifluoroethane	U		0.540	2.00	20	07/20/2020 02:45	WG1511418
Tetrachloroethene	U		0.560	2.00	20	07/20/2020 02:45	WG1511418
Toluene	U		1.00	4.00	20	07/20/2020 02:45	WG1511418
1,2,3-Trichlorobenzene	U		0.500	10.0	20	07/20/2020 02:45	WG1511418
1,2,4-Trichlorobenzene	U		3.86	10.0	20	07/20/2020 02:45	WG1511418
1,1,1-Trichloroethane	U		0.220	2.00	20	07/20/2020 02:45	WG1511418
1,1,2-Trichloroethane	U		0.706	2.00	20	07/20/2020 02:45	WG1511418
Trichloroethene	3.06		0.320	0.800	20	07/20/2020 02:45	WG1511418
Trichlorofluoromethane	U		0.400	2.00	20	07/20/2020 02:45	WG1511418
1,2,3-Trichloropropane	U		4.08	10.0	20	07/20/2020 02:45	WG1511418
1,2,4-Trimethylbenzene	1.30	J	0.928	4.00	20	07/20/2020 02:45	WG1511418
1,2,3-Trimethylbenzene	U		0.920	4.00	20	07/20/2020 02:45	WG1511418
1,3,5-Trimethylbenzene	U		0.864	4.00	20	07/20/2020 02:45	WG1511418
Vinyl chloride	668		0.546	2.00	20	07/20/2020 02:45	WG1511418
Xylenes, Total	U		3.82	5.20	20	07/20/2020 02:45	WG1511418
Ethyl Ether	U		0.340	2.00	20	07/20/2020 02:45	WG1511418
Tetrahydrofuran	U		1.80	10.0	20	07/20/2020 02:45	WG1511418
Iodomethane	U		4.84	10.0	20	07/20/2020 02:45	WG1511418
Allyl chloride	U		11.6	20.0	20	07/20/2020 02:45	WG1511418
Trans-1,4-Dichloro-2-butene	U UJ	J0	1.12	4.00	20	07/20/2020 02:45	WG1511418
(S) Toluene-d8	*94.2*			*75.0-131*		*07/20/2020 02:45*	WG1511418
(S) 4-Bromofluorobenzene	*103*			*67.0-138*		*07/20/2020 02:45*	WG1511418
(S) 1,2-Dichloroethane-d4	*106*			*70.0-130*		*07/20/2020 02:45*	WG1511418

JC 8/18/2020

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	150000		8450	20000	1	07/21/2020 22:07	WG1511470

Sample Narrative:

L1240037-03 WG1511470: Endpoint pH 4.5 headspace

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	7490		379	1000	1	07/16/2020 23:58	WG1510095
Nitrate	50.9	J	48.0	100	1	07/16/2020 23:58	WG1510095
Sulfate	6670		594	5000	1	07/16/2020 23:58	WG1510095

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	957	~~B J~~	102	1000	1	07/17/2020 14:47	WG1510700

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	2420		48.9	100	1	07/21/2020 09:18	WG1511299
Manganese	597		1.32	5.00	1	07/21/2020 09:18	WG1511299

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	39.7		0.287	0.678	1	07/17/2020 13:20	WG1510667
Ethane	U		0.296	1.29	1	07/17/2020 13:20	WG1510667
Ethene	U		0.422	1.27	1	07/17/2020 13:20	WG1510667

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U	~~J3~~	0.548	1.00	1	07/19/2020 23:55	WG1511418
Acrylonitrile	U		0.0760	0.500	1	07/19/2020 23:55	WG1511418
Benzene	U		0.0160	0.0400	1	07/19/2020 23:55	WG1511418
Bromobenzene	U		0.0420	0.500	1	07/19/2020 23:55	WG1511418
Bromodichloromethane	U		0.0315	0.100	1	07/19/2020 23:55	WG1511418
Bromoform	U		0.239	1.00	1	07/19/2020 23:55	WG1511418
Bromomethane	U		0.148	0.500	1	07/19/2020 23:55	WG1511418
n-Butylbenzene	U		0.153	0.500	1	07/19/2020 23:55	WG1511418
sec-Butylbenzene	U		0.101	0.500	1	07/19/2020 23:55	WG1511418
tert-Butylbenzene	U		0.0620	0.200	1	07/19/2020 23:55	WG1511418
Carbon tetrachloride	U		0.0432	0.200	1	07/19/2020 23:55	WG1511418
Chlorobenzene	U		0.0229	0.100	1	07/19/2020 23:55	WG1511418
Chlorodibromomethane	U		0.0180	0.100	1	07/19/2020 23:55	WG1511418
Chloroethane	U		0.0432	0.200	1	07/19/2020 23:55	WG1511418
Chloroform	U		0.0166	0.100	1	07/19/2020 23:55	WG1511418
Chloromethane	U		0.0556	0.500	1	07/19/2020 23:55	WG1511418
2-Chlorotoluene	U		0.0368	0.100	1	07/19/2020 23:55	WG1511418
4-Chlorotoluene	U		0.0452	0.200	1	07/19/2020 23:55	WG1511418
1,2-Dibromo-3-Chloropropane	U	UJ J0	0.204	1.00	1	07/19/2020 23:55	WG1511418
1,2-Dibromoethane	U		0.0210	0.100	1	07/19/2020 23:55	WG1511418

JC 8/18/2020

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Volatile Organic Compounds (GC/MS) by Method 8260D

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Dibromomethane	U		0.0400	0.200	1	07/19/2020 23:55	WG1511418
1,2-Dichlorobenzene	U	~~J4~~	0.0580	0.200	1	07/19/2020 23:55	WG1511418
1,3-Dichlorobenzene	U		0.0680	0.200	1	07/19/2020 23:55	WG1511418
1,4-Dichlorobenzene	U		0.0788	0.200	1	07/19/2020 23:55	WG1511418
Dichlorodifluoromethane	U		0.0327	0.100	1	07/19/2020 23:55	WG1511418
1,1-Dichloroethane	U		0.0230	0.100	1	07/19/2020 23:55	WG1511418
1,2-Dichloroethane	U		0.0190	0.100	1	07/19/2020 23:55	WG1511418
1,1-Dichloroethene	U		0.0200	0.100	1	07/19/2020 23:55	WG1511418
cis-1,2-Dichloroethene	U		0.0276	0.100	1	07/19/2020 23:55	WG1511418
trans-1,2-Dichloroethene	U	~~J4~~	0.0572	0.200	1	07/19/2020 23:55	WG1511418
1,2-Dichloropropane	U		0.0508	0.200	1	07/19/2020 23:55	WG1511418
1,1-Dichloropropene	U		0.0280	0.100	1	07/19/2020 23:55	WG1511418
1,3-Dichloropropane	U		0.0700	0.200	1	07/19/2020 23:55	WG1511418
cis-1,3-Dichloropropene	U		0.0271	0.100	1	07/19/2020 23:55	WG1511418
trans-1,3-Dichloropropene	U		0.0612	0.200	1	07/19/2020 23:55	WG1511418
2,2-Dichloropropane	U		0.0317	0.100	1	07/19/2020 23:55	WG1511418
Di-isopropyl ether	U		0.0140	0.0400	1	07/19/2020 23:55	WG1511418
Ethylbenzene	U		0.0212	0.100	1	07/19/2020 23:55	WG1511418
Hexachloro-1,3-butadiene	U		0.508	1.00	1	07/19/2020 23:55	WG1511418
Isopropylbenzene	U		0.0345	0.100	1	07/19/2020 23:55	WG1511418
p-Isopropyltoluene	U		0.0932	0.200	1	07/19/2020 23:55	WG1511418
2-Butanone (MEK)	U		0.500	1.00	1	07/19/2020 23:55	WG1511418
Methylene Chloride	U		0.265	1.00	1	07/19/2020 23:55	WG1511418
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	07/19/2020 23:55	WG1511418
Methyl tert-butyl ether	U		0.0118	0.0400	1	07/19/2020 23:55	WG1511418
Naphthalene	U		0.124	0.500	1	07/19/2020 23:55	WG1511418
n-Propylbenzene	U		0.0472	0.200	1	07/19/2020 23:55	WG1511418
Styrene	U		0.109	0.500	1	07/19/2020 23:55	WG1511418
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	07/19/2020 23:55	WG1511418
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	07/19/2020 23:55	WG1511418
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	07/19/2020 23:55	WG1511418
Tetrachloroethene	U		0.0280	0.100	1	07/19/2020 23:55	WG1511418
Toluene	1.79		0.0500	0.200	1	07/19/2020 23:55	WG1511418
1,2,3-Trichlorobenzene	U		0.0250	0.500	1	07/19/2020 23:55	WG1511418
1,2,4-Trichlorobenzene	U		0.193	0.500	1	07/19/2020 23:55	WG1511418
1,1,1-Trichloroethane	U		0.0110	0.100	1	07/19/2020 23:55	WG1511418
1,1,2-Trichloroethane	U		0.0353	0.100	1	07/19/2020 23:55	WG1511418
Trichloroethene	U		0.0160	0.0400	1	07/19/2020 23:55	WG1511418
Trichlorofluoromethane	U		0.0200	0.100	1	07/19/2020 23:55	WG1511418
1,2,3-Trichloropropane	U		0.204	0.500	1	07/19/2020 23:55	WG1511418
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	07/19/2020 23:55	WG1511418
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	07/19/2020 23:55	WG1511418
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	07/19/2020 23:55	WG1511418
Vinyl chloride	U		0.0273	0.100	1	07/19/2020 23:55	WG1511418
Xylenes, Total	U		0.191	0.260	1	07/19/2020 23:55	WG1511418
Ethyl Ether	U		0.0170	0.100	1	07/19/2020 23:55	WG1511418
Tetrahydrofuran	U		0.0900	0.500	1	07/19/2020 23:55	WG1511418
Iodomethane	U		0.242	0.500	1	07/19/2020 23:55	WG1511418
Allyl chloride	U		0.580	1.00	1	07/19/2020 23:55	WG1511418
Trans-1,4-Dichloro-2-butene	U	UJ J0	0.0560	0.200	1	07/19/2020 23:55	WG1511418
(S) Toluene-d8	*99.4*			*75.0-131*		*07/19/2020 23:55*	WG1511418
(S) 4-Bromofluorobenzene	*98.0*			*67.0-138*		*07/19/2020 23:55*	WG1511418
(S) 1,2-Dichloroethane-d4	*106*			*70.0-130*		*07/19/2020 23:55*	WG1511418

JC 8/18/2020

Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	642000		8450	20000	1	07/21/2020 22:15	WG1511470

Sample Narrative:

L1240037-04 WG1511470: Endpoint pH 4.5 headspace

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	55600		379	1000	1	07/17/2020 00:15	WG1510095
Nitrate	U		48.0	100	1	07/17/2020 00:15	WG1510095
Sulfate	92100		594	5000	1	07/17/2020 00:15	WG1510095

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	12800		102	1000	1	07/17/2020 15:31	WG1510700

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	3190		48.9	100	1	07/21/2020 09:21	WG1511299
Manganese	2690		1.32	5.00	1	07/21/2020 09:21	WG1511299

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	2490		0.287	0.678	1	07/17/2020 13:23	WG1510667
Ethane	242		0.296	1.29	1	07/17/2020 13:23	WG1510667
Ethene	U		0.422	1.27	1	07/17/2020 13:23	WG1510667

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U	~~J3~~	27.4	50.0	50	07/20/2020 03:04	WG1511418
Acrylonitrile	U		3.80	25.0	50	07/20/2020 03:04	WG1511418
Benzene	1.60	J	0.800	2.00	50	07/20/2020 03:04	WG1511418
Bromobenzene	U		2.10	25.0	50	07/20/2020 03:04	WG1511418
Bromodichloromethane	U		1.58	5.00	50	07/20/2020 03:04	WG1511418
Bromoform	U		12.0	50.0	50	07/20/2020 03:04	WG1511418
Bromomethane	U		7.40	25.0	50	07/20/2020 03:04	WG1511418
n-Butylbenzene	U		7.65	25.0	50	07/20/2020 03:04	WG1511418
sec-Butylbenzene	U		5.05	25.0	50	07/20/2020 03:04	WG1511418
tert-Butylbenzene	U		3.10	10.0	50	07/20/2020 03:04	WG1511418
Carbon tetrachloride	U		2.16	10.0	50	07/20/2020 03:04	WG1511418
Chlorobenzene	U		1.15	5.00	50	07/20/2020 03:04	WG1511418
Chlorodibromomethane	U		0.900	5.00	50	07/20/2020 03:04	WG1511418
Chloroethane	U		2.16	10.0	50	07/20/2020 03:04	WG1511418
Chloroform	U		0.830	5.00	50	07/20/2020 03:04	WG1511418
Chloromethane	U		2.78	25.0	50	07/20/2020 03:04	WG1511418
2-Chlorotoluene	U		1.84	5.00	50	07/20/2020 03:04	WG1511418
4-Chlorotoluene	U		2.26	10.0	50	07/20/2020 03:04	WG1511418
1,2-Dibromo-3-Chloropropane	U	UJ J0	10.2	50.0	50	07/20/2020 03:04	WG1511418
1,2-Dibromoethane	U		1.05	5.00	50	07/20/2020 03:04	WG1511418

JC 8/18/2020

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Dibromomethane	U		2.00	10.0	50	07/20/2020 03:04	WG1511418
1,2-Dichlorobenzene	U	~~J4~~	2.90	10.0	50	07/20/2020 03:04	WG1511418
1,3-Dichlorobenzene	U		3.40	10.0	50	07/20/2020 03:04	WG1511418
1,4-Dichlorobenzene	U		3.94	10.0	50	07/20/2020 03:04	WG1511418
Dichlorodifluoromethane	U		1.64	5.00	50	07/20/2020 03:04	WG1511418
1,1-Dichloroethane	U		1.15	5.00	50	07/20/2020 03:04	WG1511418
1,2-Dichloroethane	U		0.950	5.00	50	07/20/2020 03:04	WG1511418
1,1-Dichloroethene	6.40		1.00	5.00	50	07/20/2020 03:04	WG1511418
cis-1,2-Dichloroethene	1040		1.38	5.00	50	07/20/2020 03:04	WG1511418
trans-1,2-Dichloroethene	6.50	J ~~J4~~	2.86	10.0	50	07/20/2020 03:04	WG1511418
1,2-Dichloropropane	U		2.54	10.0	50	07/20/2020 03:04	WG1511418
1,1-Dichloropropene	U		1.40	5.00	50	07/20/2020 03:04	WG1511418
1,3-Dichloropropane	U		3.50	10.0	50	07/20/2020 03:04	WG1511418
cis-1,3-Dichloropropene	U		1.36	5.00	50	07/20/2020 03:04	WG1511418
trans-1,3-Dichloropropene	U		3.06	10.0	50	07/20/2020 03:04	WG1511418
2,2-Dichloropropane	U		1.59	5.00	50	07/20/2020 03:04	WG1511418
Di-isopropyl ether	U		0.700	2.00	50	07/20/2020 03:04	WG1511418
Ethylbenzene	U		1.06	5.00	50	07/20/2020 03:04	WG1511418
Hexachloro-1,3-butadiene	U		25.4	50.0	50	07/20/2020 03:04	WG1511418
Isopropylbenzene	U		1.73	5.00	50	07/20/2020 03:04	WG1511418
p-Isopropyltoluene	U		4.66	10.0	50	07/20/2020 03:04	WG1511418
2-Butanone (MEK)	U		25.0	50.0	50	07/20/2020 03:04	WG1511418
Methylene Chloride	U		13.3	50.0	50	07/20/2020 03:04	WG1511418
4-Methyl-2-pentanone (MIBK)	U		20.0	50.0	50	07/20/2020 03:04	WG1511418
Methyl tert-butyl ether	U		0.590	2.00	50	07/20/2020 03:04	WG1511418
Naphthalene	U		6.20	25.0	50	07/20/2020 03:04	WG1511418
n-Propylbenzene	U		2.36	10.0	50	07/20/2020 03:04	WG1511418
Styrene	U		5.45	25.0	50	07/20/2020 03:04	WG1511418
1,1,1,2-Tetrachloroethane	U		1.00	5.00	50	07/20/2020 03:04	WG1511418
1,1,2,2-Tetrachloroethane	U		0.780	5.00	50	07/20/2020 03:04	WG1511418
1,1,2-Trichlorotrifluoroethane	U		1.35	5.00	50	07/20/2020 03:04	WG1511418
Tetrachloroethene	597		1.40	5.00	50	07/20/2020 03:04	WG1511418
Toluene	U		2.50	10.0	50	07/20/2020 03:04	WG1511418
1,2,3-Trichlorobenzene	U		1.25	25.0	50	07/20/2020 03:04	WG1511418
1,2,4-Trichlorobenzene	U		9.65	25.0	50	07/20/2020 03:04	WG1511418
1,1,1-Trichloroethane	U		0.550	5.00	50	07/20/2020 03:04	WG1511418
1,1,2-Trichloroethane	U		1.77	5.00	50	07/20/2020 03:04	WG1511418
Trichloroethene	486		0.800	2.00	50	07/20/2020 03:04	WG1511418
Trichlorofluoromethane	U		1.00	5.00	50	07/20/2020 03:04	WG1511418
1,2,3-Trichloropropane	U		10.2	25.0	50	07/20/2020 03:04	WG1511418
1,2,4-Trimethylbenzene	U		2.32	10.0	50	07/20/2020 03:04	WG1511418
1,2,3-Trimethylbenzene	U		2.30	10.0	50	07/20/2020 03:04	WG1511418
1,3,5-Trimethylbenzene	U		2.16	10.0	50	07/20/2020 03:04	WG1511418
Vinyl chloride	110		1.36	5.00	50	07/20/2020 03:04	WG1511418
Xylenes, Total	U		9.55	13.0	50	07/20/2020 03:04	WG1511418
Ethyl Ether	U		0.850	5.00	50	07/20/2020 03:04	WG1511418
Tetrahydrofuran	U		4.50	25.0	50	07/20/2020 03:04	WG1511418
Iodomethane	U		12.1	25.0	50	07/20/2020 03:04	WG1511418
Allyl chloride	U		29.0	50.0	50	07/20/2020 03:04	WG1511418
Trans-1,4-Dichloro-2-butene	U	UJ J0	2.80	10.0	50	07/20/2020 03:04	WG1511418
(S) Toluene-d8	*96.3*			*75.0-131*		*07/20/2020 03:04*	WG1511418
(S) 4-Bromofluorobenzene	*102*			*67.0-138*		*07/20/2020 03:04*	WG1511418
(S) 1,2-Dichloroethane-d4	*107*			*70.0-130*		*07/20/2020 03:04*	WG1511418

JC 8/18/2020

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	162000		8450	20000	1	07/21/2020 22:22	WG1511470

Sample Narrative:

L1240037-05 WG1511470: Endpoint pH 4.5 headspace

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	16300		379	1000	1	07/17/2020 00:32	WG1510095
Nitrate	U		48.0	100	1	07/17/2020 00:32	WG1510095
Sulfate	127000		5940	50000	10	07/17/2020 00:50	WG1510095

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	2360	~~B~~	102	1000	1	07/17/2020 15:44	WG1510700

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	7720		48.9	100	1	07/21/2020 09:24	WG1511299
Manganese	517		1.32	5.00	1	07/21/2020 09:24	WG1511299

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	1320		0.287	0.678	1	07/17/2020 13:28	WG1510667
Ethane	13.1		0.296	1.29	1	07/17/2020 13:28	WG1510667
Ethene	U		0.422	1.27	1	07/17/2020 13:28	WG1510667

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U	~~J3~~	0.548	1.00	1	07/20/2020 00:14	WG1511418
Acrylonitrile	U		0.0760	0.500	1	07/20/2020 00:14	WG1511418
Benzene	U		0.0160	0.0400	1	07/20/2020 00:14	WG1511418
Bromobenzene	U		0.0420	0.500	1	07/20/2020 00:14	WG1511418
Bromodichloromethane	U		0.0315	0.100	1	07/20/2020 00:14	WG1511418
Bromoform	U		0.239	1.00	1	07/20/2020 00:14	WG1511418
Bromomethane	U		0.148	0.500	1	07/20/2020 00:14	WG1511418
n-Butylbenzene	U		0.153	0.500	1	07/20/2020 00:14	WG1511418
sec-Butylbenzene	U		0.101	0.500	1	07/20/2020 00:14	WG1511418
tert-Butylbenzene	U		0.0620	0.200	1	07/20/2020 00:14	WG1511418
Carbon tetrachloride	U		0.0432	0.200	1	07/20/2020 00:14	WG1511418
Chlorobenzene	U		0.0229	0.100	1	07/20/2020 00:14	WG1511418
Chlorodibromomethane	U		0.0180	0.100	1	07/20/2020 00:14	WG1511418
Chloroethane	U		0.0432	0.200	1	07/20/2020 00:14	WG1511418
Chloroform	U		0.0166	0.100	1	07/20/2020 00:14	WG1511418
Chloromethane	U		0.0556	0.500	1	07/20/2020 00:14	WG1511418
2-Chlorotoluene	U		0.0368	0.100	1	07/20/2020 00:14	WG1511418
4-Chlorotoluene	U		0.0452	0.200	1	07/20/2020 00:14	WG1511418
1,2-Dibromo-3-Chloropropane	U	UJ J0	0.204	1.00	1	07/20/2020 00:14	WG1511418 JC 8/18/2020
1,2-Dibromoethane	U		0.0210	0.100	1	07/20/2020 00:14	WG1511418

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Dibromomethane	U		0.0400	0.200	1	07/20/2020 00:14	WG1511418
1,2-Dichlorobenzene	U	~~J4~~	0.0580	0.200	1	07/20/2020 00:14	WG1511418
1,3-Dichlorobenzene	U		0.0680	0.200	1	07/20/2020 00:14	WG1511418
1,4-Dichlorobenzene	U		0.0788	0.200	1	07/20/2020 00:14	WG1511418
Dichlorodifluoromethane	U		0.0327	0.100	1	07/20/2020 00:14	WG1511418
1,1-Dichloroethane	U		0.0230	0.100	1	07/20/2020 00:14	WG1511418
1,2-Dichloroethane	U		0.0190	0.100	1	07/20/2020 00:14	WG1511418
1,1-Dichloroethene	U		0.0200	0.100	1	07/20/2020 00:14	WG1511418
cis-1,2-Dichloroethene	U		0.0276	0.100	1	07/20/2020 00:14	WG1511418
trans-1,2-Dichloroethene	U	~~J4~~	0.0572	0.200	1	07/20/2020 00:14	WG1511418
1,2-Dichloropropane	U		0.0508	0.200	1	07/20/2020 00:14	WG1511418
1,1-Dichloropropene	U		0.0280	0.100	1	07/20/2020 00:14	WG1511418
1,3-Dichloropropane	U		0.0700	0.200	1	07/20/2020 00:14	WG1511418
cis-1,3-Dichloropropene	U		0.0271	0.100	1	07/20/2020 00:14	WG1511418
trans-1,3-Dichloropropene	U		0.0612	0.200	1	07/20/2020 00:14	WG1511418
2,2-Dichloropropane	U		0.0317	0.100	1	07/20/2020 00:14	WG1511418
Di-isopropyl ether	U		0.0140	0.0400	1	07/20/2020 00:14	WG1511418
Ethylbenzene	U		0.0212	0.100	1	07/20/2020 00:14	WG1511418
Hexachloro-1,3-butadiene	U		0.508	1.00	1	07/20/2020 00:14	WG1511418
Isopropylbenzene	U		0.0345	0.100	1	07/20/2020 00:14	WG1511418
p-Isopropyltoluene	U		0.0932	0.200	1	07/20/2020 00:14	WG1511418
2-Butanone (MEK)	U		0.500	1.00	1	07/20/2020 00:14	WG1511418
Methylene Chloride	U		0.265	1.00	1	07/20/2020 00:14	WG1511418
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	07/20/2020 00:14	WG1511418
Methyl tert-butyl ether	U		0.0118	0.0400	1	07/20/2020 00:14	WG1511418
Naphthalene	U		0.124	0.500	1	07/20/2020 00:14	WG1511418
n-Propylbenzene	U		0.0472	0.200	1	07/20/2020 00:14	WG1511418
Styrene	U		0.109	0.500	1	07/20/2020 00:14	WG1511418
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	07/20/2020 00:14	WG1511418
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	07/20/2020 00:14	WG1511418
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	07/20/2020 00:14	WG1511418
Tetrachloroethene	U		0.0280	0.100	1	07/20/2020 00:14	WG1511418
Toluene	1.32		0.0500	0.200	1	07/20/2020 00:14	WG1511418
1,2,3-Trichlorobenzene	U		0.0250	0.500	1	07/20/2020 00:14	WG1511418
1,2,4-Trichlorobenzene	U		0.193	0.500	1	07/20/2020 00:14	WG1511418
1,1,1-Trichloroethane	U		0.0110	0.100	1	07/20/2020 00:14	WG1511418
1,1,2-Trichloroethane	U		0.0353	0.100	1	07/20/2020 00:14	WG1511418
Trichloroethene	U		0.0160	0.0400	1	07/20/2020 00:14	WG1511418
Trichlorofluoromethane	U		0.0200	0.100	1	07/20/2020 00:14	WG1511418
1,2,3-Trichloropropane	U		0.204	0.500	1	07/20/2020 00:14	WG1511418
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	07/20/2020 00:14	WG1511418
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	07/20/2020 00:14	WG1511418
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	07/20/2020 00:14	WG1511418
Vinyl chloride	0.224		0.0273	0.100	1	07/20/2020 00:14	WG1511418
Xylenes, Total	U		0.191	0.260	1	07/20/2020 00:14	WG1511418
Ethyl Ether	U		0.0170	0.100	1	07/20/2020 00:14	WG1511418
Tetrahydrofuran	U		0.0900	0.500	1	07/20/2020 00:14	WG1511418
Iodomethane	U		0.242	0.500	1	07/20/2020 00:14	WG1511418
Allyl chloride	U		0.580	1.00	1	07/20/2020 00:14	WG1511418
Trans-1,4-Dichloro-2-butene	U	UJ J0	0.0560	0.200	1	07/20/2020 00:14	WG1511418
(S) Toluene-d8	*99.6*			*75.0-131*		*07/20/2020 00:14*	WG1511418
(S) 4-Bromofluorobenzene	*97.9*			*67.0-138*		*07/20/2020 00:14*	WG1511418
(S) 1,2-Dichloroethane-d4	*106*			*70.0-130*		*07/20/2020 00:14*	WG1511418

JC 8/18/2020

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U	J3	0.548	1.00	1	07/19/2020 21:05	WG1511418
Acrylonitrile	U		0.0760	0.500	1	07/19/2020 21:05	WG1511418
Benzene	U		0.0160	0.0400	1	07/19/2020 21:05	WG1511418
Bromobenzene	U		0.0420	0.500	1	07/19/2020 21:05	WG1511418
Bromodichloromethane	U		0.0315	0.100	1	07/19/2020 21:05	WG1511418
Bromoform	U		0.239	1.00	1	07/19/2020 21:05	WG1511418
Bromomethane	U		0.148	0.500	1	07/19/2020 21:05	WG1511418
n-Butylbenzene	U		0.153	0.500	1	07/19/2020 21:05	WG1511418
sec-Butylbenzene	U		0.101	0.500	1	07/19/2020 21:05	WG1511418
tert-Butylbenzene	U		0.0620	0.200	1	07/19/2020 21:05	WG1511418
Carbon tetrachloride	U		0.0432	0.200	1	07/19/2020 21:05	WG1511418
Chlorobenzene	U		0.0229	0.100	1	07/19/2020 21:05	WG1511418
Chlorodibromomethane	U		0.0180	0.100	1	07/19/2020 21:05	WG1511418
Chloroethane	U		0.0432	0.200	1	07/19/2020 21:05	WG1511418
Chloroform	U		0.0166	0.100	1	07/19/2020 21:05	WG1511418
Chloromethane	U		0.0556	0.500	1	07/19/2020 21:05	WG1511418
2-Chlorotoluene	U		0.0368	0.100	1	07/19/2020 21:05	WG1511418
4-Chlorotoluene	U		0.0452	0.200	1	07/19/2020 21:05	WG1511418
1,2-Dibromo-3-Chloropropane	U	J0	0.204	1.00	1	07/19/2020 21:05	WG1511418
1,2-Dibromoethane	U		0.0210	0.100	1	07/19/2020 21:05	WG1511418
Dibromomethane	U		0.0400	0.200	1	07/19/2020 21:05	WG1511418
1,2-Dichlorobenzene	U	J4	0.0580	0.200	1	07/19/2020 21:05	WG1511418
1,3-Dichlorobenzene	U		0.0680	0.200	1	07/19/2020 21:05	WG1511418
1,4-Dichlorobenzene	U		0.0788	0.200	1	07/19/2020 21:05	WG1511418
Dichlorodifluoromethane	U		0.0327	0.100	1	07/19/2020 21:05	WG1511418
1,1-Dichloroethane	U		0.0230	0.100	1	07/19/2020 21:05	WG1511418
1,2-Dichloroethane	U		0.0190	0.100	1	07/19/2020 21:05	WG1511418
1,1-Dichloroethene	U		0.0200	0.100	1	07/19/2020 21:05	WG1511418
cis-1,2-Dichloroethene	U		0.0276	0.100	1	07/19/2020 21:05	WG1511418
trans-1,2-Dichloroethene	U	J4	0.0572	0.200	1	07/19/2020 21:05	WG1511418
1,2-Dichloropropane	U		0.0508	0.200	1	07/19/2020 21:05	WG1511418
1,1-Dichloropropene	U		0.0280	0.100	1	07/19/2020 21:05	WG1511418
1,3-Dichloropropane	U		0.0700	0.200	1	07/19/2020 21:05	WG1511418
cis-1,3-Dichloropropene	U		0.0271	0.100	1	07/19/2020 21:05	WG1511418
trans-1,3-Dichloropropene	U		0.0612	0.200	1	07/19/2020 21:05	WG1511418
2,2-Dichloropropane	U		0.0317	0.100	1	07/19/2020 21:05	WG1511418
Di-isopropyl ether	U		0.0140	0.0400	1	07/19/2020 21:05	WG1511418
Ethylbenzene	U		0.0212	0.100	1	07/19/2020 21:05	WG1511418
Hexachloro-1,3-butadiene	U		0.508	1.00	1	07/19/2020 21:05	WG1511418
Isopropylbenzene	U		0.0345	0.100	1	07/19/2020 21:05	WG1511418
p-Isopropyltoluene	U		0.0932	0.200	1	07/19/2020 21:05	WG1511418
2-Butanone (MEK)	U		0.500	1.00	1	07/19/2020 21:05	WG1511418
Methylene Chloride	U		0.265	1.00	1	07/19/2020 21:05	WG1511418
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	07/19/2020 21:05	WG1511418
Methyl tert-butyl ether	U		0.0118	0.0400	1	07/19/2020 21:05	WG1511418
Naphthalene	U		0.124	0.500	1	07/19/2020 21:05	WG1511418
n-Propylbenzene	U		0.0472	0.200	1	07/19/2020 21:05	WG1511418
Styrene	U		0.109	0.500	1	07/19/2020 21:05	WG1511418
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	07/19/2020 21:05	WG1511418
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	07/19/2020 21:05	WG1511418
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	07/19/2020 21:05	WG1511418
Tetrachloroethene	U		0.0280	0.100	1	07/19/2020 21:05	WG1511418
Toluene	U		0.0500	0.200	1	07/19/2020 21:05	WG1511418
1,2,3-Trichlorobenzene	U		0.0250	0.500	1	07/19/2020 21:05	WG1511418
1,2,4-Trichlorobenzene	U		0.193	0.500	1	07/19/2020 21:05	WG1511418
1,1,1-Trichloroethane	U		0.0110	0.100	1	07/19/2020 21:05	WG1511418

JC 8/18/2020

Volatile Organic Compounds (GC/MS) by Method 8260D

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
1,1,2-Trichloroethane	U		0.0353	0.100	1	07/19/2020 21:05	WG1511418
Trichloroethene	U		0.0160	0.0400	1	07/19/2020 21:05	WG1511418
Trichlorofluoromethane	U		0.0200	0.100	1	07/19/2020 21:05	WG1511418
1,2,3-Trichloropropane	U		0.204	0.500	1	07/19/2020 21:05	WG1511418
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	07/19/2020 21:05	WG1511418
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	07/19/2020 21:05	WG1511418
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	07/19/2020 21:05	WG1511418
Vinyl chloride	U		0.0273	0.100	1	07/19/2020 21:05	WG1511418
Xylenes, Total	U		0.191	0.260	1	07/19/2020 21:05	WG1511418
Ethyl Ether	U		0.0170	0.100	1	07/19/2020 21:05	WG1511418
Tetrahydrofuran	U		0.0900	0.500	1	07/19/2020 21:05	WG1511418
Iodomethane	U		0.242	0.500	1	07/19/2020 21:05	WG1511418
Allyl chloride	U		0.580	1.00	1	07/19/2020 21:05	WG1511418
Trans-1,4-Dichloro-2-butene	U	J0	0.0560	0.200	1	07/19/2020 21:05	WG1511418
(S) Toluene-d8	*95.9*			*75.0-131*		*07/19/2020 21:05*	WG1511418
(S) 4-Bromofluorobenzene	*103*			*67.0-138*		*07/19/2020 21:05*	WG1511418
(S) 1,2-Dichloroethane-d4	*107*			*70.0-130*		*07/19/2020 21:05*	WG1511418

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

JC 8/18/2020

Wet Chemistry by Method 2320 B-2011

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Alkalinity	649000		8450	20000	1	07/23/2020 22:28	WG1511475

Sample Narrative:

L1240639-01 WG1511475: Endpoint pH 4.5

Wet Chemistry by Method 9056A

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Chloride	20800		379	1000	1	07/17/2020 16:47	WG1510729
Nitrate	U		48.0	100	1	07/17/2020 16:47	WG1510729
Sulfate	50200		594	5000	1	07/17/2020 16:47	WG1510729

Wet Chemistry by Method 9060A

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
TOC (Total Organic Carbon)	8020		102	1000	1	07/20/2020 15:22	WG1511400

Metals (ICPMS) by Method 6020B

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Iron	15200		48.9	100	1	07/20/2020 22:45	WG1511792
Manganese	1970		26.4	100	20	07/21/2020 00:13	WG1511792

Volatile Organic Compounds (GC) by Method RSK175

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Methane	8660		2.87	6.78	10	07/21/2020 13:25	WG1512332
Ethane	50.1		0.296	1.29	1	07/20/2020 11:18	WG1511042
Ethene	U		0.422	1.27	1	07/20/2020 11:18	WG1511042

Volatile Organic Compounds (GC/MS) by Method 8260D

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Acetone	U	~~J3~~	13.7	25.0	25	07/21/2020 04:58	WG1511692
Acrylonitrile	U		1.90	12.5	25	07/21/2020 04:58	WG1511692
Benzene	29.7		0.400	1.00	25	07/21/2020 04:58	WG1511692
Bromobenzene	U		1.05	12.5	25	07/21/2020 04:58	WG1511692
Bromodichloromethane	U		0.788	2.50	25	07/21/2020 04:58	WG1511692
Bromoform	U		5.98	25.0	25	07/21/2020 04:58	WG1511692
Bromomethane	U		3.70	12.5	25	07/21/2020 04:58	WG1511692
n-Butylbenzene	U		3.83	12.5	25	07/21/2020 04:58	WG1511692
sec-Butylbenzene	U		2.53	12.5	25	07/21/2020 04:58	WG1511692
tert-Butylbenzene	U		1.55	5.00	25	07/21/2020 04:58	WG1511692
Carbon tetrachloride	U		1.08	5.00	25	07/21/2020 04:58	WG1511692
Chlorobenzene	U		0.573	2.50	25	07/21/2020 04:58	WG1511692
Chlorodibromomethane	U		0.450	2.50	25	07/21/2020 04:58	WG1511692
Chloroethane	U		1.08	5.00	25	07/21/2020 04:58	WG1511692
Chloroform	1.15	J	0.415	2.50	25	07/21/2020 04:58	WG1511692
Chloromethane	U		1.39	12.5	25	07/21/2020 04:58	WG1511692
2-Chlorotoluene	U		0.920	2.50	25	07/21/2020 04:58	WG1511692
4-Chlorotoluene	U		1.13	5.00	25	07/21/2020 04:58	WG1511692
1,2-Dibromo-3-Chloropropane	U		5.10	25.0	25	07/21/2020 04:58	WG1511692
1,2-Dibromoethane	U		0.525	2.50	25	07/21/2020 04:58	WG1511692

JC 8/18/2020

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Dibromomethane	U		1.00	5.00	25	07/21/2020 04:58	WG1511692
1,2-Dichlorobenzene	U	UJ J4	1.45	5.00	25	07/21/2020 04:58	WG1511692
1,3-Dichlorobenzene	U		1.70	5.00	25	07/21/2020 04:58	WG1511692
1,4-Dichlorobenzene	U		1.97	5.00	25	07/21/2020 04:58	WG1511692
Dichlorodifluoromethane	U		0.818	2.50	25	07/21/2020 04:58	WG1511692
1,1-Dichloroethane	U		0.575	2.50	25	07/21/2020 04:58	WG1511692
1,2-Dichloroethane	U		0.475	2.50	25	07/21/2020 04:58	WG1511692
1,1-Dichloroethene	1.63	J	0.500	2.50	25	07/21/2020 04:58	WG1511692
cis-1,2-Dichloroethene	216	J4	0.690	2.50	25	07/21/2020 04:58	WG1511692
trans-1,2-Dichloroethene	1.88	J	1.43	5.00	25	07/21/2020 04:58	WG1511692
1,2-Dichloropropane	U		1.27	5.00	25	07/21/2020 04:58	WG1511692
1,1-Dichloropropene	U		0.700	2.50	25	07/21/2020 04:58	WG1511692
1,3-Dichloropropane	U		1.75	5.00	25	07/21/2020 04:58	WG1511692
cis-1,3-Dichloropropene	U		0.678	2.50	25	07/21/2020 04:58	WG1511692
trans-1,3-Dichloropropene	U		1.53	5.00	25	07/21/2020 04:58	WG1511692
2,2-Dichloropropane	U		0.793	2.50	25	07/21/2020 04:58	WG1511692
Di-isopropyl ether	1.17		0.350	1.00	25	07/21/2020 04:58	WG1511692
Ethylbenzene	U		0.530	2.50	25	07/21/2020 04:58	WG1511692
Hexachloro-1,3-butadiene	U		12.7	25.0	25	07/21/2020 04:58	WG1511692
Isopropylbenzene	U		0.863	2.50	25	07/21/2020 04:58	WG1511692
p-Isopropyltoluene	U		2.33	5.00	25	07/21/2020 04:58	WG1511692
2-Butanone (MEK)	U		12.5	25.0	25	07/21/2020 04:58	WG1511692
Methylene Chloride	U		6.63	25.0	25	07/21/2020 04:58	WG1511692
4-Methyl-2-pentanone (MIBK)	U		10.0	25.0	25	07/21/2020 04:58	WG1511692
Methyl tert-butyl ether	U		0.295	1.00	25	07/21/2020 04:58	WG1511692
Naphthalene	U		3.10	12.5	25	07/21/2020 04:58	WG1511692
n-Propylbenzene	U		1.18	5.00	25	07/21/2020 04:58	WG1511692
Styrene	U		2.73	12.5	25	07/21/2020 04:58	WG1511692
1,1,1,2-Tetrachloroethane	U		0.500	2.50	25	07/21/2020 04:58	WG1511692
1,1,2,2-Tetrachloroethane	U	UJ J0	0.390	2.50	25	07/21/2020 04:58	WG1511692
1,1,2-Trichlorotrifluoroethane	U		0.675	2.50	25	07/21/2020 04:58	WG1511692
Tetrachloroethene	189		0.700	2.50	25	07/21/2020 04:58	WG1511692
Toluene	1.73	J	1.25	5.00	25	07/21/2020 04:58	WG1511692
1,2,3-Trichlorobenzene	U		0.625	12.5	25	07/21/2020 04:58	WG1511692
1,2,4-Trichlorobenzene	U		4.83	12.5	25	07/21/2020 04:58	WG1511692
1,1,1-Trichloroethane	U		0.275	2.50	25	07/21/2020 04:58	WG1511692
1,1,2-Trichloroethane	U		0.883	2.50	25	07/21/2020 04:58	WG1511692
Trichloroethene	162		0.400	1.00	25	07/21/2020 04:58	WG1511692
Trichlorofluoromethane	U		0.500	2.50	25	07/21/2020 04:58	WG1511692
1,2,3-Trichloropropane	U		5.10	12.5	25	07/21/2020 04:58	WG1511692
1,2,4-Trimethylbenzene	U		1.16	5.00	25	07/21/2020 04:58	WG1511692
1,2,3-Trimethylbenzene	U		1.15	5.00	25	07/21/2020 04:58	WG1511692
1,3,5-Trimethylbenzene	U		1.08	5.00	25	07/21/2020 04:58	WG1511692
Vinyl chloride	11.3		0.682	2.50	25	07/21/2020 04:58	WG1511692
Xylenes, Total	U		4.78	6.50	25	07/21/2020 04:58	WG1511692
Ethyl Ether	U		0.425	2.50	25	07/21/2020 04:58	WG1511692
Tetrahydrofuran	5.98	J	2.25	12.5	25	07/21/2020 04:58	WG1511692
Iodomethane	U		6.05	12.5	25	07/21/2020 04:58	WG1511692
Allyl chloride	U		14.5	25.0	25	07/21/2020 04:58	WG1511692
Trans-1,4-Dichloro-2-butene	U	UJ J0	1.40	5.00	25	07/21/2020 04:58	WG1511692
(S) Toluene-d8	*96.9*			*75.0-131*		*07/21/2020 04:58*	WG1511692
(S) 4-Bromofluorobenzene	*95.6*			*67.0-138*		*07/21/2020 04:58*	WG1511692
(S) 1,2-Dichloroethane-d4	*105*			*70.0-130*		*07/21/2020 04:58*	WG1511692

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1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	510000		8450	20000	1	07/23/2020 22:35	WG1511475

Sample Narrative:

L1240639-02 WG1511475: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	42800		379	1000	1	07/17/2020 17:53	WG1510729
Nitrate	U		48.0	100	1	07/17/2020 17:53	WG1510729
Sulfate	94800		5940	50000	10	07/17/2020 18:09	WG1510729

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	14000		102	1000	1	07/20/2020 15:36	WG1511400

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	6530		48.9	100	1	07/20/2020 22:49	WG1511792
Manganese	1160		13.2	50.0	10	07/21/2020 00:17	WG1511792

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	4290		0.287	0.678	1	07/20/2020 11:21	WG1511042
Ethane	70.8		0.296	1.29	1	07/20/2020 11:21	WG1511042
Ethene	178		0.422	1.27	1	07/20/2020 11:21	WG1511042

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U	~~J3~~	54.8	100	100	07/21/2020 05:16	WG1511692
Acrylonitrile	U		7.60	50.0	100	07/21/2020 05:16	WG1511692
Benzene	U		1.60	4.00	100	07/21/2020 05:16	WG1511692
Bromobenzene	U		4.20	50.0	100	07/21/2020 05:16	WG1511692
Bromodichloromethane	U		3.15	10.0	100	07/21/2020 05:16	WG1511692
Bromoform	U		23.9	100	100	07/21/2020 05:16	WG1511692
Bromomethane	U		14.8	50.0	100	07/21/2020 05:16	WG1511692
n-Butylbenzene	U		15.3	50.0	100	07/21/2020 05:16	WG1511692
sec-Butylbenzene	U		10.1	50.0	100	07/21/2020 05:16	WG1511692
tert-Butylbenzene	U		6.20	20.0	100	07/21/2020 05:16	WG1511692
Carbon tetrachloride	U		4.32	20.0	100	07/21/2020 05:16	WG1511692
Chlorobenzene	U		2.29	10.0	100	07/21/2020 05:16	WG1511692
Chlorodibromomethane	U		1.80	10.0	100	07/21/2020 05:16	WG1511692
Chloroethane	U		4.32	20.0	100	07/21/2020 05:16	WG1511692
Chloroform	U		1.66	10.0	100	07/21/2020 05:16	WG1511692
Chloromethane	U		5.56	50.0	100	07/21/2020 05:16	WG1511692
2-Chlorotoluene	U		3.68	10.0	100	07/21/2020 05:16	WG1511692
4-Chlorotoluene	U		4.52	20.0	100	07/21/2020 05:16	WG1511692
1,2-Dibromo-3-Chloropropane	U		20.4	100	100	07/21/2020 05:16	WG1511692
1,2-Dibromoethane	U		2.10	10.0	100	07/21/2020 05:16	WG1511692

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MW-314-071620 SAMPLE RESULTS - 02

Collected date/time: 07/16/20 09:50

L1240639

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Dibromomethane	U		4.00	20.0	100	07/21/2020 05:16	WG1511692
1,2-Dichlorobenzene	U UJ	J4	5.80	20.0	100	07/21/2020 05:16	WG1511692
1,3-Dichlorobenzene	U		6.80	20.0	100	07/21/2020 05:16	WG1511692
1,4-Dichlorobenzene	U		7.88	20.0	100	07/21/2020 05:16	WG1511692
Dichlorodifluoromethane	U		3.27	10.0	100	07/21/2020 05:16	WG1511692
1,1-Dichloroethane	U		2.30	10.0	100	07/21/2020 05:16	WG1511692
1,2-Dichloroethane	U		1.90	10.0	100	07/21/2020 05:16	WG1511692
1,1-Dichloroethene	9.60	J	2.00	10.0	100	07/21/2020 05:16	WG1511692
cis-1,2-Dichloroethene	4020	J4	2.76	10.0	100	07/21/2020 05:16	WG1511692
trans-1,2-Dichloroethene	22.3		5.72	20.0	100	07/21/2020 05:16	WG1511692
1,2-Dichloropropane	U		5.08	20.0	100	07/21/2020 05:16	WG1511692
1,1-Dichloropropene	U		2.80	10.0	100	07/21/2020 05:16	WG1511692
1,3-Dichloropropane	U		7.00	20.0	100	07/21/2020 05:16	WG1511692
cis-1,3-Dichloropropene	U		2.71	10.0	100	07/21/2020 05:16	WG1511692
trans-1,3-Dichloropropene	U		6.12	20.0	100	07/21/2020 05:16	WG1511692
2,2-Dichloropropane	U		3.17	10.0	100	07/21/2020 05:16	WG1511692
Di-isopropyl ether	U		1.40	4.00	100	07/21/2020 05:16	WG1511692
Ethylbenzene	U		2.12	10.0	100	07/21/2020 05:16	WG1511692
Hexachloro-1,3-butadiene	U		50.8	100	100	07/21/2020 05:16	WG1511692
Isopropylbenzene	U		3.45	10.0	100	07/21/2020 05:16	WG1511692
p-Isopropyltoluene	U		9.32	20.0	100	07/21/2020 05:16	WG1511692
2-Butanone (MEK)	U		50.0	100	100	07/21/2020 05:16	WG1511692
Methylene Chloride	U		26.5	100	100	07/21/2020 05:16	WG1511692
4-Methyl-2-pentanone (MIBK)	U		40.0	100	100	07/21/2020 05:16	WG1511692
Methyl tert-butyl ether	U		1.18	4.00	100	07/21/2020 05:16	WG1511692
Naphthalene	U		12.4	50.0	100	07/21/2020 05:16	WG1511692
n-Propylbenzene	U		4.72	20.0	100	07/21/2020 05:16	WG1511692
Styrene	U		10.9	50.0	100	07/21/2020 05:16	WG1511692
1,1,1,2-Tetrachloroethane	U		2.00	10.0	100	07/21/2020 05:16	WG1511692
1,1,2,2-Tetrachloroethane	U UJ	J0	1.56	10.0	100	07/21/2020 05:16	WG1511692
1,1,2-Trichlorotrifluoroethane	U		2.70	10.0	100	07/21/2020 05:16	WG1511692
Tetrachloroethene	4.20	J	2.80	10.0	100	07/21/2020 05:16	WG1511692
Toluene	U		5.00	20.0	100	07/21/2020 05:16	WG1511692
1,2,3-Trichlorobenzene	U		2.50	50.0	100	07/21/2020 05:16	WG1511692
1,2,4-Trichlorobenzene	U		19.3	50.0	100	07/21/2020 05:16	WG1511692
1,1,1-Trichloroethane	U		1.10	10.0	100	07/21/2020 05:16	WG1511692
1,1,2-Trichloroethane	U		3.53	10.0	100	07/21/2020 05:16	WG1511692
Trichloroethene	313		1.60	4.00	100	07/21/2020 05:16	WG1511692
Trichlorofluoromethane	U		2.00	10.0	100	07/21/2020 05:16	WG1511692
1,2,3-Trichloropropane	U		20.4	50.0	100	07/21/2020 05:16	WG1511692
1,2,4-Trimethylbenzene	U		4.64	20.0	100	07/21/2020 05:16	WG1511692
1,2,3-Trimethylbenzene	U		4.60	20.0	100	07/21/2020 05:16	WG1511692
1,3,5-Trimethylbenzene	U		4.32	20.0	100	07/21/2020 05:16	WG1511692
Vinyl chloride	442		2.73	10.0	100	07/21/2020 05:16	WG1511692
Xylenes, Total	U		19.1	26.0	100	07/21/2020 05:16	WG1511692
Ethyl Ether	U		1.70	10.0	100	07/21/2020 05:16	WG1511692
Tetrahydrofuran	21.6	J	9.00	50.0	100	07/21/2020 05:16	WG1511692
Iodomethane	U		24.2	50.0	100	07/21/2020 05:16	WG1511692
Allyl chloride	U		58.0	100	100	07/21/2020 05:16	WG1511692
Trans-1,4-Dichloro-2-butene	U UJ	J0	5.60	20.0	100	07/21/2020 05:16	WG1511692
(S) Toluene-d8	*97.0*			*75.0-131*		*07/21/2020 05:16*	WG1511692
(S) 4-Bromofluorobenzene	*98.1*			*67.0-138*		*07/21/2020 05:16*	WG1511692
(S) 1,2-Dichloroethane-d4	*105*			*70.0-130*		*07/21/2020 05:16*	WG1511692

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Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	409000		8450	20000	1	07/24/2020 00:53	WG1511475

Sample Narrative:

L1240639-03 WG1511475: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	43700		379	1000	1	07/17/2020 18:26	WG1510729
Nitrate	U		48.0	100	1	07/17/2020 18:26	WG1510729
Sulfate	8360		594	5000	1	07/17/2020 18:26	WG1510729

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	7880		102	1000	1	07/20/2020 15:50	WG1511400

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	5480		48.9	100	1	07/21/2020 20:48	WG1511793
Manganese	791		1.32	5.00	1	07/21/2020 20:48	WG1511793

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	633		0.287	0.678	1	07/20/2020 11:25	WG1511042
Ethane	14.2		0.296	1.29	1	07/20/2020 11:25	WG1511042
Ethene	U		0.422	1.27	1	07/20/2020 11:25	WG1511042

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U	~~J3~~	0.548	1.00	1	07/21/2020 02:27	WG1511692
Acrylonitrile	U		0.0760	0.500	1	07/21/2020 02:27	WG1511692
Benzene	0.0650		0.0160	0.0400	1	07/21/2020 02:27	WG1511692
Bromobenzene	U		0.0420	0.500	1	07/21/2020 02:27	WG1511692
Bromodichloromethane	U		0.0315	0.100	1	07/21/2020 02:27	WG1511692
Bromoform	U		0.239	1.00	1	07/21/2020 02:27	WG1511692
Bromomethane	U		0.148	0.500	1	07/21/2020 02:27	WG1511692
n-Butylbenzene	U		0.153	0.500	1	07/21/2020 02:27	WG1511692
sec-Butylbenzene	U		0.101	0.500	1	07/21/2020 02:27	WG1511692
tert-Butylbenzene	U		0.0620	0.200	1	07/21/2020 02:27	WG1511692
Carbon tetrachloride	U		0.0432	0.200	1	07/21/2020 02:27	WG1511692
Chlorobenzene	U		0.0229	0.100	1	07/21/2020 02:27	WG1511692
Chlorodibromomethane	U		0.0180	0.100	1	07/21/2020 02:27	WG1511692
Chloroethane	U		0.0432	0.200	1	07/21/2020 02:27	WG1511692
Chloroform	U		0.0166	0.100	1	07/21/2020 02:27	WG1511692
Chloromethane	U		0.0556	0.500	1	07/21/2020 02:27	WG1511692
2-Chlorotoluene	U		0.0368	0.100	1	07/21/2020 02:27	WG1511692
4-Chlorotoluene	U		0.0452	0.200	1	07/21/2020 02:27	WG1511692
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	07/21/2020 02:27	WG1511692
1,2-Dibromoethane	U		0.0210	0.100	1	07/21/2020 02:27	WG1511692

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Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Dibromomethane	U		0.0400	0.200	1	07/21/2020 02:27	WG1511692
1,2-Dichlorobenzene	U UJ	J4	0.0580	0.200	1	07/21/2020 02:27	WG1511692
1,3-Dichlorobenzene	U		0.0680	0.200	1	07/21/2020 02:27	WG1511692
1,4-Dichlorobenzene	U		0.0788	0.200	1	07/21/2020 02:27	WG1511692
Dichlorodifluoromethane	U		0.0327	0.100	1	07/21/2020 02:27	WG1511692
1,1-Dichloroethane	U		0.0230	0.100	1	07/21/2020 02:27	WG1511692
1,2-Dichloroethane	U		0.0190	0.100	1	07/21/2020 02:27	WG1511692
1,1-Dichloroethene	0.0450	J	0.0200	0.100	1	07/21/2020 02:27	WG1511692
cis-1,2-Dichloroethene	5.24	J4	0.0276	0.100	1	07/21/2020 02:27	WG1511692
trans-1,2-Dichloroethene	0.144	J	0.0572	0.200	1	07/21/2020 02:27	WG1511692
1,2-Dichloropropane	U		0.0508	0.200	1	07/21/2020 02:27	WG1511692
1,1-Dichloropropene	U		0.0280	0.100	1	07/21/2020 02:27	WG1511692
1,3-Dichloropropane	U		0.0700	0.200	1	07/21/2020 02:27	WG1511692
cis-1,3-Dichloropropene	U		0.0271	0.100	1	07/21/2020 02:27	WG1511692
trans-1,3-Dichloropropene	U		0.0612	0.200	1	07/21/2020 02:27	WG1511692
2,2-Dichloropropane	U		0.0317	0.100	1	07/21/2020 02:27	WG1511692
Di-isopropyl ether	U		0.0140	0.0400	1	07/21/2020 02:27	WG1511692
Ethylbenzene	U		0.0212	0.100	1	07/21/2020 02:27	WG1511692
Hexachloro-1,3-butadiene	U		0.508	1.00	1	07/21/2020 02:27	WG1511692
Isopropylbenzene	U		0.0345	0.100	1	07/21/2020 02:27	WG1511692
p-Isopropyltoluene	U		0.0932	0.200	1	07/21/2020 02:27	WG1511692
2-Butanone (MEK)	U		0.500	1.00	1	07/21/2020 02:27	WG1511692
Methylene Chloride	U		0.265	1.00	1	07/21/2020 02:27	WG1511692
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	07/21/2020 02:27	WG1511692
Methyl tert-butyl ether	U		0.0118	0.0400	1	07/21/2020 02:27	WG1511692
Naphthalene	U		0.124	0.500	1	07/21/2020 02:27	WG1511692
n-Propylbenzene	U		0.0472	0.200	1	07/21/2020 02:27	WG1511692
Styrene	U		0.109	0.500	1	07/21/2020 02:27	WG1511692
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	07/21/2020 02:27	WG1511692
1,1,2,2-Tetrachloroethane	U UJ	J0	0.0156	0.100	1	07/21/2020 02:27	WG1511692
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	07/21/2020 02:27	WG1511692
Tetrachloroethene	0.0470	J	0.0280	0.100	1	07/21/2020 02:27	WG1511692
Toluene	3.39		0.0500	0.200	1	07/21/2020 02:27	WG1511692
1,2,3-Trichlorobenzene	U		0.0250	0.500	1	07/21/2020 02:27	WG1511692
1,2,4-Trichlorobenzene	U		0.193	0.500	1	07/21/2020 02:27	WG1511692
1,1,1-Trichloroethane	U		0.0110	0.100	1	07/21/2020 02:27	WG1511692
1,1,2-Trichloroethane	U		0.0353	0.100	1	07/21/2020 02:27	WG1511692
Trichloroethene	0.334		0.0160	0.0400	1	07/21/2020 02:27	WG1511692
Trichlorofluoromethane	U		0.0200	0.100	1	07/21/2020 02:27	WG1511692
1,2,3-Trichloropropane	U		0.204	0.500	1	07/21/2020 02:27	WG1511692
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	07/21/2020 02:27	WG1511692
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	07/21/2020 02:27	WG1511692
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	07/21/2020 02:27	WG1511692
Vinyl chloride	24.0		0.0273	0.100	1	07/21/2020 02:27	WG1511692
Xylenes, Total	U		0.191	0.260	1	07/21/2020 02:27	WG1511692
Ethyl Ether	U		0.0170	0.100	1	07/21/2020 02:27	WG1511692
Tetrahydrofuran	U		0.0900	0.500	1	07/21/2020 02:27	WG1511692
Iodomethane	U		0.242	0.500	1	07/21/2020 02:27	WG1511692
Allyl chloride	U		0.580	1.00	1	07/21/2020 02:27	WG1511692
Trans-1,4-Dichloro-2-butene	U UJ	J0	0.0560	0.200	1	07/21/2020 02:27	WG1511692
(S) Toluene-d8	*93.1*			*75.0-131*		*07/21/2020 02:27*	WG1511692
(S) 4-Bromofluorobenzene	*99.9*			*67.0-138*		*07/21/2020 02:27*	WG1511692
(S) 1,2-Dichloroethane-d4	*107*			*70.0-130*		*07/21/2020 02:27*	WG1511692

JC 8/18/2020

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Wet Chemistry by Method 2320 B-2011

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Alkalinity	490000		8450	20000	1	07/24/2020 01:01	WG1511475

Sample Narrative:

L1240639-04 WG1511475: Endpoint pH 4.5

Wet Chemistry by Method 9056A

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Chloride	20000		379	1000	1	07/17/2020 18:58	WG1510729
Nitrate	U		48.0	100	1	07/17/2020 18:58	WG1510729
Sulfate	98700		594	5000	1	07/17/2020 18:58	WG1510729

Wet Chemistry by Method 9060A

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
TOC (Total Organic Carbon)	4640		102	1000	1	07/20/2020 18:36	WG1511400

Metals (ICPMS) by Method 6020B

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Iron	2680		48.9	100	1	07/21/2020 20:52	WG1511793
Manganese	3160		1.32	5.00	1	07/21/2020 20:52	WG1511793

Volatile Organic Compounds (GC) by Method RSK175

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Methane	3000		0.287	0.678	1	07/20/2020 11:29	WG1511042
Ethane	7.68		0.296	1.29	1	07/20/2020 11:29	WG1511042
Ethene	U		0.422	1.27	1	07/20/2020 11:29	WG1511042

Volatile Organic Compounds (GC/MS) by Method 8260D

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Acetone	U	J3	2.74	5.00	5	07/21/2020 05:35	WG1511692
Acrylonitrile	U		0.380	2.50	5	07/21/2020 05:35	WG1511692
Benzene	0.335		0.0800	0.200	5	07/21/2020 05:35	WG1511692
Bromobenzene	U		0.210	2.50	5	07/21/2020 05:35	WG1511692
Bromodichloromethane	U		0.158	0.500	5	07/21/2020 05:35	WG1511692
Bromoform	U		1.20	5.00	5	07/21/2020 05:35	WG1511692
Bromomethane	U		0.740	2.50	5	07/21/2020 05:35	WG1511692
n-Butylbenzene	U		0.765	2.50	5	07/21/2020 05:35	WG1511692
sec-Butylbenzene	U		0.505	2.50	5	07/21/2020 05:35	WG1511692
tert-Butylbenzene	U		0.310	1.00	5	07/21/2020 05:35	WG1511692
Carbon tetrachloride	U		0.216	1.00	5	07/21/2020 05:35	WG1511692
Chlorobenzene	U		0.115	0.500	5	07/21/2020 05:35	WG1511692
Chlorodibromomethane	U		0.0900	0.500	5	07/21/2020 05:35	WG1511692
Chloroethane	U		0.216	1.00	5	07/21/2020 05:35	WG1511692
Chloroform	U		0.0830	0.500	5	07/21/2020 05:35	WG1511692
Chloromethane	U		0.278	2.50	5	07/21/2020 05:35	WG1511692
2-Chlorotoluene	U		0.184	0.500	5	07/21/2020 05:35	WG1511692
4-Chlorotoluene	U		0.226	1.00	5	07/21/2020 05:35	WG1511692
1,2-Dibromo-3-Chloropropane	U		1.02	5.00	5	07/21/2020 05:35	WG1511692
1,2-Dibromoethane	U		0.105	0.500	5	07/21/2020 05:35	WG1511692

JC 8/18/2020

MW110-071620

Collected date/time: 07/16/20 11:23

SAMPLE RESULTS - 04

L1240639

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Dibromomethane	U		0.200	1.00	5	07/21/2020 05:35	WG1511692
1,2-Dichlorobenzene	U	UJ J4	0.290	1.00	5	07/21/2020 05:35	WG1511692
1,3-Dichlorobenzene	U		0.340	1.00	5	07/21/2020 05:35	WG1511692
1,4-Dichlorobenzene	U		0.394	1.00	5	07/21/2020 05:35	WG1511692
Dichlorodifluoromethane	U		0.164	0.500	5	07/21/2020 05:35	WG1511692
1,1-Dichloroethane	U		0.115	0.500	5	07/21/2020 05:35	WG1511692
1,2-Dichloroethane	U		0.0950	0.500	5	07/21/2020 05:35	WG1511692
1,1-Dichloroethene	4.23		0.100	0.500	5	07/21/2020 05:35	WG1511692
cis-1,2-Dichloroethene	791		1.38	5.00	50	07/23/2020 23:14	WG1513488
trans-1,2-Dichloroethene	7.79		0.286	1.00	5	07/21/2020 05:35	WG1511692
1,2-Dichloropropane	U		0.254	1.00	5	07/21/2020 05:35	WG1511692
1,1-Dichloropropene	U		0.140	0.500	5	07/21/2020 05:35	WG1511692
1,3-Dichloropropane	U		0.350	1.00	5	07/21/2020 05:35	WG1511692
cis-1,3-Dichloropropene	U		0.136	0.500	5	07/21/2020 05:35	WG1511692
trans-1,3-Dichloropropene	U		0.306	1.00	5	07/21/2020 05:35	WG1511692
2,2-Dichloropropane	U		0.159	0.500	5	07/21/2020 05:35	WG1511692
Di-isopropyl ether	U		0.0700	0.200	5	07/21/2020 05:35	WG1511692
Ethylbenzene	U		0.106	0.500	5	07/21/2020 05:35	WG1511692
Hexachloro-1,3-butadiene	U		2.54	5.00	5	07/21/2020 05:35	WG1511692
Isopropylbenzene	U		0.173	0.500	5	07/21/2020 05:35	WG1511692
p-Isopropyltoluene	U		0.466	1.00	5	07/21/2020 05:35	WG1511692
2-Butanone (MEK)	U		2.50	5.00	5	07/21/2020 05:35	WG1511692
Methylene Chloride	U		1.33	5.00	5	07/21/2020 05:35	WG1511692
4-Methyl-2-pentanone (MIBK)	U		2.00	5.00	5	07/21/2020 05:35	WG1511692
Methyl tert-butyl ether	U		0.0590	0.200	5	07/21/2020 05:35	WG1511692
Naphthalene	U		0.620	2.50	5	07/21/2020 05:35	WG1511692
n-Propylbenzene	U		0.236	1.00	5	07/21/2020 05:35	WG1511692
Styrene	U		0.545	2.50	5	07/21/2020 05:35	WG1511692
1,1,1,2-Tetrachloroethane	U		0.100	0.500	5	07/21/2020 05:35	WG1511692
1,1,2,2-Tetrachloroethane	U	UJ J0	0.0780	0.500	5	07/21/2020 05:35	WG1511692
1,1,2-Trichlorotrifluoroethane	U		0.135	0.500	5	07/21/2020 05:35	WG1511692
Tetrachloroethene	741		1.40	5.00	50	07/23/2020 23:14	WG1513488
Toluene	0.465	J	0.250	1.00	5	07/21/2020 05:35	WG1511692
1,2,3-Trichlorobenzene	U		0.125	2.50	5	07/21/2020 05:35	WG1511692
1,2,4-Trichlorobenzene	U		0.965	2.50	5	07/21/2020 05:35	WG1511692
1,1,1-Trichloroethane	U		0.0550	0.500	5	07/21/2020 05:35	WG1511692
1,1,2-Trichloroethane	U		0.177	0.500	5	07/21/2020 05:35	WG1511692
Trichloroethene	349		0.0800	0.200	5	07/21/2020 05:35	WG1511692
Trichlorofluoromethane	U		0.100	0.500	5	07/21/2020 05:35	WG1511692
1,2,3-Trichloropropane	U		1.02	2.50	5	07/21/2020 05:35	WG1511692
1,2,4-Trimethylbenzene	U		0.232	1.00	5	07/21/2020 05:35	WG1511692
1,2,3-Trimethylbenzene	U		0.230	1.00	5	07/21/2020 05:35	WG1511692
1,3,5-Trimethylbenzene	U		0.216	1.00	5	07/21/2020 05:35	WG1511692
Vinyl chloride	12.5		0.137	0.500	5	07/21/2020 05:35	WG1511692
Xylenes, Total	U		0.955	1.30	5	07/21/2020 05:35	WG1511692
Ethyl Ether	U		0.0850	0.500	5	07/21/2020 05:35	WG1511692
Tetrahydrofuran	1.73	J	0.450	2.50	5	07/21/2020 05:35	WG1511692
Iodomethane	U		1.21	2.50	5	07/21/2020 05:35	WG1511692
Allyl chloride	U		2.90	5.00	5	07/21/2020 05:35	WG1511692
Trans-1,4-Dichloro-2-butene	U	UJ J0	0.280	1.00	5	07/21/2020 05:35	WG1511692
(S) Toluene-d8	*98.2*			*75.0-131*		*07/21/2020 05:35*	WG1511692
(S) Toluene-d8	*99.7*			*75.0-131*		*07/23/2020 23:14*	WG1513488
(S) 4-Bromofluorobenzene	*96.4*			*67.0-138*		*07/21/2020 05:35*	WG1511692
(S) 4-Bromofluorobenzene	*103*			*67.0-138*		*07/23/2020 23:14*	WG1513488
(S) 1,2-Dichloroethane-d4	*102*			*70.0-130*		*07/21/2020 05:35*	WG1511692
(S) 1,2-Dichloroethane-d4	*100*			*70.0-130*		*07/23/2020 23:14*	WG1513488

JC 8/18/2020

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Wet Chemistry by Method 2320 B-2011

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Alkalinity	651000		8450	20000	1	07/24/2020 01:09	WG1511475

Sample Narrative:

L1240639-05 WG1511475: Endpoint pH 4.5

Wet Chemistry by Method 9056A

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Chloride	24200		379	1000	1	07/17/2020 19:32	WG1510729
Nitrate	U		48.0	100	1	07/17/2020 19:32	WG1510729
Sulfate	51500		594	5000	1	07/17/2020 19:32	WG1510729

Wet Chemistry by Method 9060A

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
TOC (Total Organic Carbon)	8110		102	1000	1	07/20/2020 18:49	WG1511400

Metals (ICPMS) by Method 6020B

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Iron	15600		48.9	100	1	07/21/2020 20:55	WG1511793
Manganese	2050		1.32	5.00	1	07/21/2020 20:55	WG1511793

Volatile Organic Compounds (GC) by Method RSK175

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Methane	9770		2.87	6.78	10	07/21/2020 13:33	WG1512332
Ethane	53.7		0.296	1.29	1	07/20/2020 12:27	WG1511042
Ethene	U		0.422	1.27	1	07/20/2020 12:27	WG1511042

Volatile Organic Compounds (GC/MS) by Method 8260D

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Acetone	U	~~J3~~	0.548	1.00	1	07/21/2020 02:46	WG1511692
Acrylonitrile	U		0.0760	0.500	1	07/21/2020 02:46	WG1511692
Benzene	34.3		0.0160	0.0400	1	07/21/2020 02:46	WG1511692
Bromobenzene	U		0.0420	0.500	1	07/21/2020 02:46	WG1511692
Bromodichloromethane	U		0.0315	0.100	1	07/21/2020 02:46	WG1511692
Bromoform	U		0.239	1.00	1	07/21/2020 02:46	WG1511692
Bromomethane	U		0.148	0.500	1	07/21/2020 02:46	WG1511692
n-Butylbenzene	U		0.153	0.500	1	07/21/2020 02:46	WG1511692
sec-Butylbenzene	U		0.101	0.500	1	07/21/2020 02:46	WG1511692
tert-Butylbenzene	U		0.0620	0.200	1	07/21/2020 02:46	WG1511692
Carbon tetrachloride	U		0.0432	0.200	1	07/21/2020 02:46	WG1511692
Chlorobenzene	U		0.0229	0.100	1	07/21/2020 02:46	WG1511692
Chlorodibromomethane	U		0.0180	0.100	1	07/21/2020 02:46	WG1511692
Chloroethane	U		0.0432	0.200	1	07/21/2020 02:46	WG1511692
Chloroform	U		0.0166	0.100	1	07/21/2020 02:46	WG1511692
Chloromethane	U		0.0556	0.500	1	07/21/2020 02:46	WG1511692
2-Chlorotoluene	U		0.0368	0.100	1	07/21/2020 02:46	WG1511692
4-Chlorotoluene	U		0.0452	0.200	1	07/21/2020 02:46	WG1511692
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	07/21/2020 02:46	WG1511692
1,2-Dibromoethane	U		0.0210	0.100	1	07/21/2020 02:46	WG1511692

JC 8/18/2020

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Dibromomethane	U		0.0400	0.200	1	07/21/2020 02:46	WG1511692
1,2-Dichlorobenzene	U	UJ J4	0.0580	0.200	1	07/21/2020 02:46	WG1511692
1,3-Dichlorobenzene	U		0.0680	0.200	1	07/21/2020 02:46	WG1511692
1,4-Dichlorobenzene	U		0.0788	0.200	1	07/21/2020 02:46	WG1511692
Dichlorodifluoromethane	U		0.0327	0.100	1	07/21/2020 02:46	WG1511692
1,1-Dichloroethane	0.139		0.0230	0.100	1	07/21/2020 02:46	WG1511692
1,2-Dichloroethane	U		0.0190	0.100	1	07/21/2020 02:46	WG1511692
1,1-Dichloroethene	2.03		0.0200	0.100	1	07/21/2020 02:46	WG1511692
cis-1,2-Dichloroethene	264		0.552	2.00	20	07/23/2020 23:34	WG1513488
trans-1,2-Dichloroethene	2.37		0.0572	0.200	1	07/21/2020 02:46	WG1511692
1,2-Dichloropropane	U		0.0508	0.200	1	07/21/2020 02:46	WG1511692
1,1-Dichloropropene	U		0.0280	0.100	1	07/21/2020 02:46	WG1511692
1,3-Dichloropropane	U		0.0700	0.200	1	07/21/2020 02:46	WG1511692
cis-1,3-Dichloropropene	U		0.0271	0.100	1	07/21/2020 02:46	WG1511692
trans-1,3-Dichloropropene	U		0.0612	0.200	1	07/21/2020 02:46	WG1511692
2,2-Dichloropropane	U		0.0317	0.100	1	07/21/2020 02:46	WG1511692
Di-isopropyl ether	1.15		0.0140	0.0400	1	07/21/2020 02:46	WG1511692
Ethylbenzene	U		0.0212	0.100	1	07/21/2020 02:46	WG1511692
Hexachloro-1,3-butadiene	U		0.508	1.00	1	07/21/2020 02:46	WG1511692
Isopropylbenzene	0.671		0.0345	0.100	1	07/21/2020 02:46	WG1511692
p-Isopropyltoluene	U		0.0932	0.200	1	07/21/2020 02:46	WG1511692
2-Butanone (MEK)	U		0.500	1.00	1	07/21/2020 02:46	WG1511692
Methylene Chloride	U		0.265	1.00	1	07/21/2020 02:46	WG1511692
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	07/21/2020 02:46	WG1511692
Methyl tert-butyl ether	0.257		0.0118	0.0400	1	07/21/2020 02:46	WG1511692
Naphthalene	U		0.124	0.500	1	07/21/2020 02:46	WG1511692
n-Propylbenzene	U		0.0472	0.200	1	07/21/2020 02:46	WG1511692
Styrene	U		0.109	0.500	1	07/21/2020 02:46	WG1511692
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	07/21/2020 02:46	WG1511692
1,1,2,2-Tetrachloroethane	U	UJ J0	0.0156	0.100	1	07/21/2020 02:46	WG1511692
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	07/21/2020 02:46	WG1511692
Tetrachloroethene	226	J E	0.0280	0.100	1	07/21/2020 02:46	WG1511692
Toluene	2.20		0.0500	0.200	1	07/21/2020 02:46	WG1511692
1,2,3-Trichlorobenzene	U		0.0250	0.500	1	07/21/2020 02:46	WG1511692
1,2,4-Trichlorobenzene	U		0.193	0.500	1	07/21/2020 02:46	WG1511692
1,1,1-Trichloroethane	U		0.0110	0.100	1	07/21/2020 02:46	WG1511692
1,1,2-Trichloroethane	U		0.0353	0.100	1	07/21/2020 02:46	WG1511692
Trichloroethene	170		0.320	0.800	20	07/23/2020 23:34	WG1513488
Trichlorofluoromethane	U		0.0200	0.100	1	07/21/2020 02:46	WG1511692
1,2,3-Trichloropropane	U		0.204	0.500	1	07/21/2020 02:46	WG1511692
1,2,4-Trimethylbenzene	0.0730	J	0.0464	0.200	1	07/21/2020 02:46	WG1511692
1,2,3-Trimethylbenzene	0.926		0.0460	0.200	1	07/21/2020 02:46	WG1511692
1,3,5-Trimethylbenzene	0.229		0.0432	0.200	1	07/21/2020 02:46	WG1511692
Vinyl chloride	16.5		0.0273	0.100	1	07/21/2020 02:46	WG1511692
Xylenes, Total	3.06		0.191	0.260	1	07/21/2020 02:46	WG1511692
Ethyl Ether	U		0.0170	0.100	1	07/21/2020 02:46	WG1511692
Tetrahydrofuran	U		0.0900	0.500	1	07/21/2020 02:46	WG1511692
Iodomethane	U		0.242	0.500	1	07/21/2020 02:46	WG1511692
Allyl chloride	U		0.580	1.00	1	07/21/2020 02:46	WG1511692
Trans-1,4-Dichloro-2-butene	U	UJ J0	0.0560	0.200	1	07/21/2020 02:46	WG1511692
(S) Toluene-d8	*95.1*			*75.0-131*		*07/21/2020 02:46*	WG1511692
(S) Toluene-d8	*101*			*75.0-131*		*07/23/2020 23:34*	WG1513488
(S) 4-Bromofluorobenzene	*105*			*67.0-138*		*07/21/2020 02:46*	WG1511692
(S) 4-Bromofluorobenzene	*104*			*67.0-138*		*07/23/2020 23:34*	WG1513488
(S) 1,2-Dichloroethane-d4	*105*			*70.0-130*		*07/21/2020 02:46*	WG1511692
(S) 1,2-Dichloroethane-d4	*99.5*			*70.0-130*		*07/23/2020 23:34*	WG1513488

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1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	164000		8450	20000	1	07/24/2020 01:16	WG1511475

Sample Narrative:

L1240639-06 WG1511475: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	11000		379	1000	1	07/17/2020 20:04	WG1510729
Nitrate	U		48.0	100	1	07/17/2020 20:04	WG1510729
Sulfate	45900		594	5000	1	07/17/2020 20:04	WG1510729

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	2220	~~B~~	102	1000	1	07/20/2020 19:15	WG1511400

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	2560		48.9	100	1	07/21/2020 20:58	WG1511793
Manganese	971		1.32	5.00	1	07/21/2020 20:58	WG1511793

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	31.3		0.287	0.678	1	07/20/2020 12:55	WG1511043
Ethane	U		0.296	1.29	1	07/20/2020 12:55	WG1511043
Ethene	U		0.422	1.27	1	07/20/2020 12:55	WG1511043

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U	~~J3~~	0.548	1.00	1	07/21/2020 03:05	WG1511692
Acrylonitrile	U		0.0760	0.500	1	07/21/2020 03:05	WG1511692
Benzene	0.0500		0.0160	0.0400	1	07/21/2020 03:05	WG1511692
Bromobenzene	U		0.0420	0.500	1	07/21/2020 03:05	WG1511692
Bromodichloromethane	U		0.0315	0.100	1	07/21/2020 03:05	WG1511692
Bromoform	U		0.239	1.00	1	07/21/2020 03:05	WG1511692
Bromomethane	U		0.148	0.500	1	07/21/2020 03:05	WG1511692
n-Butylbenzene	U		0.153	0.500	1	07/21/2020 03:05	WG1511692
sec-Butylbenzene	U		0.101	0.500	1	07/21/2020 03:05	WG1511692
tert-Butylbenzene	U		0.0620	0.200	1	07/21/2020 03:05	WG1511692
Carbon tetrachloride	U		0.0432	0.200	1	07/21/2020 03:05	WG1511692
Chlorobenzene	U		0.0229	0.100	1	07/21/2020 03:05	WG1511692
Chlorodibromomethane	U		0.0180	0.100	1	07/21/2020 03:05	WG1511692
Chloroethane	U		0.0432	0.200	1	07/21/2020 03:05	WG1511692
Chloroform	U		0.0166	0.100	1	07/21/2020 03:05	WG1511692
Chloromethane	U		0.0556	0.500	1	07/21/2020 03:05	WG1511692
2-Chlorotoluene	U		0.0368	0.100	1	07/21/2020 03:05	WG1511692
4-Chlorotoluene	U		0.0452	0.200	1	07/21/2020 03:05	WG1511692
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	07/21/2020 03:05	WG1511692
1,2-Dibromoethane	U		0.0210	0.100	1	07/21/2020 03:05	WG1511692

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Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Dibromomethane	U		0.0400	0.200	1	07/21/2020 03:05	WG1511692
1,2-Dichlorobenzene	U UJ	J4	0.0580	0.200	1	07/21/2020 03:05	WG1511692
1,3-Dichlorobenzene	U		0.0680	0.200	1	07/21/2020 03:05	WG1511692
1,4-Dichlorobenzene	U		0.0788	0.200	1	07/21/2020 03:05	WG1511692
Dichlorodifluoromethane	U		0.0327	0.100	1	07/21/2020 03:05	WG1511692
1,1-Dichloroethane	U		0.0230	0.100	1	07/21/2020 03:05	WG1511692
1,2-Dichloroethane	U		0.0190	0.100	1	07/21/2020 03:05	WG1511692
1,1-Dichloroethene	U		0.0200	0.100	1	07/21/2020 03:05	WG1511692
cis-1,2-Dichloroethene	0.0583	J	0.0276	0.100	1	07/23/2020 21:51	WG1513488
trans-1,2-Dichloroethene	U		0.0572	0.200	1	07/21/2020 03:05	WG1511692
1,2-Dichloropropane	U		0.0508	0.200	1	07/21/2020 03:05	WG1511692
1,1-Dichloropropene	U		0.0280	0.100	1	07/21/2020 03:05	WG1511692
1,3-Dichloropropane	U		0.0700	0.200	1	07/21/2020 03:05	WG1511692
cis-1,3-Dichloropropene	U		0.0271	0.100	1	07/21/2020 03:05	WG1511692
trans-1,3-Dichloropropene	U		0.0612	0.200	1	07/21/2020 03:05	WG1511692
2,2-Dichloropropane	U		0.0317	0.100	1	07/21/2020 03:05	WG1511692
Di-isopropyl ether	U		0.0140	0.0400	1	07/21/2020 03:05	WG1511692
Ethylbenzene	0.0690	J	0.0212	0.100	1	07/21/2020 03:05	WG1511692
Hexachloro-1,3-butadiene	U		0.508	1.00	1	07/21/2020 03:05	WG1511692
Isopropylbenzene	U		0.0345	0.100	1	07/21/2020 03:05	WG1511692
p-Isopropyltoluene	U		0.0932	0.200	1	07/21/2020 03:05	WG1511692
2-Butanone (MEK)	U		0.500	1.00	1	07/21/2020 03:05	WG1511692
Methylene Chloride	U		0.265	1.00	1	07/21/2020 03:05	WG1511692
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	07/21/2020 03:05	WG1511692
Methyl tert-butyl ether	U		0.0118	0.0400	1	07/21/2020 03:05	WG1511692
Naphthalene	U		0.124	0.500	1	07/21/2020 03:05	WG1511692
n-Propylbenzene	U		0.0472	0.200	1	07/21/2020 03:05	WG1511692
Styrene	U		0.109	0.500	1	07/21/2020 03:05	WG1511692
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	07/21/2020 03:05	WG1511692
1,1,2,2-Tetrachloroethane	U UJ	J0	0.0156	0.100	1	07/21/2020 03:05	WG1511692
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	07/21/2020 03:05	WG1511692
Tetrachloroethene	0.0625	J	0.0280	0.100	1	07/23/2020 21:51	WG1513488
Toluene	2.49		0.0500	0.200	1	07/21/2020 03:05	WG1511692
1,2,3-Trichlorobenzene	U		0.0250	0.500	1	07/21/2020 03:05	WG1511692
1,2,4-Trichlorobenzene	U		0.193	0.500	1	07/21/2020 03:05	WG1511692
1,1,1-Trichloroethane	U		0.0110	0.100	1	07/21/2020 03:05	WG1511692
1,1,2-Trichloroethane	U		0.0353	0.100	1	07/21/2020 03:05	WG1511692
Trichloroethene	0.0646		0.0160	0.0400	1	07/23/2020 21:51	WG1513488
Trichlorofluoromethane	U		0.0200	0.100	1	07/21/2020 03:05	WG1511692
1,2,3-Trichloropropane	U		0.204	0.500	1	07/21/2020 03:05	WG1511692
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	07/21/2020 03:05	WG1511692
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	07/21/2020 03:05	WG1511692
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	07/21/2020 03:05	WG1511692
Vinyl chloride	U		0.0273	0.100	1	07/21/2020 03:05	WG1511692
Xylenes, Total	0.263		0.191	0.260	1	07/21/2020 03:05	WG1511692
Ethyl Ether	U		0.0170	0.100	1	07/21/2020 03:05	WG1511692
Tetrahydrofuran	U		0.0900	0.500	1	07/21/2020 03:05	WG1511692
Iodomethane	U		0.242	0.500	1	07/21/2020 03:05	WG1511692
Allyl chloride	U		0.580	1.00	1	07/21/2020 03:05	WG1511692
Trans-1,4-Dichloro-2-butene	U UJ	J0	0.0560	0.200	1	07/21/2020 03:05	WG1511692
(S) Toluene-d8	*93.3*			*75.0-131*		*07/21/2020 03:05*	WG1511692
(S) Toluene-d8	*100*			*75.0-131*		*07/23/2020 21:51*	WG1513488
(S) 4-Bromofluorobenzene	*102*			*67.0-138*		*07/21/2020 03:05*	WG1511692
(S) 4-Bromofluorobenzene	*106*			*67.0-138*		*07/23/2020 21:51*	WG1513488
(S) 1,2-Dichloroethane-d4	*106*			*70.0-130*		*07/21/2020 03:05*	WG1511692
(S) 1,2-Dichloroethane-d4	*98.9*			*70.0-130*		*07/23/2020 21:51*	WG1513488

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Wet Chemistry by Method 2320 B-2011

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Alkalinity	U		8450	20000	1	07/24/2020 01:24	WG1511475

Sample Narrative:

L1240639-07 WG1511475: Endpoint pH 4.5

Wet Chemistry by Method 9056A

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Chloride	U		379	1000	1	07/17/2020 21:10	WG1510729
Nitrate	U		48.0	100	1	07/17/2020 21:10	WG1510729
Sulfate	U		594	5000	1	07/17/2020 21:10	WG1510729

Wet Chemistry by Method 9060A

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
TOC (Total Organic Carbon)	730	B J	102	1000	1	07/20/2020 19:29	WG1511400

Metals (ICPMS) by Method 6020B

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Iron	U		48.9	100	1	07/21/2020 20:35	WG1511793
Manganese	U		1.32	5.00	1	07/21/2020 20:35	WG1511793

Volatile Organic Compounds (GC) by Method RSK175

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Methane	U		0.287	0.678	1	07/20/2020 12:57	WG1511043
Ethane	U		0.296	1.29	1	07/20/2020 12:57	WG1511043
Ethene	U		0.422	1.27	1	07/20/2020 12:57	WG1511043

Volatile Organic Compounds (GC/MS) by Method 8260D

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Acetone	9.46	~~J3~~	0.548	1.00	1	07/20/2020 23:37	WG1511692
Acrylonitrile	U		0.0760	0.500	1	07/20/2020 23:37	WG1511692
Benzene	0.0210	J	0.0160	0.0400	1	07/20/2020 23:37	WG1511692
Bromobenzene	U		0.0420	0.500	1	07/20/2020 23:37	WG1511692
Bromodichloromethane	U		0.0315	0.100	1	07/20/2020 23:37	WG1511692
Bromoform	U		0.239	1.00	1	07/20/2020 23:37	WG1511692
Bromomethane	U		0.148	0.500	1	07/20/2020 23:37	WG1511692
n-Butylbenzene	U		0.153	0.500	1	07/20/2020 23:37	WG1511692
sec-Butylbenzene	U		0.101	0.500	1	07/20/2020 23:37	WG1511692
tert-Butylbenzene	U		0.0620	0.200	1	07/20/2020 23:37	WG1511692
Carbon tetrachloride	U		0.0432	0.200	1	07/20/2020 23:37	WG1511692
Chlorobenzene	U		0.0229	0.100	1	07/20/2020 23:37	WG1511692
Chlorodibromomethane	U		0.0180	0.100	1	07/20/2020 23:37	WG1511692
Chloroethane	U		0.0432	0.200	1	07/20/2020 23:37	WG1511692
Chloroform	U		0.0166	0.100	1	07/20/2020 23:37	WG1511692
Chloromethane	U		0.0556	0.500	1	07/20/2020 23:37	WG1511692
2-Chlorotoluene	U		0.0368	0.100	1	07/20/2020 23:37	WG1511692
4-Chlorotoluene	U		0.0452	0.200	1	07/20/2020 23:37	WG1511692
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	07/20/2020 23:37	WG1511692
1,2-Dibromoethane	U		0.0210	0.100	1	07/20/2020 23:37	WG1511692

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Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Dibromomethane	U		0.0400	0.200	1	07/20/2020 23:37	WG1511692
1,2-Dichlorobenzene	U	J4	0.0580	0.200	1	07/20/2020 23:37	WG1511692
1,3-Dichlorobenzene	U		0.0680	0.200	1	07/20/2020 23:37	WG1511692
1,4-Dichlorobenzene	U		0.0788	0.200	1	07/20/2020 23:37	WG1511692
Dichlorodifluoromethane	U		0.0327	0.100	1	07/20/2020 23:37	WG1511692
1,1-Dichloroethane	U		0.0230	0.100	1	07/20/2020 23:37	WG1511692
1,2-Dichloroethane	U		0.0190	0.100	1	07/20/2020 23:37	WG1511692
1,1-Dichloroethene	U		0.0200	0.100	1	07/20/2020 23:37	WG1511692
cis-1,2-Dichloroethene	U	J4	0.0276	0.100	1	07/20/2020 23:37	WG1511692
trans-1,2-Dichloroethene	U		0.0572	0.200	1	07/20/2020 23:37	WG1511692
1,2-Dichloropropane	U		0.0508	0.200	1	07/20/2020 23:37	WG1511692
1,1-Dichloropropene	U		0.0280	0.100	1	07/20/2020 23:37	WG1511692
1,3-Dichloropropane	U		0.0700	0.200	1	07/20/2020 23:37	WG1511692
cis-1,3-Dichloropropene	U		0.0271	0.100	1	07/20/2020 23:37	WG1511692
trans-1,3-Dichloropropene	U		0.0612	0.200	1	07/20/2020 23:37	WG1511692
2,2-Dichloropropane	U		0.0317	0.100	1	07/20/2020 23:37	WG1511692
Di-isopropyl ether	U		0.0140	0.0400	1	07/20/2020 23:37	WG1511692
Ethylbenzene	U		0.0212	0.100	1	07/20/2020 23:37	WG1511692
Hexachloro-1,3-butadiene	U		0.508	1.00	1	07/20/2020 23:37	WG1511692
Isopropylbenzene	U		0.0345	0.100	1	07/20/2020 23:37	WG1511692
p-Isopropyltoluene	U		0.0932	0.200	1	07/20/2020 23:37	WG1511692
2-Butanone (MEK)	U		0.500	1.00	1	07/20/2020 23:37	WG1511692
Methylene Chloride	U		0.265	1.00	1	07/20/2020 23:37	WG1511692
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	07/20/2020 23:37	WG1511692
Methyl tert-butyl ether	U		0.0118	0.0400	1	07/20/2020 23:37	WG1511692
Naphthalene	U		0.124	0.500	1	07/20/2020 23:37	WG1511692
n-Propylbenzene	U		0.0472	0.200	1	07/20/2020 23:37	WG1511692
Styrene	U		0.109	0.500	1	07/20/2020 23:37	WG1511692
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	07/20/2020 23:37	WG1511692
1,1,2,2-Tetrachloroethane	U	UJ J0	0.0156	0.100	1	07/20/2020 23:37	WG1511692
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	07/20/2020 23:37	WG1511692
Tetrachloroethene	U		0.0280	0.100	1	07/20/2020 23:37	WG1511692
Toluene	0.102	J	0.0500	0.200	1	07/20/2020 23:37	WG1511692
1,2,3-Trichlorobenzene	U		0.0250	0.500	1	07/20/2020 23:37	WG1511692
1,2,4-Trichlorobenzene	U		0.193	0.500	1	07/20/2020 23:37	WG1511692
1,1,1-Trichloroethane	U		0.0110	0.100	1	07/20/2020 23:37	WG1511692
1,1,2-Trichloroethane	U		0.0353	0.100	1	07/20/2020 23:37	WG1511692
Trichloroethene	U		0.0160	0.0400	1	07/20/2020 23:37	WG1511692
Trichlorofluoromethane	U		0.0200	0.100	1	07/20/2020 23:37	WG1511692
1,2,3-Trichloropropane	U		0.204	0.500	1	07/20/2020 23:37	WG1511692
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	07/20/2020 23:37	WG1511692
1,2,3-Trimethylbenzene	0.0910	J	0.0460	0.200	1	07/20/2020 23:37	WG1511692
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	07/20/2020 23:37	WG1511692
Vinyl chloride	U		0.0273	0.100	1	07/20/2020 23:37	WG1511692
Xylenes, Total	U		0.191	0.260	1	07/20/2020 23:37	WG1511692
Ethyl Ether	U		0.0170	0.100	1	07/20/2020 23:37	WG1511692
Tetrahydrofuran	U		0.0900	0.500	1	07/20/2020 23:37	WG1511692
Iodomethane	U		0.242	0.500	1	07/20/2020 23:37	WG1511692
Allyl chloride	U		0.580	1.00	1	07/20/2020 23:37	WG1511692
Trans-1,4-Dichloro-2-butene	U	UJ J0	0.0560	0.200	1	07/20/2020 23:37	WG1511692
(S) Toluene-d8	*98.1*			*75.0-131*		*07/20/2020 23:37*	WG1511692
(S) 4-Bromofluorobenzene	*101*			*67.0-138*		*07/20/2020 23:37*	WG1511692
(S) 1,2-Dichloroethane-d4	*108*			*70.0-130*		*07/20/2020 23:37*	WG1511692

JC 8/18/2020

MEMORANDUM

TO: Project File **DATE:** August 25, 2020

FROM: Jessie Compeau

SUBJECT: Laboratory Data Validation Review

PROJECT: American Linen Data Validation

PROJECT #: 1413.001.02.501G

TASK: EIM Data Validation Level EPA2A for 3rd Quarter Monitoring – Groundwater Samples – Group 3

LAB: Pace Sample Delivery Groups (SDGs): L1241067, L1242545, L1242992, L1243496, and L1244760

Seventeen (17) groundwater samples and one trip blank were collected as part of the 3rd Quarterly Monitoring Round for 2020 for the ongoing Remedial Investigation (RI) sampling at the Former American Linen Supply Site, in Seattle, Washington in July 2020. The samples were shipped and delivered to Pace Lab Sciences (Pace) of Mount Juliet, TN for laboratory analysis. Selected samples were analyzed for the following:

- Volatile organic compounds (VOCs) by United States Environmental Protection Agency (USEPA) Method 8260D;
- VOCs (dissolved gases – methane, ethane, and ethene) by EPA SOP RSK 175;
- Alkalinity by Method 2320 B-2011;
- Anions (chloride, nitrate, and sulfate) by USEPA Method 9056A;
- Total Organic Carbon (TOC) by USEPA Method 9060A; and
- Metals (iron and manganese) by USEPA Method 6020B.

Results are reported in multiple SDGs from Pace. Pace SDGs are reviewed in small groups for each data validation report. Group 3 analytical results are reported in SDGs L1241067, L1242545, L1242992, L1243496, and L1244760. The quality assurance review of the laboratory data associated with Group 3 is summarized below.

DATA QUALIFICATIONS

Guidelines established by USEPA for a limited data validation review of analytical data along with Pace control limit criteria were used to validate the data. The comments presented in this memorandum refer to the laboratory's performance in meeting the quality control criteria outlined in the USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (USEPA, 2017) and USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Superfund Methods Data Review (USEPA, 2017). Following Guidelines, non-project-specific laboratory duplicates and matrix spike results were not evaluated as part of this data validation.

DATA VALIDATION

Completeness

All samples were collected and analyzed as requested with the following exceptions:

- SDG L1242992: PES requested that chain of custody listed sample MW-340-072320 be excluded from analysis since this sample was collected on July 17, 2020 and submitted for analysis (refer to SDG L1241067).

Sample Collection and Preservation

Samples were collected in laboratory-supplied sample containers preserved as appropriate for the individual analyses conducted. The samples were packed on ice in coolers and delivered by courier to the analytical laboratory. The laboratory reported that the coolers were received at a cooler temperature less than the recommended temperature preservation of 6°C. Samples were received in good condition. No data were qualified based upon the sample collection and preservation information.

Holding Times

USEPA Method 8260D:
All samples were analyzed for VOCs within the EPA recommended holding time of fourteen days for preserved waters from the date of collection. All holding time criteria are met.

Dissolved Gases (Methane, Ethane, and Ethene) by RSK 175:
All samples were analyzed within the WA State recommended holding time of fourteen days for preserved waters from the date of sample collection. All holding time criteria are met.

USEPA Method 6020B:
All samples were analyzed within the USEPA recommended holding time for iron and manganese of 180 days for preserved waters from the date of sample collection. All holding time criteria are met.

General Chemistry (Alkalinity, Chloride, Sulfate, Nitrate, and TOC):
All samples were analyzed within the USEPA recommended holding time for alkalinity (14 days), chloride (28 days), sulfate (28 days), and nitrate (48 hours), and TOC (28 days) for preserved waters from the date of sample collection. All holding time criteria are met.

Initial and Continuing Calibration

Calibration data for this project are not required for this deliverable however Pace's notes indicate the following:

- Multiple SDGs - *USEPA Method 8260D:* Continuing calibration verification (CCV) issues were noted by Pace for multiple compounds associated with analytical batches in each SDG. These compounds are qualified by the laboratory "J0" to indicate that percent

difference CCV is outside of laboratory acceptance criteria. **Associated sample results with laboratory qualified (J0) results are estimated and qualified (J/UJ).**

Method Blank Results

USEPA Method 8260D:
Laboratory method blanks were included with the analytical batches per method requirement. The target analytes were not detected in the method blanks at or above the reporting detection limits (RDLs) with the following exception:

- SDG L1243496 – Analytical batch WG1519557: One compound (2-butanone (MEK)) is detected above the RDL in the method blank. No action is required since MEK is not detected in the associated samples.

Dissolved Gases (Methane, Ethane, and Ethene) by RSK 175:
Laboratory method blanks were included with the analytical batches per method requirement. The target analytes (dissolved gases) are not detected in the method blanks at or above the RDLs.

USEPA Method 6020B and General Chemistry (Alkalinity, Chloride, Sulfate, Nitrate, and TOC):
Laboratory method blanks were included with the analytical batches per method requirement. The target analytes were detected in the method blanks below the RDLs. Per Guidance, no action is taken for blank detections less than the RDL when associated sample detections are greater than the RDL. General chemistry and/or metal method blank detections are shown below:

SDG	Batch	Method	Analyte	Method Blank Result	Qualifier	RDL	Units	Associated Result(s) Qualified
L1241067	WG1511965	9060A	TOC	517	J	1000	µg/L	NO
L1242545	WG1514838	9060A	TOC	385	J	1000	µg/L	NO
L1242992	WG1514838	9060A	TOC	385	J	1000	µg/L	NO
L1242992	WG1515181	9060A	TOC	325	J	1000	µg/L	NO
L1243496	WG1516221	9060A	TOC	273	J	1000	µg/L	NO
L1244760	WG1518848	9060A	TOC	249	J	1000	µg/L	NO

Target analytes were detected in method blanks at low levels with no impact to the associated samples.

Trip Blank Results

USEPA Method 8260D:
One trip blank TB-072420 (SDG L1243496) was collected and analyzed for VOCs. The target analytes were not detected in the trip blank at or above the RDLs.

Field, Rinsate, or Equipment Blank Results

All Analytical Methods:
Field, rinsate, or equipment blanks were not collected.

Field Duplicate Analyses

Field duplicate pairs were not collected.

Laboratory Duplicate Analyses

USEPA Method 8260D:
Laboratory duplicate samples were not analyzed. Refer to laboratory control sample/sample duplicate (LCS/LCSD) or matrix spike/matrix spike duplicate (MS/MSD) results for precision data.

Dissolved Gases (Methane, Ethane, and Ethene) by RSK 175:
Laboratory duplicate sample analyses were performed on client and/or on non-client samples within the analytical batches. The primary/duplicate RPDs for dissolved gas analyses are within the laboratory control limit of 20%.

USEPA Method 6020B:
Laboratory duplicate samples were not analyzed. Refer to MS/MSD results for precision data.

General Chemistry (Alkalinity, Chloride, Sulfate, Nitrate, and TOC):
Laboratory duplicate sample analyses were performed on client samples and/or on non-client samples. The primary/duplicate RPDs for general chemistry parameters are within the laboratory control RPD limits or ± 1x RDL for groundwater results <5X the RDL.

Surrogate Recoveries

USEPA Method 8260D:
The surrogate recovery results for the samples, laboratory control samples, and the method blanks are within the laboratory surrogate control limits for all the analyses.

Laboratory Control Samples

USEPA Method 8260D:
Laboratory control sample/laboratory control sample duplicate (LCS/LCSD) or laboratory control sample (LCS) were analyzed by USEPA Method 8260D method. The LCS % Rs or LCS/LCSD % Rs and RPDs for all target compounds are within the laboratory control criteria for waters with the following exceptions:

- SDG L1241067 - Analytical batch WG1511692: LCS % recovery for 1,2-dichlorobenzene is below laboratory acceptance criteria and laboratory qualified (J4). **Sample MW-340-071720 result for 1,2-dichlorobenzene is estimated (UJ).**

- SDG L1241067 - Analytical batch WG1511692: LCS/LCSD RPD result for acetone is greater than laboratory acceptance criteria and laboratory qualified (J3). No action is taken since the recoveries are within criteria but are recovered wide. **LCS/LCSD % recoveries for 1,2-dichlorobenzene are below laboratory acceptance criteria and laboratory qualified (J4). Again, sample MW-340-071720 result for 1,2-dichlorobenzene is estimated and qualified (UJ).** LCS cis-1,2-dichloroethene %

recovery is below criteria but the LCSD % recovery is within criteria. In this case no action is taken since the LCSD recovery is within criteria.

- SDGs L1242545, L1242992, and L1243496: Analytical batch WG1516510: LCS recoveries for chloroethane, chloromethane, trans-1,2-dichloroethene, and vinyl chloride are above QC criteria and laboratory qualified (J4). No action is taken since associated sample results for these compounds are non-detect. Note that certain targets including trans-1,2-dichloroethene and vinyl chloride were re-analyzed (analytical batches WG1517119 and WG1518009) and respective LCS recoveries are within QC criteria.

- SDG L1243496 - Analytical batch WG1519557: LCS % recovery for chloromethane is above control limit criteria. No action is necessary since chloromethane is not detected in the associated samples. LCS recoveries for 1,4-dichlorobenzene and 1,3-dichloropropane are below QC criteria. **Associated sample MW126-072420, MW-333-072420, and SCL-MW105-072420 results for 1,4-dichlorobenzene and 1,3-dichloropropane are estimated and qualified (UJ).**

- SDG L1244760 - Analytical batch WG1519935: LCS/LCSD RPD result for acetone is greater than laboratory acceptance criteria and laboratory qualified (J3). No action is taken since the recoveries are within criteria but are recovered wide.

- SDG L1244760 - Analytical batch WG1519935: LCS/LCSD recoveries for trichlorofluoromethane result are less than laboratory acceptance criteria and laboratory qualified (J4). **All sample results for trichlorofluoromethane are estimated and qualified (UJ) due to low LCS/LSCD recoveries.**

Dissolved Gases (Methane, Ethane, and Ethene) by RSK 175:
The LCS/LCSD % Rs and RPDs for the target compound (dissolved gases) are within the laboratory control criteria for waters.

USEPA Method 6020B:
The LCS/LCSD % Rs and RPDs for the target compound (iron and manganese) are within the laboratory control criteria for waters.

General Chemistry (Alkalinity, Chloride, Sulfate, Nitrate, and TOC):
The LCS % Rs for general chemistry parameters are within the laboratory control criteria for waters.

Matrix Spike/Matrix Spike Duplicates

USEPA Method 8260D:
Matrix spike/matrix spike duplicate (MS/MSD) analyses were not performed. Refer to LCS results and field duplicate sample for accuracy and precision data.

Dissolved Gases (Methane, Ethane, and Ethene) by RSK 175:
MS/MSD analyses were not performed. Refer to LCS results and field duplicate sample for accuracy and precision data.

USEPA Method 6020B:
MS/MSD analyses were performed on client and on non-client samples within the analytical batches. The MS/MSD % Rs and RPD were acceptable and within laboratory control limit criteria for water samples with the following discussion:

- SDG L1243496: Matrix spike analysis was performed on a non-client sample and manganese spike results are laboratory qualified (EV or V) to indicate that the sample concentration is greater than 4X the spike amount and that the MSD recovery exceeded upper limit of the calibration range. Per Guidance no action is taken.

General Chemistry (Alkalinity, Chloride, Sulfate, Nitrate, and TOC):
MS or MS/MSD analyses were performed on client and/or non-client samples within the analytical batches. In cases where MS/MSD spike analyses are not performed refer to LCS/LCSD or laboratory duplicate data for accuracy and precision data. The MS/MSD % Rs and RPDs are acceptable and within laboratory control limit criteria for water samples with the following discussion:

- SDG L1242545: MS/MSD spike was performed on a non-client sample with nitrate % Rs above QC criteria. MS/MSD results are laboratory qualified (J5) due to matrix interference. No action is taken since the spike was performed on a non-client sample. Refer to MS result for sample FMW-143-072220 with acceptable nitrate spike recovery.

Other Quality Control Issues

No laboratory quality control issues were identified in the laboratory report with the following discussions:

- Multiple SDGs: Selected sample narratives for alkalinity results indicate that several sample containers had some headspace and exposure to air may have impacted the reported results. No action was taken other than to note this.

- Electronic data deliverables (EDDs) for these SDGs were provided by the laboratory and data validator qualifiers were entered. In some cases, different chemical synonyms are used between the EDD and the hardcopy however associated Chemical Abstracts Service (CAS) numbers are provided in the EDD to confirm chemical identifications.

Compound Identification and Quantitation Limits

Results of the analyses were reported based on laboratory RDLs for all compounds. RDLs for selected compounds are elevated due to method-required dilutions with the following discussions:

- SDG L1242545: Sample narrative indicates that sample FMW-141-072220 non-target VOC compounds were too high to run at a lower dilution and that there was headspace. In response to PES's request to clarify the sample narrative the report was revised to indicate that sample FMW-141-072220 target VOC compounds were too high to run at a lower dilution. The sample narrative indicated that the sample was reanalyzed multiple times and the third run was unacceptable due to instrument performance quality control issues related to vinyl chloride. The fourth run (7/31/2020) for vinyl chloride was reported with headspace due to multiple reanalyses. No action is taken other than to note this.

- SDG L1242992: Sample narrative indicates vinyl chloride was reported with headspace on samples MW-337-072320 and MW-326-072320 due to instrument performance and quality control failures for vinyl chloride on prior analyses. No action is taken other than to note this.

Data Assessment

The laboratory data reported for this project were reviewed based on the criteria outlined in:

- USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (USEPA, 2017); and
- USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Superfund Methods Data Review (USEPA, 2017).

Data qualifiers are assigned and laboratory report pages with qualifiers are attached. All data, including qualified data, are judged to be acceptable for their intended use.

Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	533000		8450	20000	1	07/23/2020 19:42	WG1511477

Sample Narrative:

L1241067-01 WG1511477: Endpoint pH 4.5 headspace

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	12900		379	1000	1	07/18/2020 15:18	WG1511253
Nitrate	U		48.0	100	1	07/18/2020 15:18	WG1511253
Sulfate	663	J	594	5000	1	07/18/2020 15:18	WG1511253

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	5310		102	1000	1	07/21/2020 23:35	WG1511965

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	13800		48.9	100	1	07/21/2020 21:38	WG1511793
Manganese	1850		1.32	5.00	1	07/21/2020 21:38	WG1511793

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	24700		2.87	6.78	10	07/20/2020 13:42	WG1512313
Ethane	U		0.296	1.29	1	07/20/2020 13:28	WG1511043
Ethene	U		0.422	1.27	1	07/20/2020 13:28	WG1511043

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U	~~J3~~	0.548	1.00	1	07/21/2020 03:23	WG1511692
Acrylonitrile	U		0.0760	0.500	1	07/21/2020 03:23	WG1511692
Benzene	U		0.0160	0.0400	1	07/21/2020 03:23	WG1511692
Bromobenzene	U		0.0420	0.500	1	07/21/2020 03:23	WG1511692
Bromodichloromethane	U		0.0315	0.100	1	07/21/2020 03:23	WG1511692
Bromoform	U		0.239	1.00	1	07/21/2020 03:23	WG1511692
Bromomethane	U		0.148	0.500	1	07/21/2020 03:23	WG1511692
n-Butylbenzene	U		0.153	0.500	1	07/21/2020 03:23	WG1511692
sec-Butylbenzene	U		0.101	0.500	1	07/21/2020 03:23	WG1511692
tert-Butylbenzene	U		0.0620	0.200	1	07/21/2020 03:23	WG1511692
Carbon tetrachloride	U		0.0432	0.200	1	07/21/2020 03:23	WG1511692
Chlorobenzene	U		0.0229	0.100	1	07/21/2020 03:23	WG1511692
Chlorodibromomethane	U		0.0180	0.100	1	07/21/2020 03:23	WG1511692
Chloroethane	U		0.0432	0.200	1	07/21/2020 03:23	WG1511692
Chloroform	U		0.0166	0.100	1	07/21/2020 03:23	WG1511692
Chloromethane	U		0.0556	0.500	1	07/21/2020 03:23	WG1511692
2-Chlorotoluene	U		0.0368	0.100	1	07/21/2020 03:23	WG1511692
4-Chlorotoluene	U		0.0452	0.200	1	07/21/2020 03:23	WG1511692
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	07/21/2020 03:23	WG1511692
1,2-Dibromoethane	U		0.0210	0.100	1	07/21/2020 03:23	WG1511692

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MW-340-071720

Collected date/time: 07/17/20 11:55

SAMPLE RESULTS - 01

L1241067

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Dibromomethane	U		0.0400	0.200	1	07/21/2020 03:23	WG1511692
1,2-Dichlorobenzene	U	UJ J4	0.0580	0.200	1	07/21/2020 03:23	WG1511692
1,3-Dichlorobenzene	U		0.0680	0.200	1	07/21/2020 03:23	WG1511692
1,4-Dichlorobenzene	U		0.0788	0.200	1	07/21/2020 03:23	WG1511692
Dichlorodifluoromethane	U		0.0327	0.100	1	07/21/2020 03:23	WG1511692
1,1-Dichloroethane	U		0.0230	0.100	1	07/21/2020 03:23	WG1511692
1,2-Dichloroethane	U		0.0190	0.100	1	07/21/2020 03:23	WG1511692
1,1-Dichloroethene	U		0.0200	0.100	1	07/21/2020 03:23	WG1511692
cis-1,2-Dichloroethene	U	~~J4~~	0.0276	0.100	1	07/21/2020 03:23	WG1511692
trans-1,2-Dichloroethene	U		0.0572	0.200	1	07/21/2020 03:23	WG1511692
1,2-Dichloropropane	U		0.0508	0.200	1	07/21/2020 03:23	WG1511692
1,1-Dichloropropene	U		0.0280	0.100	1	07/21/2020 03:23	WG1511692
1,3-Dichloropropane	U		0.0700	0.200	1	07/21/2020 03:23	WG1511692
cis-1,3-Dichloropropene	U		0.0271	0.100	1	07/21/2020 03:23	WG1511692
trans-1,3-Dichloropropene	U		0.0612	0.200	1	07/21/2020 03:23	WG1511692
2,2-Dichloropropane	U		0.0317	0.100	1	07/21/2020 03:23	WG1511692
Di-isopropyl ether	U		0.0140	0.0400	1	07/21/2020 03:23	WG1511692
Ethylbenzene	U		0.0212	0.100	1	07/21/2020 03:23	WG1511692
Hexachloro-1,3-butadiene	U		0.508	1.00	1	07/21/2020 03:23	WG1511692
Isopropylbenzene	U		0.0345	0.100	1	07/21/2020 03:23	WG1511692
p-Isopropyltoluene	U		0.0932	0.200	1	07/21/2020 03:23	WG1511692
2-Butanone (MEK)	U		0.500	1.00	1	07/21/2020 03:23	WG1511692
Methylene Chloride	U		0.265	1.00	1	07/21/2020 03:23	WG1511692
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	07/21/2020 03:23	WG1511692
Methyl tert-butyl ether	U		0.0118	0.0400	1	07/21/2020 03:23	WG1511692
Naphthalene	U		0.124	0.500	1	07/21/2020 03:23	WG1511692
n-Propylbenzene	U		0.0472	0.200	1	07/21/2020 03:23	WG1511692
Styrene	U		0.109	0.500	1	07/21/2020 03:23	WG1511692
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	07/21/2020 03:23	WG1511692
1,1,2,2-Tetrachloroethane	U	UJ J0	0.0156	0.100	1	07/21/2020 03:23	WG1511692
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	07/21/2020 03:23	WG1511692
Tetrachloroethene	U		0.0280	0.100	1	07/23/2020 22:11	WG1513488
Toluene	U		0.0500	0.200	1	07/21/2020 03:23	WG1511692
1,2,3-Trichlorobenzene	U		0.0250	0.500	1	07/21/2020 03:23	WG1511692
1,2,4-Trichlorobenzene	U		0.193	0.500	1	07/21/2020 03:23	WG1511692
1,1,1-Trichloroethane	U		0.0110	0.100	1	07/21/2020 03:23	WG1511692
1,1,2-Trichloroethane	U		0.0353	0.100	1	07/21/2020 03:23	WG1511692
Trichloroethene	U		0.0160	0.0400	1	07/21/2020 03:23	WG1511692
Trichlorofluoromethane	U		0.0200	0.100	1	07/21/2020 03:23	WG1511692
1,2,3-Trichloropropane	U		0.204	0.500	1	07/21/2020 03:23	WG1511692
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	07/21/2020 03:23	WG1511692
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	07/21/2020 03:23	WG1511692
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	07/21/2020 03:23	WG1511692
Vinyl chloride	U		0.0273	0.100	1	07/21/2020 03:23	WG1511692
Xylenes, Total	U		0.191	0.260	1	07/21/2020 03:23	WG1511692
Ethyl Ether	U		0.0170	0.100	1	07/21/2020 03:23	WG1511692
Tetrahydrofuran	U		0.0900	0.500	1	07/21/2020 03:23	WG1511692
Iodomethane	U		0.242	0.500	1	07/21/2020 03:23	WG1511692
Allyl chloride	U		0.580	1.00	1	07/21/2020 03:23	WG1511692
Trans-1,4-Dichloro-2-butene	U	UJ J0	0.0560	0.200	1	07/21/2020 03:23	WG1511692
(S) Toluene-d8	*93.9*			*75.0-131*		*07/21/2020 03:23*	WG1511692
(S) Toluene-d8	*101*			*75.0-131*		*07/23/2020 22:11*	WG1513488
(S) 4-Bromofluorobenzene	*103*			*67.0-138*		*07/21/2020 03:23*	WG1511692
(S) 4-Bromofluorobenzene	*106*			*67.0-138*		*07/23/2020 22:11*	WG1513488
(S) 1,2-Dichloroethane-d4	*109*			*70.0-130*		*07/21/2020 03:23*	WG1511692
(S) 1,2-Dichloroethane-d4	*101*			*70.0-130*		*07/23/2020 22:11*	WG1513488

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Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	347000		8450	20000	1	07/27/2020 20:32	WG1515697

Sample Narrative:

L1242545-01 WG1515697: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	48900		379	1000	1	07/23/2020 16:50	WG1513857
Nitrate	U		48.0	100	1	07/23/2020 16:50	WG1513857
Sulfate	46700		594	5000	1	07/23/2020 16:50	WG1513857

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	4630		102	1000	1	07/26/2020 05:41	WG1514838

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	5070		48.9	100	1	07/25/2020 13:01	WG1514954
Manganese	6470		1.32	5.00	1	07/25/2020 13:01	WG1514954

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	1340		0.287	0.678	1	07/24/2020 14:01	WG1514186
Ethane	U		0.296	1.29	1	07/24/2020 14:01	WG1514186
Ethene	U		0.422	1.27	1	07/24/2020 14:01	WG1514186

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U		0.548	1.00	1	07/28/2020 23:49	WG1516510
Acrylonitrile	U		0.0760	0.500	1	07/28/2020 23:49	WG1516510
Benzene	U		0.0160	0.0400	1	07/28/2020 23:49	WG1516510
Bromobenzene	U		0.0420	0.500	1	07/28/2020 23:49	WG1516510
Bromodichloromethane	U		0.0315	0.100	1	07/28/2020 23:49	WG1516510
Bromoform	U		0.239	1.00	1	07/28/2020 23:49	WG1516510
Bromomethane	U		0.148	0.500	1	07/28/2020 23:49	WG1516510
n-Butylbenzene	U UJ	J0	0.153	0.500	1	07/28/2020 23:49	WG1516510
sec-Butylbenzene	U		0.101	0.500	1	07/28/2020 23:49	WG1516510
tert-Butylbenzene	U		0.0620	0.200	1	07/28/2020 23:49	WG1516510
Carbon tetrachloride	U		0.0432	0.200	1	07/28/2020 23:49	WG1516510
Chlorobenzene	U		0.0229	0.100	1	07/28/2020 23:49	WG1516510
Chlorodibromomethane	U		0.0180	0.100	1	07/28/2020 23:49	WG1516510
Chloroethane	U	~~J4~~	0.0432	0.200	1	07/28/2020 23:49	WG1516510
Chloroform	U		0.0166	0.100	1	07/28/2020 23:49	WG1516510
Chloromethane	U	~~J4~~	0.0556	0.500	1	07/28/2020 23:49	WG1516510
2-Chlorotoluene	U		0.0368	0.100	1	07/28/2020 23:49	WG1516510
4-Chlorotoluene	U		0.0452	0.200	1	07/28/2020 23:49	WG1516510
1,2-Dibromo-3-Chloropropane	U UJ	J0	0.204	1.00	1	07/28/2020 23:49	WG1516510
1,2-Dibromoethane	U		0.0210	0.100	1	07/28/2020 23:49	WG1516510

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FMW-143-072220

Collected date/time: 07/22/20 09:40

SAMPLE RESULTS - 01

L1242545

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Dibromomethane	U		0.0400	0.200	1	07/28/2020 23:49	WG1516510
1,2-Dichlorobenzene	U		0.0580	0.200	1	07/29/2020 23:24	WG1517119
1,3-Dichlorobenzene	U		0.0680	0.200	1	07/28/2020 23:49	WG1516510
1,4-Dichlorobenzene	U		0.0788	0.200	1	07/28/2020 23:49	WG1516510
Dichlorodifluoromethane	U		0.0327	0.100	1	07/28/2020 23:49	WG1516510
1,1-Dichloroethane	U		0.0230	0.100	1	07/28/2020 23:49	WG1516510
1,2-Dichloroethane	U		0.0190	0.100	1	07/28/2020 23:49	WG1516510
1,1-Dichloroethene	U		0.0200	0.100	1	07/28/2020 23:49	WG1516510
cis-1,2-Dichloroethene	U		0.0276	0.100	1	07/28/2020 23:49	WG1516510
trans-1,2-Dichloroethene	U	~~J4~~	0.0572	0.200	1	07/28/2020 23:49	WG1516510
1,2-Dichloropropane	U		0.0508	0.200	1	07/28/2020 23:49	WG1516510
1,1-Dichloropropene	U		0.0280	0.100	1	07/28/2020 23:49	WG1516510
1,3-Dichloropropane	U		0.0700	0.200	1	07/29/2020 23:24	WG1517119
cis-1,3-Dichloropropene	U		0.0271	0.100	1	07/28/2020 23:49	WG1516510
trans-1,3-Dichloropropene	U		0.0612	0.200	1	07/28/2020 23:49	WG1516510
2,2-Dichloropropane	U		0.0317	0.100	1	07/28/2020 23:49	WG1516510
Di-isopropyl ether	U		0.0140	0.0400	1	07/28/2020 23:49	WG1516510
Ethylbenzene	0.0490	J	0.0212	0.100	1	07/28/2020 23:49	WG1516510
Hexachloro-1,3-butadiene	U		0.508	1.00	1	07/28/2020 23:49	WG1516510
Isopropylbenzene	U		0.0345	0.100	1	07/28/2020 23:49	WG1516510
p-Isopropyltoluene	U		0.0932	0.200	1	07/28/2020 23:49	WG1516510
2-Butanone (MEK)	U		0.500	1.00	1	07/28/2020 23:49	WG1516510
Methylene Chloride	U		0.265	1.00	1	07/28/2020 23:49	WG1516510
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	07/28/2020 23:49	WG1516510
Methyl tert-butyl ether	U		0.0118	0.0400	1	07/28/2020 23:49	WG1516510
Naphthalene	U		0.124	0.500	1	07/28/2020 23:49	WG1516510
n-Propylbenzene	U		0.0472	0.200	1	07/28/2020 23:49	WG1516510
Styrene	U		0.109	0.500	1	07/28/2020 23:49	WG1516510
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	07/28/2020 23:49	WG1516510
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	07/28/2020 23:49	WG1516510
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	07/28/2020 23:49	WG1516510
Tetrachloroethene	U		0.0280	0.100	1	07/28/2020 23:49	WG1516510
Toluene	0.146	J	0.0500	0.200	1	07/28/2020 23:49	WG1516510
1,2,3-Trichlorobenzene	U		0.0250	0.500	1	07/28/2020 23:49	WG1516510
1,2,4-Trichlorobenzene	U		0.193	0.500	1	07/28/2020 23:49	WG1516510
1,1,1-Trichloroethane	U		0.0110	0.100	1	07/28/2020 23:49	WG1516510
1,1,2-Trichloroethane	U		0.0353	0.100	1	07/28/2020 23:49	WG1516510
Trichloroethene	U		0.0160	0.0400	1	07/28/2020 23:49	WG1516510
Trichlorofluoromethane	U		0.0200	0.100	1	07/28/2020 23:49	WG1516510
1,2,3-Trichloropropane	U		0.204	0.500	1	07/28/2020 23:49	WG1516510
1,2,4-Trimethylbenzene	0.117	J	0.0464	0.200	1	07/28/2020 23:49	WG1516510
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	07/28/2020 23:49	WG1516510
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	07/28/2020 23:49	WG1516510
Vinyl chloride	U	~~J4~~	0.0273	0.100	1	07/28/2020 23:49	WG1516510
Xylenes, Total	0.331		0.191	0.260	1	07/28/2020 23:49	WG1516510
Ethyl Ether	U		0.0170	0.100	1	07/28/2020 23:49	WG1516510
Tetrahydrofuran	U		0.0900	0.500	1	07/28/2020 23:49	WG1516510
Iodomethane	U		0.242	0.500	1	07/28/2020 23:49	WG1516510
Allyl chloride	U		0.580	1.00	1	07/28/2020 23:49	WG1516510
Trans-1,4-Dichloro-2-butene	U UJ	J0	0.0560	0.200	1	07/28/2020 23:49	WG1516510
(S) Toluene-d8	*93.5*			*75.0-131*		*07/28/2020 23:49*	WG1516510
(S) Toluene-d8	*110*			*75.0-131*		*07/29/2020 23:24*	WG1517119
(S) 4-Bromofluorobenzene	*105*			*67.0-138*		*07/28/2020 23:49*	WG1516510
(S) 4-Bromofluorobenzene	*102*			*67.0-138*		*07/29/2020 23:24*	WG1517119
(S) 1,2-Dichloroethane-d4	*104*			*70.0-130*		*07/28/2020 23:49*	WG1516510
(S) 1,2-Dichloroethane-d4	*98.3*			*70.0-130*		*07/29/2020 23:24*	WG1517119

JC 8/18/2020

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	205000		8450	20000	1	07/27/2020 20:39	WG1515697

Sample Narrative:

L1242545-02 WG1515697: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	23300		379	1000	1	07/23/2020 17:45	WG1513857
Nitrate	72.3	J	48.0	100	1	07/23/2020 17:45	WG1513857
Sulfate	3100	J	594	5000	1	07/23/2020 17:45	WG1513857

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	4450		102	1000	1	07/26/2020 05:53	WG1514838

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	2800		48.9	100	1	07/25/2020 13:04	WG1514954
Manganese	582		1.32	5.00	1	07/25/2020 13:04	WG1514954

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	3390		0.287	0.678	1	07/24/2020 14:09	WG1514186
Ethane	41.7		0.296	1.29	1	07/24/2020 14:09	WG1514186
Ethene	428		0.422	1.27	1	07/24/2020 14:09	WG1514186

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U		11.0	20.0	20	07/29/2020 04:33	WG1516510
Acrylonitrile	U		1.52	10.0	20	07/29/2020 04:33	WG1516510
Benzene	U		0.320	0.800	20	07/29/2020 04:33	WG1516510
Bromobenzene	U		0.840	10.0	20	07/29/2020 04:33	WG1516510
Bromodichloromethane	U		0.630	2.00	20	07/29/2020 04:33	WG1516510
Bromoform	U		4.78	20.0	20	07/29/2020 04:33	WG1516510
Bromomethane	U		2.96	10.0	20	07/29/2020 04:33	WG1516510
n-Butylbenzene	U		3.06	10.0	20	07/29/2020 04:33	WG1516510
sec-Butylbenzene	U		2.02	10.0	20	07/29/2020 04:33	WG1516510
tert-Butylbenzene	U		1.24	4.00	20	07/29/2020 04:33	WG1516510
Carbon tetrachloride	U		0.864	4.00	20	07/29/2020 04:33	WG1516510
Chlorobenzene	U		0.458	2.00	20	07/29/2020 04:33	WG1516510
Chlorodibromomethane	U		0.360	2.00	20	07/29/2020 04:33	WG1516510
Chloroethane	U	~~J4~~	0.864	4.00	20	07/29/2020 04:33	WG1516510
Chloroform	U		0.332	2.00	20	07/29/2020 04:33	WG1516510
Chloromethane	U	~~J4~~	1.11	10.0	20	07/29/2020 04:33	WG1516510
2-Chlorotoluene	U		0.736	2.00	20	07/29/2020 04:33	WG1516510
4-Chlorotoluene	U		0.904	4.00	20	07/29/2020 04:33	WG1516510
1,2-Dibromo-3-Chloropropane	U	UJ J0	4.08	20.0	20	07/29/2020 04:33	WG1516510
1,2-Dibromoethane	U		0.420	2.00	20	07/29/2020 04:33	WG1516510

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Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Dibromomethane	U		0.800	4.00	20	07/29/2020 04:33	WG1516510
1,2-Dichlorobenzene	U		1.16	4.00	20	07/30/2020 05:29	WG1517119
1,3-Dichlorobenzene	U		1.36	4.00	20	07/29/2020 04:33	WG1516510
1,4-Dichlorobenzene	U		1.58	4.00	20	07/29/2020 04:33	WG1516510
Dichlorodifluoromethane	U		0.654	2.00	20	07/29/2020 04:33	WG1516510
1,1-Dichloroethane	U		0.460	2.00	20	07/29/2020 04:33	WG1516510
1,2-Dichloroethane	U		0.380	2.00	20	07/29/2020 04:33	WG1516510
1,1-Dichloroethene	1.72	J	0.400	2.00	20	07/29/2020 04:33	WG1516510
cis-1,2-Dichloroethene	790		0.552	2.00	20	07/29/2020 04:33	WG1516510
trans-1,2-Dichloroethene	3.19	J	1.14	4.00	20	07/30/2020 05:29	WG1517119
1,2-Dichloropropane	U		1.02	4.00	20	07/29/2020 04:33	WG1516510
1,1-Dichloropropene	U		0.560	2.00	20	07/29/2020 04:33	WG1516510
1,3-Dichloropropane	U		1.40	4.00	20	07/30/2020 05:29	WG1517119
cis-1,3-Dichloropropene	U		0.542	2.00	20	07/29/2020 04:33	WG1516510
trans-1,3-Dichloropropene	U		1.22	4.00	20	07/29/2020 04:33	WG1516510
2,2-Dichloropropane	U		0.634	2.00	20	07/29/2020 04:33	WG1516510
Di-isopropyl ether	U		0.280	0.800	20	07/29/2020 04:33	WG1516510
Ethylbenzene	U		0.424	2.00	20	07/29/2020 04:33	WG1516510
Hexachloro-1,3-butadiene	U		10.2	20.0	20	07/29/2020 04:33	WG1516510
Isopropylbenzene	U		0.690	2.00	20	07/29/2020 04:33	WG1516510
p-Isopropyltoluene	U		1.86	4.00	20	07/29/2020 04:33	WG1516510
2-Butanone (MEK)	U		10.0	20.0	20	07/29/2020 04:33	WG1516510
Methylene Chloride	U		5.30	20.0	20	07/29/2020 04:33	WG1516510
4-Methyl-2-pentanone (MIBK)	U		8.00	20.0	20	07/29/2020 04:33	WG1516510
Methyl tert-butyl ether	U		0.236	0.800	20	07/29/2020 04:33	WG1516510
Naphthalene	U		2.48	10.0	20	07/29/2020 04:33	WG1516510
n-Propylbenzene	U		0.944	4.00	20	07/29/2020 04:33	WG1516510
Styrene	U		2.18	10.0	20	07/29/2020 04:33	WG1516510
1,1,1,2-Tetrachloroethane	U		0.400	2.00	20	07/29/2020 04:33	WG1516510
1,1,2,2-Tetrachloroethane	U		0.312	2.00	20	07/29/2020 04:33	WG1516510
1,1,2-Trichlorotrifluoroethane	U		0.540	2.00	20	07/29/2020 04:33	WG1516510
Tetrachloroethene	U		0.560	2.00	20	07/29/2020 04:33	WG1516510
Toluene	U		1.00	4.00	20	07/29/2020 04:33	WG1516510
1,2,3-Trichlorobenzene	U		0.500	10.0	20	07/29/2020 04:33	WG1516510
1,2,4-Trichlorobenzene	U		3.86	10.0	20	07/29/2020 04:33	WG1516510
1,1,1-Trichloroethane	U		0.220	2.00	20	07/29/2020 04:33	WG1516510
1,1,2-Trichloroethane	U		0.706	2.00	20	07/29/2020 04:33	WG1516510
Trichloroethene	2.30		0.320	0.800	20	07/29/2020 04:33	WG1516510
Trichlorofluoromethane	U		0.400	2.00	20	07/29/2020 04:33	WG1516510
1,2,3-Trichloropropane	U		4.08	10.0	20	07/29/2020 04:33	WG1516510
1,2,4-Trimethylbenzene	U		0.928	4.00	20	07/29/2020 04:33	WG1516510
1,2,3-Trimethylbenzene	U		0.920	4.00	20	07/29/2020 04:33	WG1516510
1,3,5-Trimethylbenzene	U		0.864	4.00	20	07/29/2020 04:33	WG1516510
Vinyl chloride	561		0.546	2.00	20	07/31/2020 15:43	WG1518009
Xylenes, Total	U		3.82	5.20	20	07/29/2020 04:33	WG1516510
Ethyl Ether	U		0.340	2.00	20	07/29/2020 04:33	WG1516510
Tetrahydrofuran	U		1.80	10.0	20	07/29/2020 04:33	WG1516510
Iodomethane	U		4.84	10.0	20	07/29/2020 04:33	WG1516510
Allyl chloride	U		11.6	20.0	20	07/29/2020 04:33	WG1516510
Trans-1,4-Dichloro-2-butene	U	UJ J0	1.12	4.00	20	07/29/2020 04:33	WG1516510
(S) Toluene-d8	*94.2*			*75.0-131*		*07/29/2020 04:33*	WG1516510
(S) Toluene-d8	*111*			*75.0-131*		*07/30/2020 05:29*	WG1517119
(S) Toluene-d8	*82.4*			*75.0-131*		*07/31/2020 15:43*	WG1518009
(S) 4-Bromofluorobenzene	*108*			*67.0-138*		*07/29/2020 04:33*	WG1516510
(S) 4-Bromofluorobenzene	*100*			*67.0-138*		*07/30/2020 05:29*	WG1517119
(S) 4-Bromofluorobenzene	*93.9*			*67.0-138*		*07/31/2020 15:43*	WG1518009

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Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
(S) 1,2-Dichloroethane-d4	*103*			*70.0-130*		*07/29/2020 04:33*	WG1516510
(S) 1,2-Dichloroethane-d4	*95.4*			*70.0-130*		*07/30/2020 05:29*	WG1517119
(S) 1,2-Dichloroethane-d4	*102*			*70.0-130*		*07/31/2020 15:43*	WG1518009

Sample Narrative:

L1242545-02 WG1516510, WG1518009: Non-target compounds too high to run at a lower dilution.

L1242545-02 WG1516510, WG1518009: Headspace.

JC 8/18/2020

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	263000		8450	20000	1	07/30/2020 10:37	WG1515701

Sample Narrative:

L1242992-01 WG1515701: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	8770		379	1000	1	07/24/2020 12:35	WG1514607
Nitrate	U		48.0	100	1	07/24/2020 12:35	WG1514607
Sulfate	13700		594	5000	1	07/24/2020 12:35	WG1514607

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	3060	~~B~~	102	1000	1	07/26/2020 07:36	WG1514838

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	1850		48.9	100	1	07/25/2020 14:24	WG1514954
Manganese	681		1.32	5.00	1	07/25/2020 14:24	WG1514954

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	1080		0.287	0.678	1	07/29/2020 12:36	WG1514843
Ethane	U		0.296	1.29	1	07/29/2020 12:36	WG1514843
Ethene	U		0.422	1.27	1	07/29/2020 12:36	WG1514843

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U		0.548	1.00	1	07/29/2020 00:08	WG1516510
Acrylonitrile	U		0.0760	0.500	1	07/29/2020 00:08	WG1516510
Benzene	U		0.0160	0.0400	1	07/29/2020 00:08	WG1516510
Bromobenzene	U		0.0420	0.500	1	07/29/2020 00:08	WG1516510
Bromodichloromethane	U		0.0315	0.100	1	07/29/2020 00:08	WG1516510
Bromoform	U		0.239	1.00	1	07/29/2020 00:08	WG1516510
Bromomethane	U		0.148	0.500	1	07/29/2020 00:08	WG1516510
n-Butylbenzene	U		0.153	0.500	1	07/29/2020 00:08	WG1516510
sec-Butylbenzene	U		0.101	0.500	1	07/29/2020 00:08	WG1516510
tert-Butylbenzene	U		0.0620	0.200	1	07/29/2020 00:08	WG1516510
Carbon tetrachloride	U		0.0432	0.200	1	07/29/2020 00:08	WG1516510
Chlorobenzene	U		0.0229	0.100	1	07/29/2020 00:08	WG1516510
Chlorodibromomethane	U		0.0180	0.100	1	07/29/2020 00:08	WG1516510
Chloroethane	U	~~J4~~	0.0432	0.200	1	07/29/2020 00:08	WG1516510
Chloroform	U		0.0166	0.100	1	07/29/2020 00:08	WG1516510
Chloromethane	U	~~J4~~	0.0556	0.500	1	07/29/2020 00:08	WG1516510
2-Chlorotoluene	U		0.0368	0.100	1	07/29/2020 00:08	WG1516510
4-Chlorotoluene	U		0.0452	0.200	1	07/29/2020 00:08	WG1516510
1,2-Dibromo-3-Chloropropane	U	UJ J0	0.204	1.00	1	07/29/2020 00:08	WG1516510
1,2-Dibromoethane	U		0.0210	0.100	1	07/29/2020 00:08	WG1516510

JC 8/18/2020

MW-339-072320

SAMPLE RESULTS - 01

Collected date/time: 07/23/20 08:08

L1242992

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Dibromomethane	U		0.0400	0.200	1	07/29/2020 00:08	WG1516510
1,2-Dichlorobenzene	U		0.0580	0.200	1	07/29/2020 23:46	WG1517119
1,3-Dichlorobenzene	U		0.0680	0.200	1	07/29/2020 00:08	WG1516510
1,4-Dichlorobenzene	U		0.0788	0.200	1	07/29/2020 00:08	WG1516510
Dichlorodifluoromethane	U		0.0327	0.100	1	07/29/2020 00:08	WG1516510
1,1-Dichloroethane	U		0.0230	0.100	1	07/29/2020 00:08	WG1516510
1,2-Dichloroethane	U		0.0190	0.100	1	07/29/2020 00:08	WG1516510
1,1-Dichloroethene	U		0.0200	0.100	1	07/29/2020 00:08	WG1516510
cis-1,2-Dichloroethene	0.164		0.0276	0.100	1	07/29/2020 00:08	WG1516510
trans-1,2-Dichloroethene	U	~~J4~~	0.0572	0.200	1	07/29/2020 00:08	WG1516510
1,2-Dichloropropane	U		0.0508	0.200	1	07/29/2020 00:08	WG1516510
1,1-Dichloropropene	U		0.0280	0.100	1	07/29/2020 00:08	WG1516510
1,3-Dichloropropane	U		0.0700	0.200	1	07/29/2020 23:46	WG1517119
cis-1,3-Dichloropropene	U		0.0271	0.100	1	07/29/2020 00:08	WG1516510
trans-1,3-Dichloropropene	U		0.0612	0.200	1	07/29/2020 00:08	WG1516510
2,2-Dichloropropane	U		0.0317	0.100	1	07/29/2020 00:08	WG1516510
Di-isopropyl ether	U		0.0140	0.0400	1	07/29/2020 00:08	WG1516510
Ethylbenzene	U		0.0212	0.100	1	07/29/2020 00:08	WG1516510
Hexachloro-1,3-butadiene	U		0.508	1.00	1	07/29/2020 00:08	WG1516510
Isopropylbenzene	U		0.0345	0.100	1	07/29/2020 00:08	WG1516510
p-Isopropyltoluene	U		0.0932	0.200	1	07/29/2020 00:08	WG1516510
2-Butanone (MEK)	U		0.500	1.00	1	07/29/2020 00:08	WG1516510
Methylene Chloride	U		0.265	1.00	1	07/29/2020 00:08	WG1516510
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	07/29/2020 00:08	WG1516510
Methyl tert-butyl ether	U		0.0118	0.0400	1	07/29/2020 00:08	WG1516510
Naphthalene	U		0.124	0.500	1	07/29/2020 00:08	WG1516510
n-Propylbenzene	U		0.0472	0.200	1	07/29/2020 00:08	WG1516510
Styrene	U		0.109	0.500	1	07/29/2020 00:08	WG1516510
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	07/29/2020 00:08	WG1516510
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	07/29/2020 00:08	WG1516510
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	07/29/2020 00:08	WG1516510
Tetrachloroethene	U		0.0280	0.100	1	07/29/2020 00:08	WG1516510
Toluene	U		0.0500	0.200	1	07/29/2020 00:08	WG1516510
1,2,3-Trichlorobenzene	U		0.0250	0.500	1	07/29/2020 00:08	WG1516510
1,2,4-Trichlorobenzene	U		0.193	0.500	1	07/29/2020 00:08	WG1516510
1,1,1-Trichloroethane	U		0.0110	0.100	1	07/29/2020 00:08	WG1516510
1,1,2-Trichloroethane	U		0.0353	0.100	1	07/29/2020 00:08	WG1516510
Trichloroethene	0.0280	J	0.0160	0.0400	1	07/29/2020 00:08	WG1516510
Trichlorofluoromethane	U		0.0200	0.100	1	07/29/2020 00:08	WG1516510
1,2,3-Trichloropropane	U		0.204	0.500	1	07/29/2020 00:08	WG1516510
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	07/29/2020 00:08	WG1516510
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	07/29/2020 00:08	WG1516510
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	07/29/2020 00:08	WG1516510
Vinyl chloride	U	~~J4~~	0.0273	0.100	1	07/29/2020 00:08	WG1516510
Xylenes, Total	U		0.191	0.260	1	07/29/2020 00:08	WG1516510
Ethyl Ether	U		0.0170	0.100	1	07/29/2020 00:08	WG1516510
Tetrahydrofuran	U		0.0900	0.500	1	07/29/2020 00:08	WG1516510
Iodomethane	U		0.242	0.500	1	07/29/2020 00:08	WG1516510
Allyl chloride	U		0.580	1.00	1	07/29/2020 00:08	WG1516510
Trans-1,4-Dichloro-2-butene	U	UJ J0	0.0560	0.200	1	07/29/2020 00:08	WG1516510
(S) Toluene-d8	*94.4*			*75.0-131*		*07/29/2020 00:08*	WG1516510
(S) Toluene-d8	*110*			*75.0-131*		*07/29/2020 23:46*	WG1517119
(S) 4-Bromofluorobenzene	*105*			*67.0-138*		*07/29/2020 00:08*	WG1516510
(S) 4-Bromofluorobenzene	*97.7*			*67.0-138*		*07/29/2020 23:46*	WG1517119
(S) 1,2-Dichloroethane-d4	*104*			*70.0-130*		*07/29/2020 00:08*	WG1516510
(S) 1,2-Dichloroethane-d4	*99.5*			*70.0-130*		*07/29/2020 23:46*	WG1517119

JC 8/18/2020

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	464000		8450	20000	1	07/30/2020 10:58	WG1515701

Sample Narrative:

L1242992-03 WG1515701: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	11600		379	1000	1	07/24/2020 21:22	WG1514607
Nitrate	U		48.0	100	1	07/24/2020 21:22	WG1514607
Sulfate	1110	J	594	5000	1	07/24/2020 21:22	WG1514607

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	7830		102	1000	1	07/26/2020 08:06	WG1514838

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	13800		48.9	100	1	07/27/2020 19:41	WG1515470
Manganese	1020		1.32	5.00	1	07/27/2020 19:41	WG1515470

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	22700		2.87	6.78	10	07/30/2020 12:36	WG1517565
Ethane	U		0.296	1.29	1	07/29/2020 12:41	WG1514843
Ethene	U		0.422	1.27	1	07/29/2020 12:41	WG1514843

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U		0.548	1.00	1	07/29/2020 00:27	WG1516510
Acrylonitrile	U		0.0760	0.500	1	07/29/2020 00:27	WG1516510
Benzene	U		0.0160	0.0400	1	07/29/2020 00:27	WG1516510
Bromobenzene	U		0.0420	0.500	1	07/29/2020 00:27	WG1516510
Bromodichloromethane	U		0.0315	0.100	1	07/29/2020 00:27	WG1516510
Bromoform	U		0.239	1.00	1	07/29/2020 00:27	WG1516510
Bromomethane	U		0.148	0.500	1	07/29/2020 00:27	WG1516510
n-Butylbenzene	U		0.153	0.500	1	07/29/2020 00:27	WG1516510
sec-Butylbenzene	U		0.101	0.500	1	07/29/2020 00:27	WG1516510
tert-Butylbenzene	U		0.0620	0.200	1	07/29/2020 00:27	WG1516510
Carbon tetrachloride	U		0.0432	0.200	1	07/29/2020 00:27	WG1516510
Chlorobenzene	U		0.0229	0.100	1	07/29/2020 00:27	WG1516510
Chlorodibromomethane	U		0.0180	0.100	1	07/29/2020 00:27	WG1516510
Chloroethane	U	~~J4~~	0.0432	0.200	1	07/29/2020 00:27	WG1516510
Chloroform	U		0.0166	0.100	1	07/29/2020 00:27	WG1516510
Chloromethane	U	~~J4~~	0.0556	0.500	1	07/29/2020 00:27	WG1516510
2-Chlorotoluene	U		0.0368	0.100	1	07/29/2020 00:27	WG1516510
4-Chlorotoluene	U		0.0452	0.200	1	07/29/2020 00:27	WG1516510
1,2-Dibromo-3-Chloropropane	U	UJ J0	0.204	1.00	1	07/29/2020 00:27	WG1516510
1,2-Dibromoethane	U		0.0210	0.100	1	07/29/2020 00:27	WG1516510

JC 8/18/2020

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Dibromomethane	U		0.0400	0.200	1	07/29/2020 00:27	WG1516510
1,2-Dichlorobenzene	U		0.0580	0.200	1	07/30/2020 00:07	WG1517119
1,3-Dichlorobenzene	U		0.0680	0.200	1	07/29/2020 00:27	WG1516510
1,4-Dichlorobenzene	U		0.0788	0.200	1	07/29/2020 00:27	WG1516510
Dichlorodifluoromethane	U		0.0327	0.100	1	07/29/2020 00:27	WG1516510
1,1-Dichloroethane	U		0.0230	0.100	1	07/29/2020 00:27	WG1516510
1,2-Dichloroethane	U		0.0190	0.100	1	07/29/2020 00:27	WG1516510
1,1-Dichloroethene	U		0.0200	0.100	1	07/29/2020 00:27	WG1516510
cis-1,2-Dichloroethene	U		0.0276	0.100	1	07/29/2020 00:27	WG1516510
trans-1,2-Dichloroethene	U	~~J4~~	0.0572	0.200	1	07/29/2020 00:27	WG1516510
1,2-Dichloropropane	U		0.0508	0.200	1	07/29/2020 00:27	WG1516510
1,1-Dichloropropene	U		0.0280	0.100	1	07/29/2020 00:27	WG1516510
1,3-Dichloropropane	U		0.0700	0.200	1	07/30/2020 00:07	WG1517119
cis-1,3-Dichloropropene	U		0.0271	0.100	1	07/29/2020 00:27	WG1516510
trans-1,3-Dichloropropene	U		0.0612	0.200	1	07/29/2020 00:27	WG1516510
2,2-Dichloropropane	U		0.0317	0.100	1	07/29/2020 00:27	WG1516510
Di-isopropyl ether	U		0.0140	0.0400	1	07/29/2020 00:27	WG1516510
Ethylbenzene	0.0720	J	0.0212	0.100	1	07/29/2020 00:27	WG1516510
Hexachloro-1,3-butadiene	U		0.508	1.00	1	07/29/2020 00:27	WG1516510
Isopropylbenzene	U		0.0345	0.100	1	07/29/2020 00:27	WG1516510
p-Isopropyltoluene	U		0.0932	0.200	1	07/29/2020 00:27	WG1516510
2-Butanone (MEK)	U		0.500	1.00	1	07/29/2020 00:27	WG1516510
Methylene Chloride	U		0.265	1.00	1	07/29/2020 00:27	WG1516510
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	07/29/2020 00:27	WG1516510
Methyl tert-butyl ether	U		0.0118	0.0400	1	07/29/2020 00:27	WG1516510
Naphthalene	U		0.124	0.500	1	07/29/2020 00:27	WG1516510
n-Propylbenzene	U		0.0472	0.200	1	07/29/2020 00:27	WG1516510
Styrene	U		0.109	0.500	1	07/29/2020 00:27	WG1516510
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	07/29/2020 00:27	WG1516510
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	07/29/2020 00:27	WG1516510
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	07/29/2020 00:27	WG1516510
Tetrachloroethene	U		0.0280	0.100	1	07/29/2020 00:27	WG1516510
Toluene	1.16		0.0500	0.200	1	07/29/2020 00:27	WG1516510
1,2,3-Trichlorobenzene	U		0.0250	0.500	1	07/29/2020 00:27	WG1516510
1,2,4-Trichlorobenzene	U		0.193	0.500	1	07/29/2020 00:27	WG1516510
1,1,1-Trichloroethane	U		0.0110	0.100	1	07/29/2020 00:27	WG1516510
1,1,2-Trichloroethane	U		0.0353	0.100	1	07/29/2020 00:27	WG1516510
Trichloroethene	U		0.0160	0.0400	1	07/29/2020 00:27	WG1516510
Trichlorofluoromethane	U		0.0200	0.100	1	07/29/2020 00:27	WG1516510
1,2,3-Trichloropropane	U		0.204	0.500	1	07/29/2020 00:27	WG1516510
1,2,4-Trimethylbenzene	0.0800	J	0.0464	0.200	1	07/29/2020 00:27	WG1516510
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	07/29/2020 00:27	WG1516510
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	07/29/2020 00:27	WG1516510
Vinyl chloride	U	~~J4~~	0.0273	0.100	1	07/29/2020 00:27	WG1516510
Xylenes, Total	0.617		0.191	0.260	1	07/29/2020 00:27	WG1516510
Ethyl Ether	U		0.0170	0.100	1	07/29/2020 00:27	WG1516510
Tetrahydrofuran	U		0.0900	0.500	1	07/29/2020 00:27	WG1516510
Iodomethane	U		0.242	0.500	1	07/29/2020 00:27	WG1516510
Allyl chloride	U		0.580	1.00	1	07/29/2020 00:27	WG1516510
Trans-1,4-Dichloro-2-butene	U UJ	J0	0.0560	0.200	1	07/29/2020 00:27	WG1516510
(S) Toluene-d8	*93.3*			*75.0-131*		*07/29/2020 00:27*	WG1516510
(S) Toluene-d8	*112*			*75.0-131*		*07/30/2020 00:07*	WG1517119
(S) 4-Bromofluorobenzene	*106*			*67.0-138*		*07/29/2020 00:27*	WG1516510
(S) 4-Bromofluorobenzene	*96.5*			*67.0-138*		*07/30/2020 00:07*	WG1517119
(S) 1,2-Dichloroethane-d4	*103*			*70.0-130*		*07/29/2020 00:27*	WG1516510
(S) 1,2-Dichloroethane-d4	*97.4*			*70.0-130*		*07/30/2020 00:07*	WG1517119

JC 8/18/2020

Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	220000		8450	20000	1	07/30/2020 11:05	WG1515701

Sample Narrative:

L1242992-04 WG1515701: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	9400		379	1000	1	07/24/2020 21:55	WG1514607
Nitrate	U		48.0	100	1	07/24/2020 21:55	WG1514607
Sulfate	U		594	5000	1	07/24/2020 21:55	WG1514607

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	2760	~~B~~	102	1000	1	07/26/2020 08:50	WG1514838

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	3910		48.9	100	1	07/27/2020 19:45	WG1515470
Manganese	1040		1.32	5.00	1	07/27/2020 19:45	WG1515470

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	3230		0.287	0.678	1	07/29/2020 12:44	WG1514843
Ethane	U		0.296	1.29	1	07/29/2020 12:44	WG1514843
Ethene	U		0.422	1.27	1	07/29/2020 12:44	WG1514843

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U		0.548	1.00	1	07/29/2020 00:46	WG1516510
Acrylonitrile	U		0.0760	0.500	1	07/29/2020 00:46	WG1516510
Benzene	U		0.0160	0.0400	1	07/29/2020 00:46	WG1516510
Bromobenzene	U		0.0420	0.500	1	07/29/2020 00:46	WG1516510
Bromodichloromethane	U		0.0315	0.100	1	07/29/2020 00:46	WG1516510
Bromoform	U		0.239	1.00	1	07/29/2020 00:46	WG1516510
Bromomethane	U		0.148	0.500	1	07/29/2020 00:46	WG1516510
n-Butylbenzene	U		0.153	0.500	1	07/29/2020 00:46	WG1516510
sec-Butylbenzene	U		0.101	0.500	1	07/29/2020 00:46	WG1516510
tert-Butylbenzene	U		0.0620	0.200	1	07/29/2020 00:46	WG1516510
Carbon tetrachloride	U		0.0432	0.200	1	07/29/2020 00:46	WG1516510
Chlorobenzene	U		0.0229	0.100	1	07/29/2020 00:46	WG1516510
Chlorodibromomethane	U		0.0180	0.100	1	07/29/2020 00:46	WG1516510
Chloroethane	U	~~J4~~	0.0432	0.200	1	07/29/2020 00:46	WG1516510
Chloroform	U		0.0166	0.100	1	07/29/2020 00:46	WG1516510
Chloromethane	U	~~J4~~	0.0556	0.500	1	07/29/2020 00:46	WG1516510
2-Chlorotoluene	U		0.0368	0.100	1	07/29/2020 00:46	WG1516510
4-Chlorotoluene	U		0.0452	0.200	1	07/29/2020 00:46	WG1516510
1,2-Dibromo-3-Chloropropane	U	UJ J0	0.204	1.00	1	07/29/2020 00:46	WG1516510
1,2-Dibromoethane	U		0.0210	0.100	1	07/29/2020 00:46	WG1516510

JC 8/18/2020

MW-337-072320

Collected date/time: 07/23/20 09:25

SAMPLE RESULTS - 04

L1242992

Volatile Organic Compounds (GC/MS) by Method 8260D

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Dibromomethane	U		0.0400	0.200	1	07/29/2020 00:46	WG1516510
1,2-Dichlorobenzene	U		0.0580	0.200	1	07/30/2020 00:29	WG1517119
1,3-Dichlorobenzene	U		0.0680	0.200	1	07/29/2020 00:46	WG1516510
1,4-Dichlorobenzene	U		0.0788	0.200	1	07/29/2020 00:46	WG1516510
Dichlorodifluoromethane	U		0.0327	0.100	1	07/29/2020 00:46	WG1516510
1,1-Dichloroethane	U		0.0230	0.100	1	07/29/2020 00:46	WG1516510
1,2-Dichloroethane	U		0.0190	0.100	1	07/29/2020 00:46	WG1516510
1,1-Dichloroethene	U		0.0200	0.100	1	07/29/2020 00:46	WG1516510
cis-1,2-Dichloroethene	0.0560	J	0.0276	0.100	1	07/29/2020 00:46	WG1516510
trans-1,2-Dichloroethene	U	~~J4~~	0.0572	0.200	1	07/29/2020 00:46	WG1516510
1,2-Dichloropropane	U		0.0508	0.200	1	07/29/2020 00:46	WG1516510
1,1-Dichloropropene	U		0.0280	0.100	1	07/29/2020 00:46	WG1516510
1,3-Dichloropropane	U		0.0700	0.200	1	07/30/2020 00:29	WG1517119
cis-1,3-Dichloropropene	U		0.0271	0.100	1	07/29/2020 00:46	WG1516510
trans-1,3-Dichloropropene	U		0.0612	0.200	1	07/29/2020 00:46	WG1516510
2,2-Dichloropropane	U		0.0317	0.100	1	07/29/2020 00:46	WG1516510
Di-isopropyl ether	U		0.0140	0.0400	1	07/29/2020 00:46	WG1516510
Ethylbenzene	U		0.0212	0.100	1	07/29/2020 00:46	WG1516510
Hexachloro-1,3-butadiene	U		0.508	1.00	1	07/29/2020 00:46	WG1516510
Isopropylbenzene	U		0.0345	0.100	1	07/29/2020 00:46	WG1516510
p-Isopropyltoluene	U		0.0932	0.200	1	07/29/2020 00:46	WG1516510
2-Butanone (MEK)	U		0.500	1.00	1	07/29/2020 00:46	WG1516510
Methylene Chloride	U		0.265	1.00	1	07/29/2020 00:46	WG1516510
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	07/29/2020 00:46	WG1516510
Methyl tert-butyl ether	U		0.0118	0.0400	1	07/29/2020 00:46	WG1516510
Naphthalene	U		0.124	0.500	1	07/29/2020 00:46	WG1516510
n-Propylbenzene	U		0.0472	0.200	1	07/29/2020 00:46	WG1516510
Styrene	U		0.109	0.500	1	07/29/2020 00:46	WG1516510
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	07/29/2020 00:46	WG1516510
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	07/29/2020 00:46	WG1516510
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	07/29/2020 00:46	WG1516510
Tetrachloroethene	U		0.0280	0.100	1	07/29/2020 00:46	WG1516510
Toluene	0.145	J	0.0500	0.200	1	07/29/2020 00:46	WG1516510
1,2,3-Trichlorobenzene	U		0.0250	0.500	1	07/29/2020 00:46	WG1516510
1,2,4-Trichlorobenzene	U		0.193	0.500	1	07/29/2020 00:46	WG1516510
1,1,1-Trichloroethane	U		0.0110	0.100	1	07/29/2020 00:46	WG1516510
1,1,2-Trichloroethane	U		0.0353	0.100	1	07/29/2020 00:46	WG1516510
Trichloroethene	0.0260	J	0.0160	0.0400	1	07/29/2020 00:46	WG1516510
Trichlorofluoromethane	U		0.0200	0.100	1	07/29/2020 00:46	WG1516510
1,2,3-Trichloropropane	U		0.204	0.500	1	07/29/2020 00:46	WG1516510
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	07/29/2020 00:46	WG1516510
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	07/29/2020 00:46	WG1516510
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	07/29/2020 00:46	WG1516510
Vinyl chloride	U		0.0273	0.100	1	07/31/2020 15:02	WG1518009
Xylenes, Total	U		0.191	0.260	1	07/29/2020 00:46	WG1516510
Ethyl Ether	0.0930	J	0.0170	0.100	1	07/29/2020 00:46	WG1516510
Tetrahydrofuran	U		0.0900	0.500	1	07/29/2020 00:46	WG1516510
Iodomethane	U		0.242	0.500	1	07/29/2020 00:46	WG1516510
Allyl chloride	U		0.580	1.00	1	07/29/2020 00:46	WG1516510
Trans-1,4-Dichloro-2-butene	U	UJ J0	0.0560	0.200	1	07/29/2020 00:46	WG1516510
(S) Toluene-d8	*94.7*			*75.0-131*		*07/29/2020 00:46*	WG1516510
(S) Toluene-d8	*109*			*75.0-131*		*07/30/2020 00:29*	WG1517119
(S) Toluene-d8	*89.8*			*75.0-131*		*07/31/2020 15:02*	WG1518009
(S) 4-Bromofluorobenzene	*105*			*67.0-138*		*07/29/2020 00:46*	WG1516510
(S) 4-Bromofluorobenzene	*98.5*			*67.0-138*		*07/30/2020 00:29*	WG1517119
(S) 4-Bromofluorobenzene	*107*			*67.0-138*		*07/31/2020 15:02*	WG1518009

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Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
(S) 1,2-Dichloroethane-d4	*103*			*70.0-130*		*07/29/2020 00:46*	WG1516510
(S) 1,2-Dichloroethane-d4	*98.1*			*70.0-130*		*07/30/2020 00:29*	WG1517119
(S) 1,2-Dichloroethane-d4	*96.1*			*70.0-130*		*07/31/2020 15:02*	WG1518009

Sample Narrative:

L1242992-04 WG1518009: Headspace.

JC 8/18/2020

Wet Chemistry by Method 2320 B-2011

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Alkalinity	207000		8450	20000	1	07/30/2020 11:12	WG1515701

Sample Narrative:

L1242992-05 WG1515701: Endpoint pH 4.5

Wet Chemistry by Method 9056A

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Chloride	6990		379	1000	1	07/24/2020 22:12	WG1514607
Nitrate	1970		48.0	100	1	07/24/2020 22:12	WG1514607
Sulfate	45700		594	5000	1	07/24/2020 22:12	WG1514607

Wet Chemistry by Method 9060A

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
TOC (Total Organic Carbon)	1550	~~B~~	102	1000	1	07/26/2020 09:01	WG1514838

Metals (ICPMS) by Method 6020B

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Iron	2040		48.9	100	1	07/27/2020 19:49	WG1515470
Manganese	220		1.32	5.00	1	07/27/2020 19:49	WG1515470

Volatile Organic Compounds (GC) by Method RSK175

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Methane	18.5		0.287	0.678	1	07/29/2020 12:50	WG1514843
Ethane	U		0.296	1.29	1	07/29/2020 12:50	WG1514843
Ethene	U		0.422	1.27	1	07/29/2020 12:50	WG1514843

Volatile Organic Compounds (GC/MS) by Method 8260D

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Acetone	U		0.548	1.00	1	07/29/2020 01:05	WG1516510
Acrylonitrile	U		0.0760	0.500	1	07/29/2020 01:05	WG1516510
Benzene	0.0190	J	0.0160	0.0400	1	07/29/2020 01:05	WG1516510
Bromobenzene	U		0.0420	0.500	1	07/29/2020 01:05	WG1516510
Bromodichloromethane	U		0.0315	0.100	1	07/29/2020 01:05	WG1516510
Bromoform	U		0.239	1.00	1	07/29/2020 01:05	WG1516510
Bromomethane	U		0.148	0.500	1	07/29/2020 01:05	WG1516510
n-Butylbenzene	U		0.153	0.500	1	07/29/2020 01:05	WG1516510
sec-Butylbenzene	U		0.101	0.500	1	07/29/2020 01:05	WG1516510
tert-Butylbenzene	U		0.0620	0.200	1	07/29/2020 01:05	WG1516510
Carbon tetrachloride	U		0.0432	0.200	1	07/29/2020 01:05	WG1516510
Chlorobenzene	U		0.0229	0.100	1	07/29/2020 01:05	WG1516510
Chlorodibromomethane	U		0.0180	0.100	1	07/29/2020 01:05	WG1516510
Chloroethane	U	~~J4~~	0.0432	0.200	1	07/29/2020 01:05	WG1516510
Chloroform	U		0.0166	0.100	1	07/29/2020 01:05	WG1516510
Chloromethane	U	~~J4~~	0.0556	0.500	1	07/29/2020 01:05	WG1516510
2-Chlorotoluene	U		0.0368	0.100	1	07/29/2020 01:05	WG1516510
4-Chlorotoluene	U		0.0452	0.200	1	07/29/2020 01:05	WG1516510
1,2-Dibromo-3-Chloropropane	U UJ	J0	0.204	1.00	1	07/29/2020 01:05	WG1516510
1,2-Dibromoethane	U		0.0210	0.100	1	07/29/2020 01:05	WG1516510

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Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Dibromomethane	U		0.0400	0.200	1	07/29/2020 01:05	WG1516510
1,2-Dichlorobenzene	U		0.0580	0.200	1	07/30/2020 00:50	WG1517119
1,3-Dichlorobenzene	U		0.0680	0.200	1	07/29/2020 01:05	WG1516510
1,4-Dichlorobenzene	U		0.0788	0.200	1	07/29/2020 01:05	WG1516510
Dichlorodifluoromethane	U		0.0327	0.100	1	07/29/2020 01:05	WG1516510
1,1-Dichloroethane	U		0.0230	0.100	1	07/29/2020 01:05	WG1516510
1,2-Dichloroethane	U		0.0190	0.100	1	07/29/2020 01:05	WG1516510
1,1-Dichloroethene	U		0.0200	0.100	1	07/29/2020 01:05	WG1516510
cis-1,2-Dichloroethene	0.262		0.0276	0.100	1	07/29/2020 01:05	WG1516510
trans-1,2-Dichloroethene	U	~~J4~~	0.0572	0.200	1	07/29/2020 01:05	WG1516510
1,2-Dichloropropane	U		0.0508	0.200	1	07/29/2020 01:05	WG1516510
1,1-Dichloropropene	U		0.0280	0.100	1	07/29/2020 01:05	WG1516510
1,3-Dichloropropane	U		0.0700	0.200	1	07/30/2020 00:50	WG1517119
cis-1,3-Dichloropropene	U		0.0271	0.100	1	07/29/2020 01:05	WG1516510
trans-1,3-Dichloropropene	U		0.0612	0.200	1	07/29/2020 01:05	WG1516510
2,2-Dichloropropane	U		0.0317	0.100	1	07/29/2020 01:05	WG1516510
Di-isopropyl ether	U		0.0140	0.0400	1	07/29/2020 01:05	WG1516510
Ethylbenzene	0.0450	J	0.0212	0.100	1	07/29/2020 01:05	WG1516510
Hexachloro-1,3-butadiene	U		0.508	1.00	1	07/29/2020 01:05	WG1516510
Isopropylbenzene	U		0.0345	0.100	1	07/29/2020 01:05	WG1516510
p-Isopropyltoluene	U		0.0932	0.200	1	07/29/2020 01:05	WG1516510
2-Butanone (MEK)	U		0.500	1.00	1	07/29/2020 01:05	WG1516510
Methylene Chloride	U		0.265	1.00	1	07/29/2020 01:05	WG1516510
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	07/29/2020 01:05	WG1516510
Methyl tert-butyl ether	U		0.0118	0.0400	1	07/29/2020 01:05	WG1516510
Naphthalene	U		0.124	0.500	1	07/29/2020 01:05	WG1516510
n-Propylbenzene	U		0.0472	0.200	1	07/29/2020 01:05	WG1516510
Styrene	U		0.109	0.500	1	07/29/2020 01:05	WG1516510
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	07/29/2020 01:05	WG1516510
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	07/29/2020 01:05	WG1516510
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	07/29/2020 01:05	WG1516510
Tetrachloroethene	U		0.0280	0.100	1	07/29/2020 01:05	WG1516510
Toluene	0.298		0.0500	0.200	1	07/29/2020 01:05	WG1516510
1,2,3-Trichlorobenzene	U		0.0250	0.500	1	07/29/2020 01:05	WG1516510
1,2,4-Trichlorobenzene	U		0.193	0.500	1	07/29/2020 01:05	WG1516510
1,1,1-Trichloroethane	U		0.0110	0.100	1	07/29/2020 01:05	WG1516510
1,1,2-Trichloroethane	U		0.0353	0.100	1	07/29/2020 01:05	WG1516510
Trichloroethene	U		0.0160	0.0400	1	07/29/2020 01:05	WG1516510
Trichlorofluoromethane	U		0.0200	0.100	1	07/29/2020 01:05	WG1516510
1,2,3-Trichloropropane	U		0.204	0.500	1	07/29/2020 01:05	WG1516510
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	07/29/2020 01:05	WG1516510
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	07/29/2020 01:05	WG1516510
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	07/29/2020 01:05	WG1516510
Vinyl chloride	U	~~J4~~	0.0273	0.100	1	07/29/2020 01:05	WG1516510
Xylenes, Total	0.256	J	0.191	0.260	1	07/29/2020 01:05	WG1516510
Ethyl Ether	U		0.0170	0.100	1	07/29/2020 01:05	WG1516510
Tetrahydrofuran	U		0.0900	0.500	1	07/29/2020 01:05	WG1516510
Iodomethane	U		0.242	0.500	1	07/29/2020 01:05	WG1516510
Allyl chloride	U		0.580	1.00	1	07/29/2020 01:05	WG1516510
Trans-1,4-Dichloro-2-butene	U	UJ J0	0.0560	0.200	1	07/29/2020 01:05	WG1516510
(S) Toluene-d8	*98.7*			*75.0-131*		*07/29/2020 01:05*	WG1516510
(S) Toluene-d8	*105*			*75.0-131*		*07/30/2020 00:50*	WG1517119
(S) 4-Bromofluorobenzene	*99.6*			*67.0-138*		*07/29/2020 01:05*	WG1516510
(S) 4-Bromofluorobenzene	*92.1*			*67.0-138*		*07/30/2020 00:50*	WG1517119
(S) 1,2-Dichloroethane-d4	*102*			*70.0-130*		*07/29/2020 01:05*	WG1516510
(S) 1,2-Dichloroethane-d4	*97.6*			*70.0-130*		*07/30/2020 00:50*	WG1517119

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Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	271000		8450	20000	1	07/30/2020 11:18	WG1515701

Sample Narrative:

L1242992-06 WG1515701: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	23100		379	1000	1	07/24/2020 22:28	WG1514607
Nitrate	U		48.0	100	1	07/24/2020 22:28	WG1514607
Sulfate	49900		594	5000	1	07/24/2020 22:28	WG1514607

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	1290	~~B~~	102	1000	1	07/25/2020 18:41	WG1515181

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	6530		48.9	100	1	07/27/2020 19:52	WG1515470
Manganese	470		1.32	5.00	1	07/27/2020 19:52	WG1515470

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	20.9		0.287	0.678	1	07/29/2020 12:55	WG1514843
Ethane	U		0.296	1.29	1	07/29/2020 12:55	WG1514843
Ethene	U		0.422	1.27	1	07/29/2020 12:55	WG1514843

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U		0.548	1.00	1	07/29/2020 01:24	WG1516510
Acrylonitrile	U		0.0760	0.500	1	07/29/2020 01:24	WG1516510
Benzene	0.0390	J	0.0160	0.0400	1	07/29/2020 01:24	WG1516510
Bromobenzene	U		0.0420	0.500	1	07/29/2020 01:24	WG1516510
Bromodichloromethane	U		0.0315	0.100	1	07/29/2020 01:24	WG1516510
Bromoform	U		0.239	1.00	1	07/29/2020 01:24	WG1516510
Bromomethane	U		0.148	0.500	1	07/29/2020 01:24	WG1516510
n-Butylbenzene	U		0.153	0.500	1	07/29/2020 01:24	WG1516510
sec-Butylbenzene	U		0.101	0.500	1	07/29/2020 01:24	WG1516510
tert-Butylbenzene	U		0.0620	0.200	1	07/29/2020 01:24	WG1516510
Carbon tetrachloride	U		0.0432	0.200	1	07/29/2020 01:24	WG1516510
Chlorobenzene	U		0.0229	0.100	1	07/29/2020 01:24	WG1516510
Chlorodibromomethane	U		0.0180	0.100	1	07/29/2020 01:24	WG1516510
Chloroethane	U	~~J4~~	0.0432	0.200	1	07/29/2020 01:24	WG1516510
Chloroform	U		0.0166	0.100	1	07/29/2020 01:24	WG1516510
Chloromethane	U	~~J4~~	0.0556	0.500	1	07/29/2020 01:24	WG1516510
2-Chlorotoluene	U		0.0368	0.100	1	07/29/2020 01:24	WG1516510
4-Chlorotoluene	U		0.0452	0.200	1	07/29/2020 01:24	WG1516510
1,2-Dibromo-3-Chloropropane	U UJ	J0	0.204	1.00	1	07/29/2020 01:24	WG1516510 JC 8/18/2020
1,2-Dibromoethane	U		0.0210	0.100	1	07/29/2020 01:24	WG1516510

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Dibromomethane	U		0.0400	0.200	1	07/29/2020 01:24	WG1516510
1,2-Dichlorobenzene	U		0.0580	0.200	1	07/30/2020 01:12	WG1517119
1,3-Dichlorobenzene	U		0.0680	0.200	1	07/29/2020 01:24	WG1516510
1,4-Dichlorobenzene	U		0.0788	0.200	1	07/29/2020 01:24	WG1516510
Dichlorodifluoromethane	U		0.0327	0.100	1	07/29/2020 01:24	WG1516510
1,1-Dichloroethane	U		0.0230	0.100	1	07/29/2020 01:24	WG1516510
1,2-Dichloroethane	U		0.0190	0.100	1	07/29/2020 01:24	WG1516510
1,1-Dichloroethene	U		0.0200	0.100	1	07/29/2020 01:24	WG1516510
cis-1,2-Dichloroethene	0.277		0.0276	0.100	1	07/29/2020 01:24	WG1516510
trans-1,2-Dichloroethene	U	~~J4~~	0.0572	0.200	1	07/29/2020 01:24	WG1516510
1,2-Dichloropropane	U		0.0508	0.200	1	07/29/2020 01:24	WG1516510
1,1-Dichloropropene	U		0.0280	0.100	1	07/29/2020 01:24	WG1516510
1,3-Dichloropropane	U		0.0700	0.200	1	07/30/2020 01:12	WG1517119
cis-1,3-Dichloropropene	U		0.0271	0.100	1	07/29/2020 01:24	WG1516510
trans-1,3-Dichloropropene	U		0.0612	0.200	1	07/29/2020 01:24	WG1516510
2,2-Dichloropropane	U		0.0317	0.100	1	07/29/2020 01:24	WG1516510
Di-isopropyl ether	U		0.0140	0.0400	1	07/29/2020 01:24	WG1516510
Ethylbenzene	U		0.0212	0.100	1	07/29/2020 01:24	WG1516510
Hexachloro-1,3-butadiene	U		0.508	1.00	1	07/29/2020 01:24	WG1516510
Isopropylbenzene	U		0.0345	0.100	1	07/29/2020 01:24	WG1516510
p-Isopropyltoluene	U		0.0932	0.200	1	07/29/2020 01:24	WG1516510
2-Butanone (MEK)	U		0.500	1.00	1	07/29/2020 01:24	WG1516510
Methylene Chloride	U		0.265	1.00	1	07/29/2020 01:24	WG1516510
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	07/29/2020 01:24	WG1516510
Methyl tert-butyl ether	U		0.0118	0.0400	1	07/29/2020 01:24	WG1516510
Naphthalene	U		0.124	0.500	1	07/29/2020 01:24	WG1516510
n-Propylbenzene	U		0.0472	0.200	1	07/29/2020 01:24	WG1516510
Styrene	U		0.109	0.500	1	07/29/2020 01:24	WG1516510
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	07/29/2020 01:24	WG1516510
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	07/29/2020 01:24	WG1516510
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	07/29/2020 01:24	WG1516510
Tetrachloroethene	U		0.0280	0.100	1	07/29/2020 01:24	WG1516510
Toluene	0.120	J	0.0500	0.200	1	07/29/2020 01:24	WG1516510
1,2,3-Trichlorobenzene	U		0.0250	0.500	1	07/29/2020 01:24	WG1516510
1,2,4-Trichlorobenzene	U		0.193	0.500	1	07/29/2020 01:24	WG1516510
1,1,1-Trichloroethane	U		0.0110	0.100	1	07/29/2020 01:24	WG1516510
1,1,2-Trichloroethane	U		0.0353	0.100	1	07/29/2020 01:24	WG1516510
Trichloroethene	0.0430		0.0160	0.0400	1	07/29/2020 01:24	WG1516510
Trichlorofluoromethane	U		0.0200	0.100	1	07/29/2020 01:24	WG1516510
1,2,3-Trichloropropane	U		0.204	0.500	1	07/29/2020 01:24	WG1516510
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	07/29/2020 01:24	WG1516510
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	07/29/2020 01:24	WG1516510
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	07/29/2020 01:24	WG1516510
Vinyl chloride	0.201		0.0273	0.100	1	07/31/2020 15:22	WG1518009
Xylenes, Total	U		0.191	0.260	1	07/29/2020 01:24	WG1516510
Ethyl Ether	U		0.0170	0.100	1	07/29/2020 01:24	WG1516510
Tetrahydrofuran	U		0.0900	0.500	1	07/29/2020 01:24	WG1516510
Iodomethane	U		0.242	0.500	1	07/29/2020 01:24	WG1516510
Allyl chloride	U		0.580	1.00	1	07/29/2020 01:24	WG1516510
Trans-1,4-Dichloro-2-butene	U UJ	J0	0.0560	0.200	1	07/29/2020 01:24	WG1516510
(S) Toluene-d8	*98.5*			*75.0-131*		*07/29/2020 01:24*	WG1516510
(S) Toluene-d8	*107*			*75.0-131*		*07/30/2020 01:12*	WG1517119
(S) Toluene-d8	*89.4*			*75.0-131*		*07/31/2020 15:22*	WG1518009
(S) 4-Bromofluorobenzene	*101*			*67.0-138*		*07/29/2020 01:24*	WG1516510
(S) 4-Bromofluorobenzene	*73.6*			*67.0-138*		*07/30/2020 01:12*	WG1517119
(S) 4-Bromofluorobenzene	*106*			*67.0-138*		*07/31/2020 15:22*	WG1518009

JC 8/18/2020

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
(S) 1,2-Dichloroethane-d4	*99.7*			*70.0-130*		*07/29/2020 01:24*	WG1516510
(S) 1,2-Dichloroethane-d4	*96.9*			*70.0-130*		*07/30/2020 01:12*	WG1517119
(S) 1,2-Dichloroethane-d4	*103*			*70.0-130*		*07/31/2020 15:22*	WG1518009

Sample Narrative:

L1242992-06 WG1518009: Headspace.

JC 8/18/2020

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Wet Chemistry by Method 2320 B-2011

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Alkalinity	249000		8450	20000	1	08/02/2020 18:57	WG1518263

Sample Narrative:

L1243496-01 WG1518263: Endpoint pH 4.5

Wet Chemistry by Method 9056A

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Chloride	9550		379	1000	1	07/25/2020 15:39	WG1515068
Nitrate	U		48.0	100	1	07/25/2020 15:39	WG1515068
Sulfate	38500		594	5000	1	07/25/2020 15:39	WG1515068

Wet Chemistry by Method 9060A

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
TOC (Total Organic Carbon)	1440	~~B~~	102	1000	1	07/28/2020 15:17	WG1516221

Metals (ICPMS) by Method 6020B

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Iron	3900		48.9	100	1	07/29/2020 21:59	WG1516153
Manganese	307		1.32	5.00	1	07/29/2020 21:59	WG1516153

Volatile Organic Compounds (GC) by Method RSK175

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Methane	32.7		0.287	0.678	1	07/29/2020 13:52	WG1516855
Ethane	U		0.296	1.29	1	07/29/2020 13:52	WG1516855
Ethene	U		0.422	1.27	1	07/29/2020 13:52	WG1516855

Volatile Organic Compounds (GC/MS) by Method 8260D

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Acetone	U		0.548	1.00	1	07/29/2020 03:36	WG1516510
Acrylonitrile	U		0.0760	0.500	1	07/29/2020 03:36	WG1516510
Benzene	0.0430		0.0160	0.0400	1	07/29/2020 03:36	WG1516510
Bromobenzene	U		0.0420	0.500	1	07/29/2020 03:36	WG1516510
Bromodichloromethane	U		0.0315	0.100	1	07/29/2020 03:36	WG1516510
Bromoform	U		0.239	1.00	1	07/29/2020 03:36	WG1516510
Bromomethane	U		0.148	0.500	1	07/29/2020 03:36	WG1516510
n-Butylbenzene	U		0.153	0.500	1	07/29/2020 03:36	WG1516510
sec-Butylbenzene	U		0.101	0.500	1	07/29/2020 03:36	WG1516510
tert-Butylbenzene	U		0.0620	0.200	1	07/29/2020 03:36	WG1516510
Carbon tetrachloride	U		0.0432	0.200	1	07/29/2020 03:36	WG1516510
Chlorobenzene	U		0.0229	0.100	1	07/29/2020 03:36	WG1516510
Chlorodibromomethane	U		0.0180	0.100	1	07/29/2020 03:36	WG1516510
Chloroethane	U	~~J4~~	0.0432	0.200	1	07/29/2020 03:36	WG1516510
Chloroform	U		0.0166	0.100	1	07/29/2020 03:36	WG1516510
Chloromethane	U	~~J4~~	0.0556	0.500	1	07/29/2020 03:36	WG1516510
2-Chlorotoluene	U		0.0368	0.100	1	07/29/2020 03:36	WG1516510
4-Chlorotoluene	U		0.0452	0.200	1	07/29/2020 03:36	WG1516510
1,2-Dibromo-3-Chloropropane	U UJ	J0	0.204	1.00	1	07/29/2020 03:36	WG1516510
1,2-Dibromoethane	U		0.0210	0.100	1	07/29/2020 03:36	WG1516510

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Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Dibromomethane	U		0.0400	0.200	1	07/29/2020 03:36	WG1516510
1,2-Dichlorobenzene	U		0.0580	0.200	1	07/30/2020 04:25	WG1517119
1,3-Dichlorobenzene	U		0.0680	0.200	1	07/29/2020 03:36	WG1516510
1,4-Dichlorobenzene	U		0.0788	0.200	1	07/29/2020 03:36	WG1516510
Dichlorodifluoromethane	U		0.0327	0.100	1	07/29/2020 03:36	WG1516510
1,1-Dichloroethane	U		0.0230	0.100	1	07/29/2020 03:36	WG1516510
1,2-Dichloroethane	U		0.0190	0.100	1	07/29/2020 03:36	WG1516510
1,1-Dichloroethene	U		0.0200	0.100	1	07/29/2020 03:36	WG1516510
cis-1,2-Dichloroethene	U		0.0276	0.100	1	07/29/2020 03:36	WG1516510
trans-1,2-Dichloroethene	U	~~J4~~	0.0572	0.200	1	07/29/2020 03:36	WG1516510
1,2-Dichloropropane	U		0.0508	0.200	1	07/29/2020 03:36	WG1516510
1,1-Dichloropropene	U		0.0280	0.100	1	07/29/2020 03:36	WG1516510
1,3-Dichloropropane	U		0.0700	0.200	1	07/30/2020 04:25	WG1517119
cis-1,3-Dichloropropene	U		0.0271	0.100	1	07/29/2020 03:36	WG1516510
trans-1,3-Dichloropropene	U		0.0612	0.200	1	07/29/2020 03:36	WG1516510
2,2-Dichloropropane	U		0.0317	0.100	1	07/29/2020 03:36	WG1516510
Di-isopropyl ether	U		0.0140	0.0400	1	07/29/2020 03:36	WG1516510
Ethylbenzene	0.0760	J	0.0212	0.100	1	07/29/2020 03:36	WG1516510
Hexachloro-1,3-butadiene	U		0.508	1.00	1	07/29/2020 03:36	WG1516510
Isopropylbenzene	U		0.0345	0.100	1	07/29/2020 03:36	WG1516510
p-Isopropyltoluene	U		0.0932	0.200	1	07/29/2020 03:36	WG1516510
2-Butanone (MEK)	U		0.500	1.00	1	07/29/2020 03:36	WG1516510
Methylene Chloride	U		0.265	1.00	1	07/29/2020 03:36	WG1516510
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	07/29/2020 03:36	WG1516510
Methyl tert-butyl ether	U		0.0118	0.0400	1	07/29/2020 03:36	WG1516510
Naphthalene	0.558		0.124	0.500	1	07/29/2020 03:36	WG1516510
n-Propylbenzene	U		0.0472	0.200	1	07/29/2020 03:36	WG1516510
Styrene	U		0.109	0.500	1	07/29/2020 03:36	WG1516510
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	07/29/2020 03:36	WG1516510
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	07/29/2020 03:36	WG1516510
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	07/29/2020 03:36	WG1516510
Tetrachloroethene	U		0.0280	0.100	1	07/29/2020 03:36	WG1516510
Toluene	0.632		0.0500	0.200	1	07/29/2020 03:36	WG1516510
1,2,3-Trichlorobenzene	U		0.0250	0.500	1	07/29/2020 03:36	WG1516510
1,2,4-Trichlorobenzene	U		0.193	0.500	1	07/29/2020 03:36	WG1516510
1,1,1-Trichloroethane	U		0.0110	0.100	1	07/29/2020 03:36	WG1516510
1,1,2-Trichloroethane	U		0.0353	0.100	1	07/29/2020 03:36	WG1516510
Trichloroethene	U		0.0160	0.0400	1	07/29/2020 03:36	WG1516510
Trichlorofluoromethane	U		0.0200	0.100	1	07/29/2020 03:36	WG1516510
1,2,3-Trichloropropane	U		0.204	0.500	1	07/29/2020 03:36	WG1516510
1,2,4-Trimethylbenzene	0.326		0.0464	0.200	1	07/29/2020 03:36	WG1516510
1,2,3-Trimethylbenzene	0.154	J	0.0460	0.200	1	07/29/2020 03:36	WG1516510
1,3,5-Trimethylbenzene	0.112	J	0.0432	0.200	1	07/29/2020 03:36	WG1516510
Vinyl chloride	U	~~J4~~	0.0273	0.100	1	07/29/2020 03:36	WG1516510
Xylenes, Total	0.437		0.191	0.260	1	07/29/2020 03:36	WG1516510
Ethyl Ether	U		0.0170	0.100	1	07/29/2020 03:36	WG1516510
Tetrahydrofuran	U		0.0900	0.500	1	07/29/2020 03:36	WG1516510
Iodomethane	U		0.242	0.500	1	07/29/2020 03:36	WG1516510
Allyl chloride	U		0.580	1.00	1	07/29/2020 03:36	WG1516510
Trans-1,4-Dichloro-2-butene	U UJ	J0	0.0560	0.200	1	07/29/2020 03:36	WG1516510
(S) Toluene-d8	*92.6*			*75.0-131*		*07/29/2020 03:36*	WG1516510
(S) Toluene-d8	*116*			*75.0-131*		*07/30/2020 04:25*	WG1517119
(S) 4-Bromofluorobenzene	*109*			*67.0-138*		*07/29/2020 03:36*	WG1516510
(S) 4-Bromofluorobenzene	*92.8*			*67.0-138*		*07/30/2020 04:25*	WG1517119
(S) 1,2-Dichloroethane-d4	*103*			*70.0-130*		*07/29/2020 03:36*	WG1516510
(S) 1,2-Dichloroethane-d4	*98.2*			*70.0-130*		*07/30/2020 04:25*	WG1517119

JC 8/18/2020

Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	335000		8450	20000	1	08/02/2020 19:05	WG1518263

Sample Narrative:

L1243496-02 WG1518263: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	15000		379	1000	1	07/25/2020 17:01	WG1515068
Nitrate	U		48.0	100	1	07/25/2020 17:01	WG1515068
Sulfate	47900		594	5000	1	07/25/2020 17:01	WG1515068

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	1870	~~B~~	102	1000	1	07/28/2020 15:59	WG1516221

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	1950		48.9	100	1	07/29/2020 22:03	WG1516153
Manganese	258		1.32	5.00	1	07/29/2020 22:03	WG1516153

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	179		0.287	0.678	1	07/29/2020 13:54	WG1516855
Ethane	U		0.296	1.29	1	07/29/2020 13:54	WG1516855
Ethene	U		0.422	1.27	1	07/29/2020 13:54	WG1516855

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch	
Acetone	U		0.548	1.00	1	07/29/2020 03:55	WG1516510	
Acrylonitrile	U		0.0760	0.500	1	07/29/2020 03:55	WG1516510	
Benzene	0.0250	J	0.0160	0.0400	1	07/29/2020 03:55	WG1516510	
Bromobenzene	U		0.0420	0.500	1	07/29/2020 03:55	WG1516510	
Bromodichloromethane	U		0.0315	0.100	1	07/29/2020 03:55	WG1516510	
Bromoform	U		0.239	1.00	1	07/29/2020 03:55	WG1516510	
Bromomethane	U		0.148	0.500	1	07/29/2020 03:55	WG1516510	
n-Butylbenzene	U		0.153	0.500	1	07/29/2020 03:55	WG1516510	
sec-Butylbenzene	U		0.101	0.500	1	07/29/2020 03:55	WG1516510	
tert-Butylbenzene	U		0.0620	0.200	1	07/29/2020 03:55	WG1516510	
Carbon tetrachloride	U		0.0432	0.200	1	07/29/2020 03:55	WG1516510	
Chlorobenzene	U		0.0229	0.100	1	07/29/2020 03:55	WG1516510	
Chlorodibromomethane	U		0.0180	0.100	1	07/29/2020 03:55	WG1516510	
Chloroethane	U	~~J4~~	0.0432	0.200	1	07/29/2020 03:55	WG1516510	
Chloroform	U		0.0166	0.100	1	07/29/2020 03:55	WG1516510	
Chloromethane	U	~~J4~~	0.0556	0.500	1	07/29/2020 03:55	WG1516510	
2-Chlorotoluene	U		0.0368	0.100	1	07/29/2020 03:55	WG1516510	
4-Chlorotoluene	U		0.0452	0.200	1	07/29/2020 03:55	WG1516510	
1,2-Dibromo-3-Chloropropane	U	UJ J0	0.204	1.00	1	07/29/2020 03:55	WG1516510	JC 8/18/2020
1,2-Dibromoethane	U		0.0210	0.100	1	07/29/2020 03:55	WG1516510	

MW-316-072420
Collected date/time: 07/24/20 12:25

SAMPLE RESULTS - 02

L1243496

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Dibromomethane	U		0.0400	0.200	1	07/29/2020 03:55	WG1516510
1,2-Dichlorobenzene	U		0.0580	0.200	1	07/30/2020 04:46	WG1517119
1,3-Dichlorobenzene	U		0.0680	0.200	1	07/29/2020 03:55	WG1516510
1,4-Dichlorobenzene	U		0.0788	0.200	1	07/29/2020 03:55	WG1516510
Dichlorodifluoromethane	U		0.0327	0.100	1	07/29/2020 03:55	WG1516510
1,1-Dichloroethane	U		0.0230	0.100	1	07/29/2020 03:55	WG1516510
1,2-Dichloroethane	U		0.0190	0.100	1	07/29/2020 03:55	WG1516510
1,1-Dichloroethene	U		0.0200	0.100	1	07/29/2020 03:55	WG1516510
cis-1,2-Dichloroethene	U		0.0276	0.100	1	07/29/2020 03:55	WG1516510
trans-1,2-Dichloroethene	U	~~J4~~	0.0572	0.200	1	07/29/2020 03:55	WG1516510
1,2-Dichloropropane	U		0.0508	0.200	1	07/29/2020 03:55	WG1516510
1,1-Dichloropropene	U		0.0280	0.100	1	07/29/2020 03:55	WG1516510
1,3-Dichloropropane	U		0.0700	0.200	1	07/30/2020 04:46	WG1517119
cis-1,3-Dichloropropene	U		0.0271	0.100	1	07/29/2020 03:55	WG1516510
trans-1,3-Dichloropropene	U		0.0612	0.200	1	07/29/2020 03:55	WG1516510
2,2-Dichloropropane	U		0.0317	0.100	1	07/29/2020 03:55	WG1516510
Di-isopropyl ether	U		0.0140	0.0400	1	07/29/2020 03:55	WG1516510
Ethylbenzene	U		0.0212	0.100	1	07/29/2020 03:55	WG1516510
Hexachloro-1,3-butadiene	U		0.508	1.00	1	07/29/2020 03:55	WG1516510
Isopropylbenzene	U		0.0345	0.100	1	07/29/2020 03:55	WG1516510
p-Isopropyltoluene	U		0.0932	0.200	1	07/29/2020 03:55	WG1516510
2-Butanone (MEK)	U		0.500	1.00	1	07/29/2020 03:55	WG1516510
Methylene Chloride	U		0.265	1.00	1	07/29/2020 03:55	WG1516510
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	07/29/2020 03:55	WG1516510
Methyl tert-butyl ether	U		0.0118	0.0400	1	07/29/2020 03:55	WG1516510
Naphthalene	U		0.124	0.500	1	07/29/2020 03:55	WG1516510
n-Propylbenzene	U		0.0472	0.200	1	07/29/2020 03:55	WG1516510
Styrene	U		0.109	0.500	1	07/29/2020 03:55	WG1516510
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	07/29/2020 03:55	WG1516510
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	07/29/2020 03:55	WG1516510
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	07/29/2020 03:55	WG1516510
Tetrachloroethene	U		0.0280	0.100	1	07/29/2020 03:55	WG1516510
Toluene	0.362		0.0500	0.200	1	07/29/2020 03:55	WG1516510
1,2,3-Trichlorobenzene	U		0.0250	0.500	1	07/29/2020 03:55	WG1516510
1,2,4-Trichlorobenzene	U		0.193	0.500	1	07/29/2020 03:55	WG1516510
1,1,1-Trichloroethane	U		0.0110	0.100	1	07/29/2020 03:55	WG1516510
1,1,2-Trichloroethane	U		0.0353	0.100	1	07/29/2020 03:55	WG1516510
Trichloroethene	U		0.0160	0.0400	1	07/29/2020 03:55	WG1516510
Trichlorofluoromethane	U		0.0200	0.100	1	07/29/2020 03:55	WG1516510
1,2,3-Trichloropropane	U		0.204	0.500	1	07/29/2020 03:55	WG1516510
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	07/29/2020 03:55	WG1516510
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	07/29/2020 03:55	WG1516510
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	07/29/2020 03:55	WG1516510
Vinyl chloride	U	~~J4~~	0.0273	0.100	1	07/29/2020 03:55	WG1516510
Xylenes, Total	U		0.191	0.260	1	07/29/2020 03:55	WG1516510
Ethyl Ether	U		0.0170	0.100	1	07/29/2020 03:55	WG1516510
Tetrahydrofuran	U		0.0900	0.500	1	07/29/2020 03:55	WG1516510
Iodomethane	U		0.242	0.500	1	07/29/2020 03:55	WG1516510
Allyl chloride	U		0.580	1.00	1	07/29/2020 03:55	WG1516510
Trans-1,4-Dichloro-2-butene	U	UJ J0	0.0560	0.200	1	07/29/2020 03:55	WG1516510
(S) Toluene-d8	*92.4*			*75.0-131*		*07/29/2020 03:55*	WG1516510
(S) Toluene-d8	*110*			*75.0-131*		*07/30/2020 04:46*	WG1517119
(S) 4-Bromofluorobenzene	*107*			*67.0-138*		*07/29/2020 03:55*	WG1516510
(S) 4-Bromofluorobenzene	*110*			*67.0-138*		*07/30/2020 04:46*	WG1517119
(S) 1,2-Dichloroethane-d4	*103*			*70.0-130*		*07/29/2020 03:55*	WG1516510
(S) 1,2-Dichloroethane-d4	*104*			*70.0-130*		*07/30/2020 04:46*	WG1517119

JC 8/18/2020

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	173000		8450	20000	1	08/02/2020 19:13	WG1518263

Sample Narrative:

L1243496-03 WG1518263: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	6060		379	1000	1	07/25/2020 17:18	WG1515068
Nitrate	U		48.0	100	1	07/25/2020 17:18	WG1515068
Sulfate	4370	J	594	5000	1	07/25/2020 17:18	WG1515068

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	1340	~~B~~	102	1000	1	07/28/2020 16:12	WG1516221

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	247		48.9	100	1	07/29/2020 22:06	WG1516153
Manganese	376		1.32	5.00	1	07/29/2020 22:06	WG1516153

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	7.78		0.287	0.678	1	07/29/2020 14:22	WG1516855
Ethane	U		0.296	1.29	1	07/29/2020 14:22	WG1516855
Ethene	U		0.422	1.27	1	07/29/2020 14:22	WG1516855

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U		0.548	1.00	1	07/29/2020 04:14	WG1516510
Acrylonitrile	U		0.0760	0.500	1	07/29/2020 04:14	WG1516510
Benzene	U		0.0160	0.0400	1	07/29/2020 04:14	WG1516510
Bromobenzene	U		0.0420	0.500	1	07/29/2020 04:14	WG1516510
Bromodichloromethane	U		0.0315	0.100	1	07/29/2020 04:14	WG1516510
Bromoform	U		0.239	1.00	1	07/29/2020 04:14	WG1516510
Bromomethane	U		0.148	0.500	1	07/29/2020 04:14	WG1516510
n-Butylbenzene	U		0.153	0.500	1	07/29/2020 04:14	WG1516510
sec-Butylbenzene	U		0.101	0.500	1	07/29/2020 04:14	WG1516510
tert-Butylbenzene	U		0.0620	0.200	1	07/29/2020 04:14	WG1516510
Carbon tetrachloride	U		0.0432	0.200	1	07/29/2020 04:14	WG1516510
Chlorobenzene	U		0.0229	0.100	1	07/29/2020 04:14	WG1516510
Chlorodibromomethane	U		0.0180	0.100	1	07/29/2020 04:14	WG1516510
Chloroethane	U	~~J4~~	0.0432	0.200	1	07/29/2020 04:14	WG1516510
Chloroform	U		0.0166	0.100	1	07/29/2020 04:14	WG1516510
Chloromethane	U	~~J4~~	0.0556	0.500	1	07/29/2020 04:14	WG1516510
2-Chlorotoluene	U		0.0368	0.100	1	07/29/2020 04:14	WG1516510
4-Chlorotoluene	U		0.0452	0.200	1	07/29/2020 04:14	WG1516510
1,2-Dibromo-3-Chloropropane	U	UJ J0	0.204	1.00	1	07/29/2020 04:14	WG1516510
1,2-Dibromoethane	U		0.0210	0.100	1	07/29/2020 04:14	WG1516510

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Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Dibromomethane	U		0.0400	0.200	1	07/29/2020 04:14	WG1516510
1,2-Dichlorobenzene	U		0.0580	0.200	1	07/30/2020 05:08	WG1517119
1,3-Dichlorobenzene	U		0.0680	0.200	1	07/29/2020 04:14	WG1516510
1,4-Dichlorobenzene	U		0.0788	0.200	1	07/29/2020 04:14	WG1516510
Dichlorodifluoromethane	U		0.0327	0.100	1	07/29/2020 04:14	WG1516510
1,1-Dichloroethane	U		0.0230	0.100	1	07/29/2020 04:14	WG1516510
1,2-Dichloroethane	U		0.0190	0.100	1	07/29/2020 04:14	WG1516510
1,1-Dichloroethene	U		0.0200	0.100	1	07/29/2020 04:14	WG1516510
cis-1,2-Dichloroethene	U		0.0276	0.100	1	07/29/2020 04:14	WG1516510
trans-1,2-Dichloroethene	U	~~J4~~	0.0572	0.200	1	07/29/2020 04:14	WG1516510
1,2-Dichloropropane	U		0.0508	0.200	1	07/29/2020 04:14	WG1516510
1,1-Dichloropropene	U		0.0280	0.100	1	07/29/2020 04:14	WG1516510
1,3-Dichloropropane	U		0.0700	0.200	1	07/30/2020 05:08	WG1517119
cis-1,3-Dichloropropene	U		0.0271	0.100	1	07/29/2020 04:14	WG1516510
trans-1,3-Dichloropropene	U		0.0612	0.200	1	07/29/2020 04:14	WG1516510
2,2-Dichloropropane	U		0.0317	0.100	1	07/29/2020 04:14	WG1516510
Di-isopropyl ether	U		0.0140	0.0400	1	07/29/2020 04:14	WG1516510
Ethylbenzene	U		0.0212	0.100	1	07/29/2020 04:14	WG1516510
Hexachloro-1,3-butadiene	U		0.508	1.00	1	07/29/2020 04:14	WG1516510
Isopropylbenzene	U		0.0345	0.100	1	07/29/2020 04:14	WG1516510
p-Isopropyltoluene	U		0.0932	0.200	1	07/29/2020 04:14	WG1516510
2-Butanone (MEK)	U		0.500	1.00	1	07/29/2020 04:14	WG1516510
Methylene Chloride	U		0.265	1.00	1	07/29/2020 04:14	WG1516510
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	07/29/2020 04:14	WG1516510
Methyl tert-butyl ether	U		0.0118	0.0400	1	07/29/2020 04:14	WG1516510
Naphthalene	U		0.124	0.500	1	07/29/2020 04:14	WG1516510
n-Propylbenzene	U		0.0472	0.200	1	07/29/2020 04:14	WG1516510
Styrene	U		0.109	0.500	1	07/29/2020 04:14	WG1516510
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	07/29/2020 04:14	WG1516510
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	07/29/2020 04:14	WG1516510
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	07/29/2020 04:14	WG1516510
Tetrachloroethene	0.0540	J	0.0280	0.100	1	07/29/2020 04:14	WG1516510
Toluene	0.0880	J	0.0500	0.200	1	07/29/2020 04:14	WG1516510
1,2,3-Trichlorobenzene	U		0.0250	0.500	1	07/29/2020 04:14	WG1516510
1,2,4-Trichlorobenzene	U		0.193	0.500	1	07/29/2020 04:14	WG1516510
1,1,1-Trichloroethane	U		0.0110	0.100	1	07/29/2020 04:14	WG1516510
1,1,2-Trichloroethane	U		0.0353	0.100	1	07/29/2020 04:14	WG1516510
Trichloroethene	U		0.0160	0.0400	1	07/29/2020 04:14	WG1516510
Trichlorofluoromethane	U		0.0200	0.100	1	07/29/2020 04:14	WG1516510
1,2,3-Trichloropropane	U		0.204	0.500	1	07/29/2020 04:14	WG1516510
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	07/29/2020 04:14	WG1516510
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	07/29/2020 04:14	WG1516510
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	07/29/2020 04:14	WG1516510
Vinyl chloride	U	~~J4~~	0.0273	0.100	1	07/29/2020 04:14	WG1516510
Xylenes, Total	U		0.191	0.260	1	07/29/2020 04:14	WG1516510
Ethyl Ether	U		0.0170	0.100	1	07/29/2020 04:14	WG1516510
Tetrahydrofuran	U		0.0900	0.500	1	07/29/2020 04:14	WG1516510
Iodomethane	U		0.242	0.500	1	07/29/2020 04:14	WG1516510
Allyl chloride	U		0.580	1.00	1	07/29/2020 04:14	WG1516510
Trans-1,4-Dichloro-2-butene	U	UJ J0	0.0560	0.200	1	07/29/2020 04:14	WG1516510
(S) Toluene-d8	*91.5*			*75.0-131*		*07/29/2020 04:14*	WG1516510
(S) Toluene-d8	*117*			*75.0-131*		*07/30/2020 05:08*	WG1517119
(S) 4-Bromofluorobenzene	*111*			*67.0-138*		*07/29/2020 04:14*	WG1516510
(S) 4-Bromofluorobenzene	*84.6*			*67.0-138*		*07/30/2020 05:08*	WG1517119
(S) 1,2-Dichloroethane-d4	*105*			*70.0-130*		*07/29/2020 04:14*	WG1516510
(S) 1,2-Dichloroethane-d4	*107*			*70.0-130*		*07/30/2020 05:08*	WG1517119

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Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	170000		8450	20000	1	08/02/2020 19:20	WG1518263

Sample Narrative:

L1243496-04 WG1518263: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	6790		379	1000	1	07/25/2020 17:34	WG1515068
Nitrate	U		48.0	100	1	07/25/2020 17:34	WG1515068
Sulfate	3190	J	594	5000	1	07/25/2020 17:34	WG1515068

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	3940		102	1000	1	07/28/2020 16:52	WG1516221

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	105		48.9	100	1	07/30/2020 13:11	WG1517393
Manganese	262		1.32	5.00	1	07/30/2020 13:11	WG1517393

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	361		0.287	0.678	1	07/29/2020 14:25	WG1516855
Ethane	U		0.296	1.29	1	07/29/2020 14:25	WG1516855
Ethene	U		0.422	1.27	1	07/29/2020 14:25	WG1516855

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U		0.548	1.00	1	08/03/2020 16:51	WG1519557
Acrylonitrile	U		0.0760	0.500	1	08/03/2020 16:51	WG1519557
Benzene	U		0.0160	0.0400	1	08/03/2020 16:51	WG1519557
Bromobenzene	U		0.0420	0.500	1	08/03/2020 16:51	WG1519557
Bromodichloromethane	U		0.0315	0.100	1	08/03/2020 16:51	WG1519557
Bromoform	U		0.239	1.00	1	08/03/2020 16:51	WG1519557
Bromomethane	U	UJ J0	0.148	0.500	1	08/03/2020 16:51	WG1519557
n-Butylbenzene	U		0.153	0.500	1	08/03/2020 16:51	WG1519557
sec-Butylbenzene	U		0.101	0.500	1	08/03/2020 16:51	WG1519557
tert-Butylbenzene	U		0.0620	0.200	1	08/03/2020 16:51	WG1519557
Carbon tetrachloride	U		0.0432	0.200	1	08/03/2020 16:51	WG1519557
Chlorobenzene	U		0.0229	0.100	1	08/03/2020 16:51	WG1519557
Chlorodibromomethane	U		0.0180	0.100	1	08/03/2020 16:51	WG1519557
Chloroethane	U		0.0432	0.200	1	08/03/2020 16:51	WG1519557
Chloroform	U		0.0166	0.100	1	08/03/2020 16:51	WG1519557
Chloromethane	U	J4	0.0556	0.500	1	08/03/2020 16:51	WG1519557
2-Chlorotoluene	U		0.0368	0.100	1	08/03/2020 16:51	WG1519557
4-Chlorotoluene	U		0.0452	0.200	1	08/03/2020 16:51	WG1519557
1,2-Dibromo-3-Chloropropane	U	UJ J0	0.204	1.00	1	08/03/2020 16:51	WG1519557
1,2-Dibromoethane	U		0.0210	0.100	1	08/03/2020 16:51	WG1519557

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Volatile Organic Compounds (GC/MS) by Method 8260D

	Result		Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l			ug/l	ug/l		date / time	
Dibromomethane	U			0.0400	0.200	1	08/03/2020 16:51	WG1519557
1,2-Dichlorobenzene	U			0.0580	0.200	1	08/03/2020 16:51	WG1519557
1,3-Dichlorobenzene	U			0.0680	0.200	1	08/03/2020 16:51	WG1519557
1,4-Dichlorobenzene	U	UJ	J4	0.0788	0.200	1	08/03/2020 16:51	WG1519557
Dichlorodifluoromethane	U			0.0327	0.100	1	08/03/2020 16:51	WG1519557
1,1-Dichloroethane	U			0.0230	0.100	1	08/03/2020 16:51	WG1519557
1,2-Dichloroethane	U			0.0190	0.100	1	08/03/2020 16:51	WG1519557
1,1-Dichloroethene	U			0.0200	0.100	1	08/03/2020 16:51	WG1519557
cis-1,2-Dichloroethene	U			0.0276	0.100	1	08/03/2020 16:51	WG1519557
trans-1,2-Dichloroethene	U			0.0572	0.200	1	08/03/2020 16:51	WG1519557
1,2-Dichloropropane	U			0.0508	0.200	1	08/03/2020 16:51	WG1519557
1,1-Dichloropropene	U			0.0280	0.100	1	08/03/2020 16:51	WG1519557
1,3-Dichloropropane	U	UJ	J4	0.0700	0.200	1	08/03/2020 16:51	WG1519557
cis-1,3-Dichloropropene	U	UJ	J0	0.0271	0.100	1	08/03/2020 16:51	WG1519557
trans-1,3-Dichloropropene	U			0.0612	0.200	1	08/03/2020 16:51	WG1519557
2,2-Dichloropropane	U			0.0317	0.100	1	08/03/2020 16:51	WG1519557
Di-isopropyl ether	U			0.0140	0.0400	1	08/03/2020 16:51	WG1519557
Ethylbenzene	U			0.0212	0.100	1	08/03/2020 16:51	WG1519557
Hexachloro-1,3-butadiene	U			0.508	1.00	1	08/03/2020 16:51	WG1519557
Isopropylbenzene	U			0.0345	0.100	1	08/03/2020 16:51	WG1519557
p-Isopropyltoluene	U			0.0932	0.200	1	08/03/2020 16:51	WG1519557
2-Butanone (MEK)	U			0.500	1.00	1	08/03/2020 16:51	WG1519557
Methylene Chloride	U			0.265	1.00	1	08/03/2020 16:51	WG1519557
4-Methyl-2-pentanone (MIBK)	U			0.400	1.00	1	08/03/2020 16:51	WG1519557
Methyl tert-butyl ether	U			0.0118	0.0400	1	08/03/2020 16:51	WG1519557
Naphthalene	U			0.124	0.500	1	08/03/2020 16:51	WG1519557
n-Propylbenzene	U	UJ	J0	0.0472	0.200	1	08/03/2020 16:51	WG1519557
Styrene	U			0.109	0.500	1	08/03/2020 16:51	WG1519557
1,1,1,2-Tetrachloroethane	U			0.0200	0.100	1	08/03/2020 16:51	WG1519557
1,1,2,2-Tetrachloroethane	U	UJ	J0	0.0156	0.100	1	08/03/2020 16:51	WG1519557
1,1,2-Trichlorotrifluoroethane	U			0.0270	0.100	1	08/03/2020 16:51	WG1519557
Tetrachloroethene	U			0.0280	0.100	1	08/03/2020 16:51	WG1519557
Toluene	U			0.0500	0.200	1	08/04/2020 00:37	WG1519721
1,2,3-Trichlorobenzene	U			0.0250	0.500	1	08/03/2020 16:51	WG1519557
1,2,4-Trichlorobenzene	U			0.193	0.500	1	08/03/2020 16:51	WG1519557
1,1,1-Trichloroethane	U			0.0110	0.100	1	08/03/2020 16:51	WG1519557
1,1,2-Trichloroethane	U			0.0353	0.100	1	08/03/2020 16:51	WG1519557
Trichloroethene	U			0.0160	0.0400	1	08/03/2020 16:51	WG1519557
Trichlorofluoromethane	U			0.0200	0.100	1	08/03/2020 16:51	WG1519557
1,2,3-Trichloropropane	U	UJ	J0	0.204	0.500	1	08/03/2020 16:51	WG1519557
1,2,4-Trimethylbenzene	U			0.0464	0.200	1	08/03/2020 16:51	WG1519557
1,2,3-Trimethylbenzene	U			0.0460	0.200	1	08/03/2020 16:51	WG1519557
1,3,5-Trimethylbenzene	U			0.0432	0.200	1	08/03/2020 16:51	WG1519557
Vinyl chloride	U			0.0273	0.100	1	08/03/2020 16:51	WG1519557
Xylenes, Total	U			0.191	0.260	1	08/03/2020 16:51	WG1519557
Ethyl Ether	U			0.0170	0.100	1	08/03/2020 16:51	WG1519557
Tetrahydrofuran	U	UJ	J0	0.0900	0.500	1	08/03/2020 16:51	WG1519557
Iodomethane	U			0.242	0.500	1	08/03/2020 16:51	WG1519557
Allyl chloride	U			0.580	1.00	1	08/03/2020 16:51	WG1519557
Trans-1,4-Dichloro-2-butene	U	UJ	J0	0.0560	0.200	1	08/03/2020 16:51	WG1519557
(S) Toluene-d8	*92.9*				*75.0-131*		*08/03/2020 16:51*	WG1519557
(S) Toluene-d8	*104*				*75.0-131*		*08/04/2020 00:37*	WG1519721
(S) 4-Bromofluorobenzene	*112*				*67.0-138*		*08/03/2020 16:51*	WG1519557
(S) 4-Bromofluorobenzene	*94.6*				*67.0-138*		*08/04/2020 00:37*	WG1519721
(S) 1,2-Dichloroethane-d4	*100*				*70.0-130*		*08/03/2020 16:51*	WG1519557
(S) 1,2-Dichloroethane-d4	*115*				*70.0-130*		*08/04/2020 00:37*	WG1519721

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Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	835000		8450	20000	1	08/02/2020 19:28	WG1518263

Sample Narrative:

L1243496-05 WG1518263: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	35100		379	1000	1	07/25/2020 18:07	WG1515068
Nitrate	U		48.0	100	1	07/25/2020 18:07	WG1515068
Sulfate	U		594	5000	1	07/25/2020 18:07	WG1515068

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	14400		102	1000	1	07/28/2020 18:43	WG1516221

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	21200		48.9	100	1	07/30/2020 13:15	WG1517393
Manganese	1550		1.32	5.00	1	07/30/2020 13:15	WG1517393

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	29700		2.87	6.78	10	07/30/2020 12:42	WG1517565
Ethane	U		0.296	1.29	1	07/29/2020 14:29	WG1516855
Ethene	U		0.422	1.27	1	07/29/2020 14:29	WG1516855

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U		0.548	1.00	1	08/03/2020 17:10	WG1519557
Acrylonitrile	U		0.0760	0.500	1	08/03/2020 17:10	WG1519557
Benzene	0.0200	J	0.0160	0.0400	1	08/03/2020 17:10	WG1519557
Bromobenzene	U		0.0420	0.500	1	08/03/2020 17:10	WG1519557
Bromodichloromethane	U		0.0315	0.100	1	08/03/2020 17:10	WG1519557
Bromoform	U		0.239	1.00	1	08/03/2020 17:10	WG1519557
Bromomethane	U	UJ J0	0.148	0.500	1	08/03/2020 17:10	WG1519557
n-Butylbenzene	U		0.153	0.500	1	08/03/2020 17:10	WG1519557
sec-Butylbenzene	U		0.101	0.500	1	08/03/2020 17:10	WG1519557
tert-Butylbenzene	U		0.0620	0.200	1	08/03/2020 17:10	WG1519557
Carbon tetrachloride	U		0.0432	0.200	1	08/03/2020 17:10	WG1519557
Chlorobenzene	U		0.0229	0.100	1	08/03/2020 17:10	WG1519557
Chlorodibromomethane	U		0.0180	0.100	1	08/03/2020 17:10	WG1519557
Chloroethane	U		0.0432	0.200	1	08/03/2020 17:10	WG1519557
Chloroform	U		0.0166	0.100	1	08/03/2020 17:10	WG1519557
Chloromethane	U	~~J4~~	0.0556	0.500	1	08/03/2020 17:10	WG1519557
2-Chlorotoluene	U		0.0368	0.100	1	08/03/2020 17:10	WG1519557
4-Chlorotoluene	U		0.0452	0.200	1	08/03/2020 17:10	WG1519557
1,2-Dibromo-3-Chloropropane	U	UJ J0	0.204	1.00	1	08/03/2020 17:10	WG1519557
1,2-Dibromoethane	U		0.0210	0.100	1	08/03/2020 17:10	WG1519557

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1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Dibromomethane	U		0.0400	0.200	1	08/03/2020 17:10	WG1519557
1,2-Dichlorobenzene	U		0.0580	0.200	1	08/03/2020 17:10	WG1519557
1,3-Dichlorobenzene	U		0.0680	0.200	1	08/03/2020 17:10	WG1519557
1,4-Dichlorobenzene	U	UJ J4	0.0788	0.200	1	08/03/2020 17:10	WG1519557
Dichlorodifluoromethane	U		0.0327	0.100	1	08/03/2020 17:10	WG1519557
1,1-Dichloroethane	U		0.0230	0.100	1	08/03/2020 17:10	WG1519557
1,2-Dichloroethane	U		0.0190	0.100	1	08/03/2020 17:10	WG1519557
1,1-Dichloroethene	U		0.0200	0.100	1	08/03/2020 17:10	WG1519557
cis-1,2-Dichloroethene	U		0.0276	0.100	1	08/03/2020 17:10	WG1519557
trans-1,2-Dichloroethene	U		0.0572	0.200	1	08/03/2020 17:10	WG1519557
1,2-Dichloropropane	U		0.0508	0.200	1	08/03/2020 17:10	WG1519557
1,1-Dichloropropene	U		0.0280	0.100	1	08/03/2020 17:10	WG1519557
1,3-Dichloropropane	U UJ	J4	0.0700	0.200	1	08/03/2020 17:10	WG1519557
cis-1,3-Dichloropropene	U	UJ J0	0.0271	0.100	1	08/03/2020 17:10	WG1519557
trans-1,3-Dichloropropene	U		0.0612	0.200	1	08/03/2020 17:10	WG1519557
2,2-Dichloropropane	U		0.0317	0.100	1	08/03/2020 17:10	WG1519557
Di-isopropyl ether	0.239		0.0140	0.0400	1	08/03/2020 17:10	WG1519557
Ethylbenzene	U		0.0212	0.100	1	08/03/2020 17:10	WG1519557
Hexachloro-1,3-butadiene	U		0.508	1.00	1	08/03/2020 17:10	WG1519557
Isopropylbenzene	U		0.0345	0.100	1	08/03/2020 17:10	WG1519557
p-Isopropyltoluene	U		0.0932	0.200	1	08/03/2020 17:10	WG1519557
2-Butanone (MEK)	U		0.500	1.00	1	08/03/2020 17:10	WG1519557
Methylene Chloride	U		0.265	1.00	1	08/03/2020 17:10	WG1519557
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	08/03/2020 17:10	WG1519557
Methyl tert-butyl ether	U		0.0118	0.0400	1	08/03/2020 17:10	WG1519557
Naphthalene	U		0.124	0.500	1	08/03/2020 17:10	WG1519557
n-Propylbenzene	U	UJ J0	0.0472	0.200	1	08/03/2020 17:10	WG1519557
Styrene	U		0.109	0.500	1	08/03/2020 17:10	WG1519557
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	08/03/2020 17:10	WG1519557
1,1,2,2-Tetrachloroethane	U	UJ J0	0.0156	0.100	1	08/03/2020 17:10	WG1519557
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	08/03/2020 17:10	WG1519557
Tetrachloroethene	U		0.0280	0.100	1	08/03/2020 17:10	WG1519557
Toluene	0.253		0.0500	0.200	1	08/03/2020 17:10	WG1519557
1,2,3-Trichlorobenzene	U		0.0250	0.500	1	08/03/2020 17:10	WG1519557
1,2,4-Trichlorobenzene	U		0.193	0.500	1	08/03/2020 17:10	WG1519557
1,1,1-Trichloroethane	U		0.0110	0.100	1	08/03/2020 17:10	WG1519557
1,1,2-Trichloroethane	U		0.0353	0.100	1	08/03/2020 17:10	WG1519557
Trichloroethene	U		0.0160	0.0400	1	08/03/2020 17:10	WG1519557
Trichlorofluoromethane	U		0.0200	0.100	1	08/03/2020 17:10	WG1519557
1,2,3-Trichloropropane	U	UJ J0	0.204	0.500	1	08/03/2020 17:10	WG1519557
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	08/03/2020 17:10	WG1519557
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	08/03/2020 17:10	WG1519557
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	08/03/2020 17:10	WG1519557
Vinyl chloride	U		0.0273	0.100	1	08/03/2020 17:10	WG1519557
Xylenes, Total	U		0.191	0.260	1	08/03/2020 17:10	WG1519557
Ethyl Ether	U		0.0170	0.100	1	08/03/2020 17:10	WG1519557
Tetrahydrofuran	U	UJ J0	0.0900	0.500	1	08/03/2020 17:10	WG1519557
Iodomethane	U		0.242	0.500	1	08/03/2020 17:10	WG1519557
Allyl chloride	U		0.580	1.00	1	08/03/2020 17:10	WG1519557
Trans-1,4-Dichloro-2-butene	U	UJ J0	0.0560	0.200	1	08/03/2020 17:10	WG1519557
(S) Toluene-d8	*93.3*			*75.0-131*		*08/03/2020 17:10*	WG1519557
(S) 4-Bromofluorobenzene	*113*			*67.0-138*		*08/03/2020 17:10*	WG1519557
(S) 1,2-Dichloroethane-d4	*102*			*70.0-130*		*08/03/2020 17:10*	WG1519557

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Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U		0.548	1.00	1	08/03/2020 17:29	WG1519557
Acrylonitrile	U		0.0760	0.500	1	08/03/2020 17:29	WG1519557
Benzene	86.6		0.0160	0.0400	1	08/03/2020 17:29	WG1519557
Bromobenzene	U		0.0420	0.500	1	08/03/2020 17:29	WG1519557
Bromodichloromethane	U		0.0315	0.100	1	08/03/2020 17:29	WG1519557
Bromoform	U		0.239	1.00	1	08/03/2020 17:29	WG1519557
Bromomethane	U	UJ J0	0.148	0.500	1	08/03/2020 17:29	WG1519557
n-Butylbenzene	4.24		0.153	0.500	1	08/03/2020 17:29	WG1519557
sec-Butylbenzene	4.48		0.101	0.500	1	08/03/2020 17:29	WG1519557
tert-Butylbenzene	0.192	J	0.0620	0.200	1	08/03/2020 17:29	WG1519557
Carbon tetrachloride	U		0.0432	0.200	1	08/03/2020 17:29	WG1519557
Chlorobenzene	U		0.0229	0.100	1	08/03/2020 17:29	WG1519557
Chlorodibromomethane	U		0.0180	0.100	1	08/03/2020 17:29	WG1519557
Chloroethane	U		0.0432	0.200	1	08/03/2020 17:29	WG1519557
Chloroform	U		0.0166	0.100	1	08/03/2020 17:29	WG1519557
Chloromethane	U	~~J4~~	0.0556	0.500	1	08/03/2020 17:29	WG1519557
2-Chlorotoluene	U		0.0368	0.100	1	08/03/2020 17:29	WG1519557
4-Chlorotoluene	U		0.0452	0.200	1	08/03/2020 17:29	WG1519557
1,2-Dibromo-3-Chloropropane	U	UJ J0	0.204	1.00	1	08/03/2020 17:29	WG1519557
1,2-Dibromoethane	U		0.0210	0.100	1	08/03/2020 17:29	WG1519557
Dibromomethane	U		0.0400	0.200	1	08/03/2020 17:29	WG1519557
1,2-Dichlorobenzene	U		0.0580	0.200	1	08/03/2020 17:29	WG1519557
1,3-Dichlorobenzene	U		0.0680	0.200	1	08/03/2020 17:29	WG1519557
1,4-Dichlorobenzene	U	UJ J4	0.0788	0.200	1	08/03/2020 17:29	WG1519557
Dichlorodifluoromethane	U		0.0327	0.100	1	08/03/2020 17:29	WG1519557
1,1-Dichloroethane	U		0.0230	0.100	1	08/03/2020 17:29	WG1519557
1,2-Dichloroethane	U		0.0190	0.100	1	08/03/2020 17:29	WG1519557
1,1-Dichloroethene	U		0.0200	0.100	1	08/03/2020 17:29	WG1519557
cis-1,2-Dichloroethene	U		0.0276	0.100	1	08/03/2020 17:29	WG1519557
trans-1,2-Dichloroethene	U		0.0572	0.200	1	08/03/2020 17:29	WG1519557
1,2-Dichloropropane	U		0.0508	0.200	1	08/03/2020 17:29	WG1519557
1,1-Dichloropropene	U		0.0280	0.100	1	08/03/2020 17:29	WG1519557
1,3-Dichloropropane	U	UJ J4	0.0700	0.200	1	08/03/2020 17:29	WG1519557
cis-1,3-Dichloropropene	U	UJ J0	0.0271	0.100	1	08/03/2020 17:29	WG1519557
trans-1,3-Dichloropropene	U		0.0612	0.200	1	08/03/2020 17:29	WG1519557
2,2-Dichloropropane	U		0.0317	0.100	1	08/03/2020 17:29	WG1519557
Di-isopropyl ether	0.0430		0.0140	0.0400	1	08/03/2020 17:29	WG1519557
Ethylbenzene	35.1		0.0212	0.100	1	08/03/2020 17:29	WG1519557
Hexachloro-1,3-butadiene	U		0.508	1.00	1	08/03/2020 17:29	WG1519557
Isopropylbenzene	97.0		0.0345	0.100	1	08/03/2020 17:29	WG1519557
p-Isopropyltoluene	1.26		0.0932	0.200	1	08/03/2020 17:29	WG1519557
2-Butanone (MEK)	U		0.500	1.00	1	08/03/2020 17:29	WG1519557
Methylene Chloride	U		0.265	1.00	1	08/03/2020 17:29	WG1519557
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	08/03/2020 17:29	WG1519557
Methyl tert-butyl ether	U		0.0118	0.0400	1	08/03/2020 17:29	WG1519557
Naphthalene	3.49		0.124	0.500	1	08/03/2020 17:29	WG1519557
n-Propylbenzene	185		0.472	2.00	10	08/04/2020 02:12	WG1519721
Styrene	U		0.109	0.500	1	08/03/2020 17:29	WG1519557
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	08/03/2020 17:29	WG1519557
1,1,2,2-Tetrachloroethane	U	UJ J0	0.0156	0.100	1	08/03/2020 17:29	WG1519557
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	08/03/2020 17:29	WG1519557
Tetrachloroethene	U		0.0280	0.100	1	08/03/2020 17:29	WG1519557
Toluene	12.0		0.0500	0.200	1	08/03/2020 17:29	WG1519557
1,2,3-Trichlorobenzene	U		0.0250	0.500	1	08/03/2020 17:29	WG1519557
1,2,4-Trichlorobenzene	U		0.193	0.500	1	08/03/2020 17:29	WG1519557
1,1,1-Trichloroethane	U		0.0110	0.100	1	08/03/2020 17:29	WG1519557

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Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,1,2-Trichloroethane	U		0.0353	0.100	1	08/03/2020 17:29	WG1519557
Trichloroethene	U		0.0160	0.0400	1	08/03/2020 17:29	WG1519557
Trichlorofluoromethane	U		0.0200	0.100	1	08/03/2020 17:29	WG1519557
1,2,3-Trichloropropane	U	UJ J0	0.204	0.500	1	08/03/2020 17:29	WG1519557
1,2,4-Trimethylbenzene	0.275		0.0464	0.200	1	08/03/2020 17:29	WG1519557
1,2,3-Trimethylbenzene	9.87		0.0460	0.200	1	08/03/2020 17:29	WG1519557
1,3,5-Trimethylbenzene	2.72		0.0432	0.200	1	08/03/2020 17:29	WG1519557
Vinyl chloride	U		0.0273	0.100	1	08/03/2020 17:29	WG1519557
Xylenes, Total	22.5		0.191	0.260	1	08/03/2020 17:29	WG1519557
Ethyl Ether	U		0.0170	0.100	1	08/03/2020 17:29	WG1519557
Tetrahydrofuran	U	UJ J0	0.0900	0.500	1	08/03/2020 17:29	WG1519557
Iodomethane	U		0.242	0.500	1	08/03/2020 17:29	WG1519557
Allyl chloride	U		0.580	1.00	1	08/03/2020 17:29	WG1519557
Trans-1,4-Dichloro-2-butene	U	UJ J0	0.0560	0.200	1	08/03/2020 17:29	WG1519557
(S) Toluene-d8	*94.8*			*75.0-131*		*08/03/2020 17:29*	WG1519557
(S) Toluene-d8	*102*			*75.0-131*		*08/04/2020 02:12*	WG1519721
(S) 4-Bromofluorobenzene	*112*			*67.0-138*		*08/03/2020 17:29*	WG1519557
(S) 4-Bromofluorobenzene	*101*			*67.0-138*		*08/04/2020 02:12*	WG1519721
(S) 1,2-Dichloroethane-d4	*103*			*70.0-130*		*08/03/2020 17:29*	WG1519557
(S) 1,2-Dichloroethane-d4	*112*			*70.0-130*		*08/04/2020 02:12*	WG1519721

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

JC 8/18/2020

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	265000		8450	20000	1	08/05/2020 13:15	WG1520673

Sample Narrative:

L1244760-01 WG1520673: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	14700		379	1000	1	07/30/2020 21:15	WG1517638
Nitrate	2200		48.0	100	1	07/30/2020 21:15	WG1517638
Sulfate	73000		594	5000	1	07/30/2020 21:15	WG1517638

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	1900	~~B~~	102	1000	1	08/02/2020 09:35	WG1518848

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	1220		48.9	100	1	07/31/2020 01:16	WG1518057
Manganese	169		1.32	5.00	1	07/31/2020 01:16	WG1518057

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	69.5		0.287	0.678	1	07/31/2020 13:53	WG1518230
Ethane	U		0.296	1.29	1	07/31/2020 13:53	WG1518230
Ethene	U		0.422	1.27	1	07/31/2020 13:53	WG1518230

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U	~~J3~~	0.548	1.00	1	08/05/2020 10:24	WG1519935
Acrylonitrile	U		0.0760	0.500	1	08/05/2020 10:24	WG1519935
Benzene	0.0211	J	0.0160	0.0400	1	08/05/2020 10:24	WG1519935
Bromobenzene	U		0.0420	0.500	1	08/05/2020 10:24	WG1519935
Bromodichloromethane	U		0.0315	0.100	1	08/05/2020 10:24	WG1519935
Bromoform	U		0.239	1.00	1	08/05/2020 10:24	WG1519935
Bromomethane	U		0.148	0.500	1	08/05/2020 10:24	WG1519935
n-Butylbenzene	U		0.153	0.500	1	08/05/2020 10:24	WG1519935
sec-Butylbenzene	U		0.101	0.500	1	08/05/2020 10:24	WG1519935
tert-Butylbenzene	U		0.0620	0.200	1	08/05/2020 10:24	WG1519935
Carbon tetrachloride	U		0.0432	0.200	1	08/05/2020 10:24	WG1519935
Chlorobenzene	U		0.0229	0.100	1	08/05/2020 10:24	WG1519935
Chlorodibromomethane	U		0.0180	0.100	1	08/05/2020 10:24	WG1519935
Chloroethane	U		0.0432	0.200	1	08/05/2020 10:24	WG1519935
Chloroform	U		0.0166	0.100	1	08/05/2020 10:24	WG1519935
Chloromethane	U		0.0556	0.500	1	08/05/2020 10:24	WG1519935
2-Chlorotoluene	U		0.0368	0.100	1	08/05/2020 10:24	WG1519935
4-Chlorotoluene	U		0.0452	0.200	1	08/05/2020 10:24	WG1519935
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	08/05/2020 10:24	WG1519935
1,2-Dibromoethane	U		0.0210	0.100	1	08/05/2020 10:24	WG1519935

JC 8/18/2020

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Dibromomethane	U		0.0400	0.200	1	08/05/2020 10:24	WG1519935
1,2-Dichlorobenzene	U		0.0580	0.200	1	08/05/2020 10:24	WG1519935
1,3-Dichlorobenzene	U		0.0680	0.200	1	08/05/2020 10:24	WG1519935
1,4-Dichlorobenzene	U		0.0788	0.200	1	08/05/2020 10:24	WG1519935
Dichlorodifluoromethane	U		0.0327	0.100	1	08/05/2020 10:24	WG1519935
1,1-Dichloroethane	U		0.0230	0.100	1	08/05/2020 10:24	WG1519935
1,2-Dichloroethane	U		0.0190	0.100	1	08/05/2020 10:24	WG1519935
1,1-Dichloroethene	U		0.0200	0.100	1	08/05/2020 10:24	WG1519935
cis-1,2-Dichloroethene	U		0.0276	0.100	1	08/05/2020 10:24	WG1519935
trans-1,2-Dichloroethene	U		0.0572	0.200	1	08/05/2020 10:24	WG1519935
1,2-Dichloropropane	U		0.0508	0.200	1	08/05/2020 10:24	WG1519935
1,1-Dichloropropene	U		0.0280	0.100	1	08/05/2020 10:24	WG1519935
1,3-Dichloropropane	U		0.0700	0.200	1	08/05/2020 10:24	WG1519935
cis-1,3-Dichloropropene	U		0.0271	0.100	1	08/05/2020 10:24	WG1519935
trans-1,3-Dichloropropene	U		0.0612	0.200	1	08/05/2020 10:24	WG1519935
2,2-Dichloropropane	U		0.0317	0.100	1	08/05/2020 10:24	WG1519935
Di-isopropyl ether	U		0.0140	0.0400	1	08/05/2020 10:24	WG1519935
Ethylbenzene	U		0.0212	0.100	1	08/05/2020 10:24	WG1519935
Hexachloro-1,3-butadiene	U		0.508	1.00	1	08/05/2020 10:24	WG1519935
Isopropylbenzene	U		0.0345	0.100	1	08/05/2020 10:24	WG1519935
p-Isopropyltoluene	U		0.0932	0.200	1	08/05/2020 10:24	WG1519935
2-Butanone (MEK)	U		0.500	1.00	1	08/05/2020 10:24	WG1519935
Methylene Chloride	U		0.265	1.00	1	08/05/2020 10:24	WG1519935
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	08/05/2020 10:24	WG1519935
Methyl tert-butyl ether	U		0.0118	0.0400	1	08/05/2020 10:24	WG1519935
Naphthalene	U		0.124	0.500	1	08/05/2020 10:24	WG1519935
n-Propylbenzene	U		0.0472	0.200	1	08/05/2020 10:24	WG1519935
Styrene	U		0.109	0.500	1	08/05/2020 10:24	WG1519935
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	08/05/2020 10:24	WG1519935
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	08/05/2020 10:24	WG1519935
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	08/05/2020 10:24	WG1519935
Tetrachloroethene	0.0492	J	0.0280	0.100	1	08/05/2020 10:24	WG1519935
Toluene	0.780		0.0500	0.200	1	08/05/2020 10:24	WG1519935
1,2,3-Trichlorobenzene	U		0.0250	0.500	1	08/05/2020 22:39	WG1520964
1,2,4-Trichlorobenzene	U		0.193	0.500	1	08/05/2020 10:24	WG1519935
1,1,1-Trichloroethane	U		0.0110	0.100	1	08/05/2020 10:24	WG1519935
1,1,2-Trichloroethane	U		0.0353	0.100	1	08/05/2020 10:24	WG1519935
Trichloroethene	U		0.0160	0.0400	1	08/05/2020 10:24	WG1519935
Trichlorofluoromethane	U UJ	J4	0.0200	0.100	1	08/05/2020 10:24	WG1519935
1,2,3-Trichloropropane	U		0.204	0.500	1	08/05/2020 10:24	WG1519935
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	08/05/2020 10:24	WG1519935
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	08/05/2020 10:24	WG1519935
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	08/05/2020 10:24	WG1519935
Vinyl chloride	U		0.0273	0.100	1	08/05/2020 10:24	WG1519935
Xylenes, Total	U		0.191	0.260	1	08/05/2020 10:24	WG1519935
Ethyl Ether	U		0.0170	0.100	1	08/05/2020 10:24	WG1519935
Tetrahydrofuran	U		0.0900	0.500	1	08/05/2020 10:24	WG1519935
Iodomethane	U		0.242	0.500	1	08/05/2020 10:24	WG1519935
Allyl chloride	U		0.580	1.00	1	08/05/2020 10:24	WG1519935
Trans-1,4-Dichloro-2-butene	U		0.0560	0.200	1	08/05/2020 10:24	WG1519935
(S) Toluene-d8	*105*			*75.0-131*		*08/05/2020 10:24*	WG1519935
(S) Toluene-d8	*107*			*75.0-131*		*08/05/2020 22:39*	WG1520964
(S) 4-Bromofluorobenzene	*96.1*			*67.0-138*		*08/05/2020 10:24*	WG1519935
(S) 4-Bromofluorobenzene	*96.6*			*67.0-138*		*08/05/2020 22:39*	WG1520964
(S) 1,2-Dichloroethane-d4	*103*			*70.0-130*		*08/05/2020 10:24*	WG1519935
(S) 1,2-Dichloroethane-d4	*119*			*70.0-130*		*08/05/2020 22:39*	WG1520964

JC 8/18/2020

MW-306-072920
Collected date/time: 07/29/20 11:15

SAMPLE RESULTS - 02

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	185000		8450	20000	1	08/05/2020 13:23	WG1520673

Sample Narrative:

L1244760-02 WG1520673: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	10800		379	1000	1	07/30/2020 22:22	WG1517638
Nitrate	U		48.0	100	1	07/30/2020 22:22	WG1517638
Sulfate	73900		594	5000	1	07/30/2020 22:22	WG1517638

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	1110	~~B~~	102	1000	1	08/02/2020 10:24	WG1518848

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	2930		244	500	5	07/31/2020 13:11	WG1518057
Manganese	509		6.60	25.0	5	07/31/2020 13:11	WG1518057

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	U		0.287	0.678	1	07/31/2020 13:57	WG1518230
Ethane	U		0.296	1.29	1	07/31/2020 13:57	WG1518230
Ethene	U		0.422	1.27	1	07/31/2020 13:57	WG1518230

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U	~~J3~~	0.548	1.00	1	08/05/2020 10:44	WG1519935
Acrylonitrile	U		0.0760	0.500	1	08/05/2020 10:44	WG1519935
Benzene	U		0.0160	0.0400	1	08/05/2020 10:44	WG1519935
Bromobenzene	U		0.0420	0.500	1	08/05/2020 10:44	WG1519935
Bromodichloromethane	U		0.0315	0.100	1	08/05/2020 10:44	WG1519935
Bromoform	U		0.239	1.00	1	08/05/2020 10:44	WG1519935
Bromomethane	U		0.148	0.500	1	08/05/2020 10:44	WG1519935
n-Butylbenzene	U		0.153	0.500	1	08/05/2020 10:44	WG1519935
sec-Butylbenzene	U		0.101	0.500	1	08/05/2020 10:44	WG1519935
tert-Butylbenzene	U		0.0620	0.200	1	08/05/2020 10:44	WG1519935
Carbon tetrachloride	U		0.0432	0.200	1	08/05/2020 10:44	WG1519935
Chlorobenzene	U		0.0229	0.100	1	08/05/2020 10:44	WG1519935
Chlorodibromomethane	U		0.0180	0.100	1	08/05/2020 10:44	WG1519935
Chloroethane	U		0.0432	0.200	1	08/05/2020 10:44	WG1519935
Chloroform	U		0.0166	0.100	1	08/05/2020 10:44	WG1519935
Chloromethane	U		0.0556	0.500	1	08/05/2020 10:44	WG1519935
2-Chlorotoluene	U		0.0368	0.100	1	08/05/2020 10:44	WG1519935
4-Chlorotoluene	U		0.0452	0.200	1	08/05/2020 10:44	WG1519935
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	08/05/2020 10:44	WG1519935
1,2-Dibromoethane	U		0.0210	0.100	1	08/05/2020 10:44	WG1519935

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Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Dibromomethane	U		0.0400	0.200	1	08/05/2020 10:44	WG1519935
1,2-Dichlorobenzene	U		0.0580	0.200	1	08/05/2020 10:44	WG1519935
1,3-Dichlorobenzene	U		0.0680	0.200	1	08/05/2020 10:44	WG1519935
1,4-Dichlorobenzene	U		0.0788	0.200	1	08/05/2020 10:44	WG1519935
Dichlorodifluoromethane	U		0.0327	0.100	1	08/05/2020 10:44	WG1519935
1,1-Dichloroethane	U		0.0230	0.100	1	08/05/2020 10:44	WG1519935
1,2-Dichloroethane	U		0.0190	0.100	1	08/05/2020 10:44	WG1519935
1,1-Dichloroethene	U		0.0200	0.100	1	08/05/2020 10:44	WG1519935
cis-1,2-Dichloroethene	U		0.0276	0.100	1	08/05/2020 10:44	WG1519935
trans-1,2-Dichloroethene	U		0.0572	0.200	1	08/05/2020 10:44	WG1519935
1,2-Dichloropropane	U		0.0508	0.200	1	08/05/2020 10:44	WG1519935
1,1-Dichloropropene	U		0.0280	0.100	1	08/05/2020 10:44	WG1519935
1,3-Dichloropropane	U		0.0700	0.200	1	08/05/2020 10:44	WG1519935
cis-1,3-Dichloropropene	U		0.0271	0.100	1	08/05/2020 10:44	WG1519935
trans-1,3-Dichloropropene	U		0.0612	0.200	1	08/05/2020 10:44	WG1519935
2,2-Dichloropropane	U		0.0317	0.100	1	08/05/2020 10:44	WG1519935
Di-isopropyl ether	U		0.0140	0.0400	1	08/05/2020 10:44	WG1519935
Ethylbenzene	U		0.0212	0.100	1	08/05/2020 10:44	WG1519935
Hexachloro-1,3-butadiene	U		0.508	1.00	1	08/05/2020 10:44	WG1519935
Isopropylbenzene	U		0.0345	0.100	1	08/05/2020 10:44	WG1519935
p-Isopropyltoluene	U		0.0932	0.200	1	08/05/2020 10:44	WG1519935
2-Butanone (MEK)	U		0.500	1.00	1	08/05/2020 10:44	WG1519935
Methylene Chloride	U		0.265	1.00	1	08/05/2020 10:44	WG1519935
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	08/05/2020 10:44	WG1519935
Methyl tert-butyl ether	U		0.0118	0.0400	1	08/05/2020 10:44	WG1519935
Naphthalene	U		0.124	0.500	1	08/05/2020 10:44	WG1519935
n-Propylbenzene	U		0.0472	0.200	1	08/05/2020 10:44	WG1519935
Styrene	U		0.109	0.500	1	08/05/2020 10:44	WG1519935
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	08/05/2020 10:44	WG1519935
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	08/05/2020 10:44	WG1519935
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	08/05/2020 10:44	WG1519935
Tetrachloroethene	U		0.0280	0.100	1	08/05/2020 10:44	WG1519935
Toluene	0.362		0.0500	0.200	1	08/05/2020 10:44	WG1519935
1,2,3-Trichlorobenzene	U		0.0250	0.500	1	08/05/2020 22:59	WG1520964
1,2,4-Trichlorobenzene	U		0.193	0.500	1	08/05/2020 10:44	WG1519935
1,1,1-Trichloroethane	U		0.0110	0.100	1	08/05/2020 10:44	WG1519935
1,1,2-Trichloroethane	U		0.0353	0.100	1	08/05/2020 10:44	WG1519935
Trichloroethene	U		0.0160	0.0400	1	08/05/2020 10:44	WG1519935
Trichlorofluoromethane	U UJ	J4	0.0200	0.100	1	08/05/2020 10:44	WG1519935
1,2,3-Trichloropropane	U		0.204	0.500	1	08/05/2020 10:44	WG1519935
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	08/05/2020 10:44	WG1519935
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	08/05/2020 10:44	WG1519935
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	08/05/2020 10:44	WG1519935
Vinyl chloride	U		0.0273	0.100	1	08/05/2020 10:44	WG1519935
Xylenes, Total	U		0.191	0.260	1	08/05/2020 10:44	WG1519935
Ethyl Ether	U		0.0170	0.100	1	08/05/2020 10:44	WG1519935
Tetrahydrofuran	U		0.0900	0.500	1	08/05/2020 10:44	WG1519935
Iodomethane	U		0.242	0.500	1	08/05/2020 10:44	WG1519935
Allyl chloride	U		0.580	1.00	1	08/05/2020 10:44	WG1519935
Trans-1,4-Dichloro-2-butene	U		0.0560	0.200	1	08/05/2020 10:44	WG1519935
(S) Toluene-d8	*105*			*75.0-131*		*08/05/2020 10:44*	WG1519935
(S) Toluene-d8	*99.9*			*75.0-131*		*08/05/2020 22:59*	WG1520964
(S) 4-Bromofluorobenzene	*93.8*			*67.0-138*		*08/05/2020 10:44*	WG1519935
(S) 4-Bromofluorobenzene	*84.9*			*67.0-138*		*08/05/2020 22:59*	WG1520964
(S) 1,2-Dichloroethane-d4	*104*			*70.0-130*		*08/05/2020 10:44*	WG1519935
(S) 1,2-Dichloroethane-d4	*116*			*70.0-130*		*08/05/2020 22:59*	WG1520964

JC 8/18/2020

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Wet Chemistry by Method 2320 B-2011

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Alkalinity	393000		8450	20000	1	08/05/2020 13:30	WG1520673

Sample Narrative:

L1244760-03 WG1520673: Endpoint pH 4.5

Wet Chemistry by Method 9056A

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Chloride	57200		379	1000	1	07/30/2020 22:56	WG1517638
Nitrate	U		48.0	100	1	07/30/2020 22:56	WG1517638
Sulfate	665	J	594	5000	1	07/30/2020 22:56	WG1517638

Wet Chemistry by Method 9060A

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
TOC (Total Organic Carbon)	4480		102	1000	1	08/02/2020 10:36	WG1518848

Metals (ICPMS) by Method 6020B

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Iron	1390		48.9	100	1	07/31/2020 01:23	WG1518057
Manganese	428		6.60	25.0	5	07/31/2020 13:14	WG1518057

Volatile Organic Compounds (GC) by Method RSK175

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Methane	4040		0.287	0.678	1	07/31/2020 13:59	WG1518230
Ethane	61.3		0.296	1.29	1	07/31/2020 13:59	WG1518230
Ethene	U		0.422	1.27	1	07/31/2020 13:59	WG1518230

Volatile Organic Compounds (GC/MS) by Method 8260D

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Acetone	U	~~J3~~	0.548	1.00	1	08/05/2020 11:04	WG1519935
Acrylonitrile	U		0.0760	0.500	1	08/05/2020 11:04	WG1519935
Benzene	0.0401		0.0160	0.0400	1	08/05/2020 11:04	WG1519935
Bromobenzene	U		0.0420	0.500	1	08/05/2020 11:04	WG1519935
Bromodichloromethane	U		0.0315	0.100	1	08/05/2020 11:04	WG1519935
Bromoform	U		0.239	1.00	1	08/05/2020 11:04	WG1519935
Bromomethane	U		0.148	0.500	1	08/05/2020 11:04	WG1519935
n-Butylbenzene	U		0.153	0.500	1	08/05/2020 11:04	WG1519935
sec-Butylbenzene	U		0.101	0.500	1	08/05/2020 11:04	WG1519935
tert-Butylbenzene	U		0.0620	0.200	1	08/05/2020 11:04	WG1519935
Carbon tetrachloride	U		0.0432	0.200	1	08/05/2020 11:04	WG1519935
Chlorobenzene	U		0.0229	0.100	1	08/05/2020 11:04	WG1519935
Chlorodibromomethane	U		0.0180	0.100	1	08/05/2020 11:04	WG1519935
Chloroethane	U		0.0432	0.200	1	08/05/2020 11:04	WG1519935
Chloroform	U		0.0166	0.100	1	08/05/2020 11:04	WG1519935
Chloromethane	U		0.0556	0.500	1	08/05/2020 11:04	WG1519935
2-Chlorotoluene	U		0.0368	0.100	1	08/05/2020 11:04	WG1519935
4-Chlorotoluene	U		0.0452	0.200	1	08/05/2020 11:04	WG1519935
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	08/05/2020 11:04	WG1519935
1,2-Dibromoethane	U		0.0210	0.100	1	08/05/2020 11:04	WG1519935

JC 8/18/2020

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch	
Dibromomethane	U		0.0400	0.200	1	08/05/2020 11:04	WG1519935	
1,2-Dichlorobenzene	U		0.0580	0.200	1	08/05/2020 11:04	WG1519935	
1,3-Dichlorobenzene	U		0.0680	0.200	1	08/05/2020 11:04	WG1519935	
1,4-Dichlorobenzene	U		0.0788	0.200	1	08/05/2020 11:04	WG1519935	
Dichlorodifluoromethane	U		0.0327	0.100	1	08/05/2020 11:04	WG1519935	
1,1-Dichloroethane	U		0.0230	0.100	1	08/05/2020 11:04	WG1519935	
1,2-Dichloroethane	U		0.0190	0.100	1	08/05/2020 11:04	WG1519935	
1,1-Dichloroethene	U		0.0200	0.100	1	08/05/2020 11:04	WG1519935	
cis-1,2-Dichloroethene	0.0754	J	0.0276	0.100	1	08/05/2020 11:04	WG1519935	
trans-1,2-Dichloroethene	U		0.0572	0.200	1	08/05/2020 11:04	WG1519935	
1,2-Dichloropropane	U		0.0508	0.200	1	08/05/2020 11:04	WG1519935	
1,1-Dichloropropene	U		0.0280	0.100	1	08/05/2020 11:04	WG1519935	
1,3-Dichloropropane	U		0.0700	0.200	1	08/05/2020 11:04	WG1519935	
cis-1,3-Dichloropropene	U		0.0271	0.100	1	08/05/2020 11:04	WG1519935	
trans-1,3-Dichloropropene	U		0.0612	0.200	1	08/05/2020 11:04	WG1519935	
2,2-Dichloropropane	U		0.0317	0.100	1	08/05/2020 11:04	WG1519935	
Di-isopropyl ether	U		0.0140	0.0400	1	08/05/2020 11:04	WG1519935	
Ethylbenzene	0.0229	J	0.0212	0.100	1	08/05/2020 11:04	WG1519935	
Hexachloro-1,3-butadiene	U		0.508	1.00	1	08/05/2020 11:04	WG1519935	
Isopropylbenzene	U		0.0345	0.100	1	08/05/2020 11:04	WG1519935	
p-Isopropyltoluene	U		0.0932	0.200	1	08/05/2020 11:04	WG1519935	
2-Butanone (MEK)	U		0.500	1.00	1	08/05/2020 11:04	WG1519935	
Methylene Chloride	U		0.265	1.00	1	08/05/2020 11:04	WG1519935	
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	08/05/2020 11:04	WG1519935	
Methyl tert-butyl ether	U		0.0118	0.0400	1	08/05/2020 11:04	WG1519935	
Naphthalene	U		0.124	0.500	1	08/05/2020 11:04	WG1519935	
n-Propylbenzene	U		0.0472	0.200	1	08/05/2020 11:04	WG1519935	
Styrene	U		0.109	0.500	1	08/05/2020 11:04	WG1519935	
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	08/05/2020 11:04	WG1519935	
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	08/05/2020 11:04	WG1519935	
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	08/05/2020 11:04	WG1519935	
Tetrachloroethene	0.0307	J	0.0280	0.100	1	08/05/2020 11:04	WG1519935	
Toluene	1.63		0.0500	0.200	1	08/05/2020 11:04	WG1519935	
1,2,3-Trichlorobenzene	U		0.0250	0.500	1	08/05/2020 23:18	WG1520964	
1,2,4-Trichlorobenzene	U		0.193	0.500	1	08/05/2020 11:04	WG1519935	
1,1,1-Trichloroethane	U		0.0110	0.100	1	08/05/2020 11:04	WG1519935	
1,1,2-Trichloroethane	U		0.0353	0.100	1	08/05/2020 11:04	WG1519935	
Trichloroethene	0.0167	J	0.0160	0.0400	1	08/05/2020 11:04	WG1519935	
Trichlorofluoromethane	U UJ	J4	0.0200	0.100	1	08/05/2020 11:04	WG1519935	
1,2,3-Trichloropropane	U		0.204	0.500	1	08/05/2020 11:04	WG1519935	
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	08/05/2020 11:04	WG1519935	
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	08/05/2020 11:04	WG1519935	
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	08/05/2020 11:04	WG1519935	
Vinyl chloride	U		0.0273	0.100	1	08/05/2020 11:04	WG1519935	
Xylenes, Total	U		0.191	0.260	1	08/05/2020 11:04	WG1519935	
Ethyl Ether	U		0.0170	0.100	1	08/05/2020 11:04	WG1519935	
Tetrahydrofuran	U		0.0900	0.500	1	08/05/2020 11:04	WG1519935	
Iodomethane	U		0.242	0.500	1	08/05/2020 11:04	WG1519935	
Allyl chloride	U		0.580	1.00	1	08/05/2020 11:04	WG1519935	
Trans-1,4-Dichloro-2-butene	U		0.0560	0.200	1	08/05/2020 11:04	WG1519935	
(S) Toluene-d8	*105*			*75.0-131*		*08/05/2020 11:04*	WG1519935	
(S) Toluene-d8	*103*			*75.0-131*		*08/05/2020 23:18*	WG1520964	JC 8/18/2020
(S) 4-Bromofluorobenzene	*94.0*			*67.0-138*		*08/05/2020 11:04*	WG1519935	
(S) 4-Bromofluorobenzene	*90.2*			*67.0-138*		*08/05/2020 23:18*	WG1520964	
(S) 1,2-Dichloroethane-d4	*104*			*70.0-130*		*08/05/2020 11:04*	WG1519935	
(S) 1,2-Dichloroethane-d4	*114*			*70.0-130*		*08/05/2020 23:18*	WG1520964	

MEMORANDUM

TO: Project File **DATE:** August 25, 2020

FROM: Jessie Compeau

SUBJECT: Laboratory Data Validation Review

PROJECT: American Linen Data Validation

PROJECT #: 1413.001.02.501G

TASK: EIM Data Validation Level EPA2A for 3rd Quarter Monitoring – Groundwater Samples – Group 4

LAB: Pace Sample Delivery Groups (SDGs): L1243922, L1244396, L1245254, L1245641, L1246080, L1246679, and L12482660

Forty five (45) groundwater samples including four field duplicate samples, two equipment blanks, and two trip blanks were collected as part of the 3rd Quarterly Monitoring Round for 2020 for the ongoing Remedial Investigation (RI) sampling at the Former American Linen Supply Site, in Seattle, Washington in July and August 2020. The samples were shipped and delivered to Pace Lab Sciences (Pace) of Mount Juliet, TN for laboratory analysis. Selected samples were analyzed for the following:

- Volatile organic compounds (VOCs) by United States Environmental Protection Agency (USEPA) Method 8260D;
- VOCs (dissolved gases – methane, ethane, and ethene) by EPA SOP RSK 175;
- Alkalinity by Method 2320 B-2011;
- Anions (chloride, nitrate, and sulfate) by USEPA Method 9056A;
- Total Organic Carbon (TOC) by USEPA Method 9060A; and
- Metals (iron and manganese) by USEPA Method 6020B.

Results are reported in multiple SDGs from Pace. Pace SDGs are reviewed in small groups for each data validation report. Group 4 analytical results are reported in SDGs L1243922, L1244396, L1245254, L1245641, L1246080, L1246679, and L1248266. The quality assurance review of the laboratory data associated with Group 4 is summarized below.

DATA QUALIFICATIONS

Guidelines established by USEPA for a limited data validation review of analytical data along with Pace control limit criteria were used to validate the data. The comments presented in this memorandum refer to the laboratory's performance in meeting the quality control criteria outlined in the USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (USEPA, 2017) and USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Superfund Methods Data Review

(USEPA, 2017). Following Guidelines, non-project-specific laboratory duplicates and matrix spike results were not evaluated as part of this data validation.

DATA VALIDATION

Completeness

All samples were collected and analyzed as requested.

Sample Collection and Preservation

Samples were collected in laboratory-supplied sample containers preserved as appropriate for the individual analyses conducted. The samples were packed on ice in coolers and delivered by courier to the analytical laboratory. The laboratory reported that the coolers were received at a cooler temperature less than the recommended temperature preservation of 6°C. Samples were received in good condition. No data were qualified based upon the sample collection and preservation information.

Holding Times

USEPA Method 8260D:
All samples were analyzed for VOCs within the EPA recommended holding time of fourteen days for preserved waters from the date of collection. All holding time criteria are met.

Dissolved Gases (Methane, Ethane, and Ethene) by RSK 175:
All samples were analyzed within the WA State recommended holding time of fourteen days for preserved waters from the date of sample collection. All holding time criteria are met.

USEPA Method 6020B:
All samples were analyzed within the USEPA recommended holding time for iron and manganese of 180 days for preserved waters from the date of sample collection. All holding time criteria are met.

General Chemistry (Alkalinity, Chloride, Sulfate, Nitrate, and TOC):
All samples were analyzed within the USEPA recommended holding time for alkalinity (14 days), chloride (28 days), sulfate (28 days), and nitrate (48 hours), and TOC (28 days) for preserved waters from the date of sample collection. All holding time criteria are met.

Initial and Continuing Calibration

Calibration data for this project are not required for this deliverable however Pace's notes indicate the following:

- Multiple SDGs - *USEPA Method 8260D:* Continuing calibration verification (CCV) issues were noted by Pace for multiple compounds associated with analytical batches in each SDG. These compounds are qualified by the laboratory "J0" to indicate that percent

difference CCV is outside of laboratory acceptance criteria. **Associated sample results with laboratory qualified (J0) results are estimated and qualified (J/UJ).**

Method Blank Results

USEPA Method 8260D:
Laboratory method blanks were included with the analytical batches per method requirement. The target analytes were not detected in the method blanks at or above the reporting detection limits (RDLs) with the following exceptions:

- SDGs L1246080 and L1246679 – Analytical batch WG1522682: Three compounds (ethyl ether, tetrahydrofuran, and 1,2,3-trichlorobenzene) are detected either above or below their respective RDLs in the method blank. No action is required since these compounds are not detected in the associated samples.

Dissolved Gases (Methane, Ethane, and Ethene) by RSK 175:
Laboratory method blanks were included with the analytical batches per method requirement. The target analytes (dissolved gases) are not detected in the method blanks at or above the RDLs.

USEPA Method 6020B and General Chemistry (Alkalinity, Chloride, Sulfate, Nitrate, and TOC):
Laboratory method blanks were included with the analytical batches per method requirement. The target analytes were detected in the method blanks below the RDLs. Per Guidance, no action is taken for blank detections less than the RDL when associated sample detections are greater than the RDL. General chemistry and/or metal method blank detections are shown below:

SDG	Batch	Method	Analyte	Method Blank Result	Qualifier	RDL	Units	Associated Result(s) Qualified
L1243922	WG1516423	9060A	TOC	219	J	1000	µg/L	YES
L1244396	WG1518323	9060A	TOC	238	J	1000	µg/L	NO
L1245254	WG1518849	9060A	TOC	198	J	1000	µg/L	NO
L1245641	WG1520074	9060A	TOC	344	J	1000	µg/L	NO
L1246080	WG1521819	9060A	TOC	263	J	1000	µg/L	NO
L1246679	WG1523290	9060A	TOC	259	J	1000	µg/L	NO
L1246679	WG1521039	6020B	Iron	1.49	J	5.00	µg/L	NO
L1248266	WG1524491	9060A	TOC	163	J	1000	µg/L	NO

Target analytes were detected in method blanks at low levels with no impact to the associated samples with the following exception:

- SDG L1243922: **Associated TOC result for sample MW-305-072720 is qualified as not detected (U) due to method and/or equipment blank contamination.**

Trip Blank Results

USEPA Method 8260D:
Two trip blanks (TB-073120 and TB-080420) from SDGs L1245641 and L1246679 were collected and analyzed for VOCs. The target analytes were not detected in the trip blank at or above the RDLs with the following exceptions:

- SDG L1246679: Low levels of acetone and toluene are detected in the trip blank (TB-080420). **Associated acetone results in samples MW-938-080420, MW-190-080420, and MW-312-080420 are qualified as not detected (U) due to blank contamination. Associated toluene result in sample MW-312-080420 is qualified as not detected (U) due to blank contamination.**

Field, Rinsate, or Equipment Blank Results

All Analytical Methods:
Two equipment blanks were collected and analyzed. Details are as follows:

- SDG L1243922: Equipment blank (EQ-072720) is associated with all samples collected via bladder pump on July 27, 2020. Low levels of nitrate, TOC, manganese, VOC compounds (acetone and MEK) are detected in the equipment blank. **Associated TOC result for sample MW-305-072720 is qualified as not detected (U) due to method and/or equipment blank contamination. Associated acetone result for sample MW-936-072720 is qualified as not detected (U) due to equipment blank contamination.** No action is required for nitrate, manganese, or MEK detections in the associated samples.
- SDG L1245641: Equipment blank (EQ-073120) is associated with all samples collected via bladder pump on July 31, 2020. Low levels of chloride, TOC, iron, manganese, VOC compound (acetone) are detected in the equipment blank. **Associated iron results for samples MW-161-073120, W-MW-01-073120, MW107-073120, MW-937-073120, and MW104-073120 are qualified as estimated with high bias (J+) due to equipment blank contamination.** No action is required for chloride, manganese, TOC, or MEK detections in the associated samples.

Field Duplicate Analyses

Field duplicate pairs were submitted and analyzed. Field duplicate sample pair is as follows:

- SDG L1243922: Sample BB-8-072720 field duplicate is MW-936-072720
- SDG L1245641: Sample MW104-073120 field duplicate is MW-937-073120
- SDG L1246679: Sample MW102-080420 field duplicate is MW-938-080420
- SDG L1246679: Sample MW-310-080420 field duplicate is MW-939-080420

Target analyte results are comparable and within a relative percent difference (RPD) of 30% (± 1x RDL for groundwater results <5X the RDL) for the field duplicate pairs with the following exception:

- SDG L1243922: Sample BB-8-072720 field duplicate is MW-936-072720. **Methane and toluene RPDs exceed acceptance criteria for this field duplicate pair. Results for methane and toluene are estimated and qualified (J).**

- SDG L1245641: Sample MW104-073120 field duplicate is MW-937-073120. **Methane RPD exceeds acceptance criteria for this field duplicate pair. Result for methane is estimated and qualified (J).**

- SDG L1246679: Sample MW102-080420 field duplicate is MW-938-080420. **TOC, iron, and methane RPDs exceed acceptance criteria for this field duplicate pair. Results for TOC, iron, and methane are estimated and qualified (J).**

Laboratory Duplicate Analyses

USEPA Method 8260D:
Laboratory duplicate samples were not analyzed. Refer to laboratory control sample/sample duplicate (LCS/LCSD) or matrix spike/matrix spike duplicate (MS/MSD) results for precision data.

Dissolved Gases (Methane, Ethane, and Ethene) by RSK 175:
Laboratory duplicate sample analyses were performed on client and/or on non-client samples within the analytical batches. The primary/duplicate RPDs for dissolved gas analyses are within the laboratory control limit of 20%.

USEPA Method 6020B:
Laboratory duplicate samples were not analyzed. Refer to MS/MSD results for precision data.

General Chemistry (Alkalinity, Chloride, Sulfate, Nitrate, and TOC):
Laboratory duplicate sample analyses were performed on client samples and/or on non-client samples. The primary/duplicate RPDs for general chemistry parameters are within the laboratory control RPD limits or ± 1x RDL for groundwater results <5X the RDL.

Surrogate Recoveries

USEPA Method 8260D:
The surrogate recovery results for the samples, laboratory control samples, and the method blanks are within the laboratory surrogate control limits for all the analyses.

Laboratory Control Samples

USEPA Method 8260D:
Laboratory control sample/laboratory control sample duplicate (LCS/LCSD) or laboratory control sample (LCS) were analyzed by USEPA Method 8260D method. The LCS % Rs or LCS/LCSD % Rs and RPDs for all target compounds are within the laboratory control criteria for waters with the following exceptions:

- SDG L1243922 - Analytical batch WG1519557: LCS % recovery for chloromethane is above control limit criteria. No action is necessary since chloromethane is not detected in the associated samples. LCS recoveries for 1,4-dichlorobenzene and 1,3-dichloropropane are below QC criteria. **Associated samples MW-936-072720, MW-305-072720, and**

BB-8-072720 results for 1,4-dichlorobenzene and 1,3-dichloropropane are estimated and qualified (UJ).

- SDG L1243922 - Analytical batch WG1519931: LCS/LCSD recoveries for tetrahydrofuran are above QC criteria and laboratory qualified (J4). No action is necessary since tetrahydrofuran is not detected in the associated samples. LCS recovery for trichlorofluoromethane is within criteria however the LCSD recovery at 60.6% is marginally below QC criteria (61-142%) and laboratory qualified (J4). No action is taken since the LCS is within criteria. LCS/LCSD RPD result for trichlorofluoromethane is greater than laboratory acceptance criteria and laboratory qualified (J3). No action is taken since are recoveries are wide.

- SDG L1243496 - Analytical batch WG1519557: LCS % recovery for chloromethane is above control limit criteria. No action is necessary since chloromethane is not detected in the associated samples. LCS recoveries for 1,4-dichlorobenzene and 1,3-dichloropropane are below QC criteria. **Associated sample (MW126-072420, MW-333-072420, and SCL-MW105-072420) results for 1,4-dichlorobenzene and 1,3-dichloropropane are estimated and qualified (J).**

- SDGs L1246080 and L1246679 - Analytical batch WG1522682: LCS % recoveries for chloromethane, trans-1,2-dichloroethene, and vinyl chloride are above laboratory acceptance criteria and laboratory qualified (J4). Detections are qualified as estimated (J) and no action is taken for associated non-detects. LCS % R for 1,3-dichloropropane is below laboratory acceptance criteria and laboratory qualified (J4). **All associated sample results for 1,3-dichloropropane are estimated (UJ).**

- SDGs L1246679 and L1248266 - Analytical batch WG1524178: LCS % recovery for methylene chloride is above laboratory acceptance criteria and laboratory qualified (J4). No action is needed since methylene chloride was not detected in the associated samples.

Dissolved Gases (Methane, Ethane, and Ethene) by RSK 175:
The LCS/LCSD % Rs and RPDs for the target compound (dissolved gases) are within the laboratory control criteria for waters.

USEPA Method 6020B:
The LCS/LCSD % Rs and RPDs for the target compound (iron and manganese) are within the laboratory control criteria for waters.

General Chemistry (Alkalinity, Chloride, Sulfate, Nitrate, and TOC):
The LCS % Rs for general chemistry parameters are within the laboratory control criteria for waters.

Matrix Spike/Matrix Spike Duplicates

USEPA Method 8260D:
Matrix spike/matrix spike duplicate (MS/MSD) analyses were not performed on a non-client sample associated with SDG L1248266. MS/MSD recoveries and RPDs are within criteria with

several exceptions. No action is taken since the spike was performed on a non-client sample. Refer to LCS results and field duplicate sample for accuracy and precision data.

Dissolved Gases (Methane, Ethane, and Ethene) by RSK 175:
MS/MSD analyses were not performed. Refer to LCS results and field duplicate sample for accuracy and precision data.

USEPA Method 6020B:
MS/MSD analyses were performed on client and on non-client samples within the analytical batches. The MS/MSD % Rs and RPD were acceptable and within laboratory control limit criteria for water samples with the following discussion:

- SDG L1243922: Matrix spike analysis was performed on a client sample MW-936-072720 and manganese spike results are laboratory qualified (V) to indicate that the sample concentration is greater than 4X the spike amount and that the MSD recovery exceeded upper limit of the calibration range. Per Guidance no action is taken.

- SDG L1244396: Matrix spike analysis was performed on a non-client sample and manganese spike results are laboratory qualified (V) to indicate that the sample concentration is greater than 4X the spike amount. Per Guidance no action is taken.

General Chemistry (Alkalinity, Chloride, Sulfate, Nitrate, and TOC):
MS or MS/MSD analyses were performed on client and/or non-client samples within the analytical batches. In cases where MS/MSD spike analyses are not performed refer to LCS/LCSD or laboratory duplicate data for accuracy and precision data. The MS/MSD % Rs and RPDs are acceptable and within laboratory control limit criteria for water samples with the following discussions:

- SDG L1245641: MS/MSD spike was performed on a non-client sample with % R below QC criteria. MS/MSD results are laboratory qualified (EV) due to elevated sample chloride concentration exceeding upper calibration limit. No action is taken since the spike was performed on a non-client sample. Refer to MS result for sample MW-937-073120 with acceptable chloride spike recovery.

- SDG L1246080: MS/MSD spikes were performed on non-client samples with sulfate % R below QC criteria. MS/MSD results are laboratory qualified (E, J6) due to matrix interference and elevated sample sulfate concentration exceeding upper calibration limit. No action is taken since the spikes were performed on non-client samples. Refer to MS result for sample MW124-080320 with acceptable sulfate spike recoveries.

Other Quality Control Issues

No laboratory quality control issues were identified in the laboratory report with the following discussions:

- Multiple SDGs: Selected sample narratives for alkalinity results indicate that several sample containers had some headspace and exposure to air may have impacted the reported results. No action was taken other than to note this.

- Electronic data deliverables (EDDs) for these SDGs were provided by the laboratory and data validator qualifiers were entered. In some cases, different chemical synonyms are used between the EDD and the hardcopy however associated Chemical Abstracts Service (CAS) numbers are provided in the EDD to confirm chemical identifications.

Compound Identification and Quantitation Limits

Results of the analyses were reported based on laboratory RDLs for all compounds. RDLs for selected compounds are elevated due to method-required dilutions with the following discussion:

- SDG L1246080: Sample narrative (under the report case narrative) indicates vinyl chloride was reported with headspace on sample MW-155-080320 due to instrument performance and quality control failures for vinyl chloride on prior analyses. No action is taken other than to note this.

Data Assessment

The laboratory data reported for this project were reviewed based on the criteria outlined in:

- USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (USEPA, 2017); and
- USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Superfund Methods Data Review (USEPA, 2017).

Data qualifiers are assigned and laboratory report pages with qualifiers are attached. All data, including qualified data, are judged to be acceptable for their intended use.

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	217000		8450	20000	1	08/03/2020 12:44	WG1518557

Sample Narrative:

L1243922-01 WG1518557: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	17700		379	1000	1	07/28/2020 15:52	WG1516343
Nitrate	2920		48.0	100	1	07/28/2020 15:52	WG1516343
Sulfate	91500		594	5000	1	07/28/2020 15:52	WG1516343

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	3380		102	1000	1	07/29/2020 16:27	WG1516423

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	780		48.9	100	1	07/28/2020 23:03	WG1516599
Manganese	323	~~V~~	1.32	5.00	1	07/28/2020 23:03	WG1516599

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	17.6 J		0.287	0.678	1	07/29/2020 16:10	WG1516856
Ethane	U		0.296	1.29	1	07/29/2020 16:10	WG1516856
Ethene	U		0.422	1.27	1	07/29/2020 16:10	WG1516856

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	1.66 U		0.548	1.00	1	08/03/2020 20:57	WG1519557
Acrylonitrile	U		0.0760	0.500	1	08/03/2020 20:57	WG1519557
Benzene	0.0660		0.0160	0.0400	1	08/03/2020 20:57	WG1519557
Bromobenzene	U		0.0420	0.500	1	08/03/2020 20:57	WG1519557
Bromodichloromethane	U		0.0315	0.100	1	08/03/2020 20:57	WG1519557
Bromoform	U		0.239	1.00	1	08/03/2020 20:57	WG1519557
Bromomethane	U UJ	J0	0.148	0.500	1	08/03/2020 20:57	WG1519557
n-Butylbenzene	U		0.153	0.500	1	08/03/2020 20:57	WG1519557
sec-Butylbenzene	U		0.101	0.500	1	08/03/2020 20:57	WG1519557
tert-Butylbenzene	U		0.0620	0.200	1	08/03/2020 20:57	WG1519557
Carbon tetrachloride	U		0.0432	0.200	1	08/03/2020 20:57	WG1519557
Chlorobenzene	U		0.0229	0.100	1	08/03/2020 20:57	WG1519557
Chlorodibromomethane	U		0.0180	0.100	1	08/03/2020 20:57	WG1519557
Chloroethane	U		0.0432	0.200	1	08/03/2020 20:57	WG1519557
Chloroform	U		0.0166	0.100	1	08/03/2020 20:57	WG1519557
Chloromethane	U	~~J4~~	0.0556	0.500	1	08/03/2020 20:57	WG1519557
2-Chlorotoluene	U		0.0368	0.100	1	08/03/2020 20:57	WG1519557
4-Chlorotoluene	U		0.0452	0.200	1	08/03/2020 20:57	WG1519557
1,2-Dibromo-3-Chloropropane	U UJ	J0	0.204	1.00	1	08/03/2020 20:57	WG1519557
1,2-Dibromoethane	U		0.0210	0.100	1	08/03/2020 20:57	WG1519557

JC 8/19/2020

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Dibromomethane	U		0.0400	0.200	1	08/03/2020 20:57	WG1519557
1,2-Dichlorobenzene	U		0.0580	0.200	1	08/03/2020 20:57	WG1519557
1,3-Dichlorobenzene	U		0.0680	0.200	1	08/03/2020 20:57	WG1519557
1,4-Dichlorobenzene	U	UJ J4	0.0788	0.200	1	08/03/2020 20:57	WG1519557
Dichlorodifluoromethane	U		0.0327	0.100	1	08/03/2020 20:57	WG1519557
1,1-Dichloroethane	U		0.0230	0.100	1	08/03/2020 20:57	WG1519557
1,2-Dichloroethane	U		0.0190	0.100	1	08/03/2020 20:57	WG1519557
1,1-Dichloroethene	0.229		0.0200	0.100	1	08/03/2020 20:57	WG1519557
cis-1,2-Dichloroethene	26.0		0.0276	0.100	1	08/03/2020 20:57	WG1519557
trans-1,2-Dichloroethene	0.496		0.0572	0.200	1	08/03/2020 20:57	WG1519557
1,2-Dichloropropane	U		0.0508	0.200	1	08/03/2020 20:57	WG1519557
1,1-Dichloropropene	U		0.0280	0.100	1	08/03/2020 20:57	WG1519557
1,3-Dichloropropane	U	UJ J4	0.0700	0.200	1	08/03/2020 20:57	WG1519557
cis-1,3-Dichloropropene	U	UJ J0	0.0271	0.100	1	08/03/2020 20:57	WG1519557
trans-1,3-Dichloropropene	U		0.0612	0.200	1	08/03/2020 20:57	WG1519557
2,2-Dichloropropane	U		0.0317	0.100	1	08/03/2020 20:57	WG1519557
Di-isopropyl ether	U		0.0140	0.0400	1	08/03/2020 20:57	WG1519557
Ethylbenzene	0.0710	J	0.0212	0.100	1	08/03/2020 20:57	WG1519557
Hexachloro-1,3-butadiene	U		0.508	1.00	1	08/03/2020 20:57	WG1519557
Isopropylbenzene	U		0.0345	0.100	1	08/03/2020 20:57	WG1519557
p-Isopropyltoluene	U		0.0932	0.200	1	08/03/2020 20:57	WG1519557
2-Butanone (MEK)	U		0.500	1.00	1	08/03/2020 20:57	WG1519557
Methylene Chloride	U		0.265	1.00	1	08/03/2020 20:57	WG1519557
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	08/03/2020 20:57	WG1519557
Methyl tert-butyl ether	U		0.0118	0.0400	1	08/03/2020 20:57	WG1519557
Naphthalene	U		0.124	0.500	1	08/03/2020 20:57	WG1519557
n-Propylbenzene	U	UJ J0	0.0472	0.200	1	08/03/2020 20:57	WG1519557
Styrene	U		0.109	0.500	1	08/03/2020 20:57	WG1519557
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	08/03/2020 20:57	WG1519557
1,1,2,2-Tetrachloroethane	U	UJ J0	0.0156	0.100	1	08/03/2020 20:57	WG1519557
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	08/03/2020 20:57	WG1519557
Tetrachloroethene	162		0.280	1.00	10	08/04/2020 02:31	WG1519721
Toluene	0.470	J	0.0500	0.200	1	08/03/2020 20:57	WG1519557
1,2,3-Trichlorobenzene	U		0.0250	0.500	1	08/03/2020 20:57	WG1519557
1,2,4-Trichlorobenzene	U		0.193	0.500	1	08/03/2020 20:57	WG1519557
1,1,1-Trichloroethane	U		0.0110	0.100	1	08/03/2020 20:57	WG1519557
1,1,2-Trichloroethane	U		0.0353	0.100	1	08/03/2020 20:57	WG1519557
Trichloroethene	45.5		0.0160	0.0400	1	08/03/2020 20:57	WG1519557
Trichlorofluoromethane	U		0.0200	0.100	1	08/03/2020 20:57	WG1519557
1,2,3-Trichloropropane	U	UJ J0	0.204	0.500	1	08/03/2020 20:57	WG1519557
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	08/03/2020 20:57	WG1519557
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	08/03/2020 20:57	WG1519557
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	08/03/2020 20:57	WG1519557
Vinyl chloride	0.194		0.0273	0.100	1	08/03/2020 20:57	WG1519557
Xylenes, Total	0.306		0.191	0.260	1	08/03/2020 20:57	WG1519557
Ethyl Ether	U		0.0170	0.100	1	08/03/2020 20:57	WG1519557
Tetrahydrofuran	U	UJ J0	0.0900	0.500	1	08/03/2020 20:57	WG1519557
Iodomethane	U		0.242	0.500	1	08/03/2020 20:57	WG1519557
Allyl chloride	U		0.580	1.00	1	08/03/2020 20:57	WG1519557
Trans-1,4-Dichloro-2-butene	U	UJ J0	0.0560	0.200	1	08/03/2020 20:57	WG1519557
(S) Toluene-d8	*97.2*			*75.0-131*		*08/03/2020 20:57*	WG1519557
(S) Toluene-d8	*106*			*75.0-131*		*08/04/2020 02:31*	WG1519721
(S) 4-Bromofluorobenzene	*106*			*67.0-138*		*08/03/2020 20:57*	WG1519557
(S) 4-Bromofluorobenzene	*91.8*			*67.0-138*		*08/04/2020 02:31*	WG1519721
(S) 1,2-Dichloroethane-d4	*99.3*			*70.0-130*		*08/03/2020 20:57*	WG1519557
(S) 1,2-Dichloroethane-d4	*113*			*70.0-130*		*08/04/2020 02:31*	WG1519721

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1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	106000		8450	20000	1	08/03/2020 12:59	WG1518557

Sample Narrative:

L1243922-02 WG1518557: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	14900		379	1000	1	07/28/2020 16:25	WG1516343
Nitrate	1100		48.0	100	1	07/28/2020 16:25	WG1516343
Sulfate	21200		594	5000	1	07/28/2020 16:25	WG1516343

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	793	U ~~B J~~	102	1000	1	07/29/2020 16:40	WG1516423

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	1180		48.9	100	1	07/28/2020 23:46	WG1516599
Manganese	62.3		1.32	5.00	1	07/28/2020 23:46	WG1516599

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	U		0.287	0.678	1	07/29/2020 16:12	WG1516856
Ethane	U		0.296	1.29	1	07/29/2020 16:12	WG1516856
Ethene	U		0.422	1.27	1	07/29/2020 16:12	WG1516856

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U		0.548	1.00	1	08/03/2020 21:16	WG1519557
Acrylonitrile	U		0.0760	0.500	1	08/03/2020 21:16	WG1519557
Benzene	U		0.0160	0.0400	1	08/03/2020 21:16	WG1519557
Bromobenzene	U		0.0420	0.500	1	08/03/2020 21:16	WG1519557
Bromodichloromethane	U		0.0315	0.100	1	08/03/2020 21:16	WG1519557
Bromoform	U		0.239	1.00	1	08/03/2020 21:16	WG1519557
Bromomethane	U	UJ J0	0.148	0.500	1	08/03/2020 21:16	WG1519557
n-Butylbenzene	U		0.153	0.500	1	08/03/2020 21:16	WG1519557
sec-Butylbenzene	U		0.101	0.500	1	08/03/2020 21:16	WG1519557
tert-Butylbenzene	U		0.0620	0.200	1	08/03/2020 21:16	WG1519557
Carbon tetrachloride	U		0.0432	0.200	1	08/03/2020 21:16	WG1519557
Chlorobenzene	U		0.0229	0.100	1	08/03/2020 21:16	WG1519557
Chlorodibromomethane	U		0.0180	0.100	1	08/03/2020 21:16	WG1519557
Chloroethane	U		0.0432	0.200	1	08/03/2020 21:16	WG1519557
Chloroform	U		0.0166	0.100	1	08/03/2020 21:16	WG1519557
Chloromethane	U	~~J4~~	0.0556	0.500	1	08/03/2020 21:16	WG1519557
2-Chlorotoluene	U		0.0368	0.100	1	08/03/2020 21:16	WG1519557
4-Chlorotoluene	U		0.0452	0.200	1	08/03/2020 21:16	WG1519557
1,2-Dibromo-3-Chloropropane	U	UJ J0	0.204	1.00	1	08/03/2020 21:16	WG1519557
1,2-Dibromoethane	U		0.0210	0.100	1	08/03/2020 21:16	WG1519557

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Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Dibromomethane	U		0.0400	0.200	1	08/03/2020 21:16	WG1519557
1,2-Dichlorobenzene	U		0.0580	0.200	1	08/03/2020 21:16	WG1519557
1,3-Dichlorobenzene	U		0.0680	0.200	1	08/03/2020 21:16	WG1519557
1,4-Dichlorobenzene	U	UJ J4	0.0788	0.200	1	08/03/2020 21:16	WG1519557
Dichlorodifluoromethane	U		0.0327	0.100	1	08/03/2020 21:16	WG1519557
1,1-Dichloroethane	U		0.0230	0.100	1	08/03/2020 21:16	WG1519557
1,2-Dichloroethane	U		0.0190	0.100	1	08/03/2020 21:16	WG1519557
1,1-Dichloroethene	U		0.0200	0.100	1	08/03/2020 21:16	WG1519557
cis-1,2-Dichloroethene	U		0.0276	0.100	1	08/03/2020 21:16	WG1519557
trans-1,2-Dichloroethene	U		0.0572	0.200	1	08/03/2020 21:16	WG1519557
1,2-Dichloropropane	U		0.0508	0.200	1	08/03/2020 21:16	WG1519557
1,1-Dichloropropene	U		0.0280	0.100	1	08/03/2020 21:16	WG1519557
1,3-Dichloropropane	U	UJ J4	0.0700	0.200	1	08/03/2020 21:16	WG1519557
cis-1,3-Dichloropropene	U	UJ J0	0.0271	0.100	1	08/03/2020 21:16	WG1519557
trans-1,3-Dichloropropene	U		0.0612	0.200	1	08/03/2020 21:16	WG1519557
2,2-Dichloropropane	U		0.0317	0.100	1	08/03/2020 21:16	WG1519557
Di-isopropyl ether	U		0.0140	0.0400	1	08/03/2020 21:16	WG1519557
Ethylbenzene	U		0.0212	0.100	1	08/03/2020 21:16	WG1519557
Hexachloro-1,3-butadiene	U		0.508	1.00	1	08/03/2020 21:16	WG1519557
Isopropylbenzene	U		0.0345	0.100	1	08/03/2020 21:16	WG1519557
p-Isopropyltoluene	U		0.0932	0.200	1	08/03/2020 21:16	WG1519557
2-Butanone (MEK)	U		0.500	1.00	1	08/03/2020 21:16	WG1519557
Methylene Chloride	U		0.265	1.00	1	08/03/2020 21:16	WG1519557
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	08/03/2020 21:16	WG1519557
Methyl tert-butyl ether	U		0.0118	0.0400	1	08/03/2020 21:16	WG1519557
Naphthalene	U		0.124	0.500	1	08/03/2020 21:16	WG1519557
n-Propylbenzene	U	UJ J0	0.0472	0.200	1	08/03/2020 21:16	WG1519557
Styrene	U		0.109	0.500	1	08/03/2020 21:16	WG1519557
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	08/03/2020 21:16	WG1519557
1,1,2,2-Tetrachloroethane	U	UJ J0	0.0156	0.100	1	08/03/2020 21:16	WG1519557
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	08/03/2020 21:16	WG1519557
Tetrachloroethene	U		0.0280	0.100	1	08/04/2020 01:53	WG1519721
Toluene	0.199	J	0.0500	0.200	1	08/03/2020 21:16	WG1519557
1,2,3-Trichlorobenzene	U		0.0250	0.500	1	08/03/2020 21:16	WG1519557
1,2,4-Trichlorobenzene	U		0.193	0.500	1	08/03/2020 21:16	WG1519557
1,1,1-Trichloroethane	U		0.0110	0.100	1	08/03/2020 21:16	WG1519557
1,1,2-Trichloroethane	U		0.0353	0.100	1	08/03/2020 21:16	WG1519557
Trichloroethene	U		0.0160	0.0400	1	08/03/2020 21:16	WG1519557
Trichlorofluoromethane	U		0.0200	0.100	1	08/03/2020 21:16	WG1519557
1,2,3-Trichloropropane	U	UJ J0	0.204	0.500	1	08/03/2020 21:16	WG1519557
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	08/03/2020 21:16	WG1519557
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	08/03/2020 21:16	WG1519557
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	08/03/2020 21:16	WG1519557
Vinyl chloride	U		0.0273	0.100	1	08/03/2020 21:16	WG1519557
Xylenes, Total	U		0.191	0.260	1	08/03/2020 21:16	WG1519557
Ethyl Ether	U		0.0170	0.100	1	08/03/2020 21:16	WG1519557
Tetrahydrofuran	U	UJ J0	0.0900	0.500	1	08/03/2020 21:16	WG1519557
Iodomethane	U		0.242	0.500	1	08/03/2020 21:16	WG1519557
Allyl chloride	U		0.580	1.00	1	08/03/2020 21:16	WG1519557
Trans-1,4-Dichloro-2-butene	U	UJ J0	0.0560	0.200	1	08/03/2020 21:16	WG1519557
(S) Toluene-d8	*98.4*			*75.0-131*		*08/03/2020 21:16*	WG1519557
(S) Toluene-d8	*102*			*75.0-131*		*08/04/2020 01:53*	WG1519721
(S) 4-Bromofluorobenzene	*105*			*67.0-138*		*08/03/2020 21:16*	WG1519557
(S) 4-Bromofluorobenzene	*93.6*			*67.0-138*		*08/04/2020 01:53*	WG1519721
(S) 1,2-Dichloroethane-d4	*101*			*70.0-130*		*08/03/2020 21:16*	WG1519557
(S) 1,2-Dichloroethane-d4	*116*			*70.0-130*		*08/04/2020 01:53*	WG1519721

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Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	217000		8450	20000	1	08/03/2020 13:06	WG1518557

Sample Narrative:

L1243922-03 WG1518557: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	17900		379	1000	1	07/28/2020 16:58	WG1516343
Nitrate	2960		48.0	100	1	07/28/2020 16:58	WG1516343
Sulfate	91700		594	5000	1	07/28/2020 16:58	WG1516343

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	3380		102	1000	1	07/29/2020 17:44	WG1516423

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	685		48.9	100	1	07/28/2020 23:49	WG1516599
Manganese	297		1.32	5.00	1	07/28/2020 23:49	WG1516599

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	10.8 J		0.287	0.678	1	07/29/2020 16:14	WG1516856
Ethane	U		0.296	1.29	1	07/29/2020 16:14	WG1516856
Ethene	U		0.422	1.27	1	07/29/2020 16:14	WG1516856

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U		0.548	1.00	1	08/03/2020 21:35	WG1519557
Acrylonitrile	U		0.0760	0.500	1	08/03/2020 21:35	WG1519557
Benzene	0.0570		0.0160	0.0400	1	08/03/2020 21:35	WG1519557
Bromobenzene	U		0.0420	0.500	1	08/03/2020 21:35	WG1519557
Bromodichloromethane	U		0.0315	0.100	1	08/03/2020 21:35	WG1519557
Bromoform	U		0.239	1.00	1	08/03/2020 21:35	WG1519557
Bromomethane	U UJ	J0	0.148	0.500	1	08/03/2020 21:35	WG1519557
n-Butylbenzene	U		0.153	0.500	1	08/03/2020 21:35	WG1519557
sec-Butylbenzene	U		0.101	0.500	1	08/03/2020 21:35	WG1519557
tert-Butylbenzene	U		0.0620	0.200	1	08/03/2020 21:35	WG1519557
Carbon tetrachloride	U		0.0432	0.200	1	08/03/2020 21:35	WG1519557
Chlorobenzene	U		0.0229	0.100	1	08/03/2020 21:35	WG1519557
Chlorodibromomethane	U		0.0180	0.100	1	08/03/2020 21:35	WG1519557
Chloroethane	U		0.0432	0.200	1	08/03/2020 21:35	WG1519557
Chloroform	U		0.0166	0.100	1	08/03/2020 21:35	WG1519557
Chloromethane	U	~~J4~~	0.0556	0.500	1	08/03/2020 21:35	WG1519557
2-Chlorotoluene	U		0.0368	0.100	1	08/03/2020 21:35	WG1519557
4-Chlorotoluene	U		0.0452	0.200	1	08/03/2020 21:35	WG1519557
1,2-Dibromo-3-Chloropropane	U UJ	J0	0.204	1.00	1	08/03/2020 21:35	WG1519557
1,2-Dibromoethane	U		0.0210	0.100	1	08/03/2020 21:35	WG1519557

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BB-8-072720

Collected date/time: 07/27/20 09:40

SAMPLE RESULTS - 03

L1243922

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Dibromomethane	U		0.0400	0.200	1	08/03/2020 21:35	WG1519557
1,2-Dichlorobenzene	U		0.0580	0.200	1	08/03/2020 21:35	WG1519557
1,3-Dichlorobenzene	U		0.0680	0.200	1	08/03/2020 21:35	WG1519557
1,4-Dichlorobenzene	U	UJ J4	0.0788	0.200	1	08/03/2020 21:35	WG1519557
Dichlorodifluoromethane	U		0.0327	0.100	1	08/03/2020 21:35	WG1519557
1,1-Dichloroethane	U		0.0230	0.100	1	08/03/2020 21:35	WG1519557
1,2-Dichloroethane	U		0.0190	0.100	1	08/03/2020 21:35	WG1519557
1,1-Dichloroethene	0.227		0.0200	0.100	1	08/03/2020 21:35	WG1519557
cis-1,2-Dichloroethene	26.3		0.0276	0.100	1	08/03/2020 21:35	WG1519557
trans-1,2-Dichloroethene	0.531		0.0572	0.200	1	08/03/2020 21:35	WG1519557
1,2-Dichloropropane	U		0.0508	0.200	1	08/03/2020 21:35	WG1519557
1,1-Dichloropropene	U		0.0280	0.100	1	08/03/2020 21:35	WG1519557
1,3-Dichloropropane	U	UJ J4	0.0700	0.200	1	08/03/2020 21:35	WG1519557
cis-1,3-Dichloropropene	U	UJ J0	0.0271	0.100	1	08/03/2020 21:35	WG1519557
trans-1,3-Dichloropropene	U		0.0612	0.200	1	08/03/2020 21:35	WG1519557
2,2-Dichloropropane	U		0.0317	0.100	1	08/03/2020 21:35	WG1519557
Di-isopropyl ether	U		0.0140	0.0400	1	08/03/2020 21:35	WG1519557
Ethylbenzene	0.0320	J	0.0212	0.100	1	08/03/2020 21:35	WG1519557
Hexachloro-1,3-butadiene	U		0.508	1.00	1	08/03/2020 21:35	WG1519557
Isopropylbenzene	U		0.0345	0.100	1	08/03/2020 21:35	WG1519557
p-Isopropyltoluene	U		0.0932	0.200	1	08/03/2020 21:35	WG1519557
2-Butanone (MEK)	U		0.500	1.00	1	08/03/2020 21:35	WG1519557
Methylene Chloride	U		0.265	1.00	1	08/03/2020 21:35	WG1519557
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	08/03/2020 21:35	WG1519557
Methyl tert-butyl ether	0.0180	J	0.0118	0.0400	1	08/03/2020 21:35	WG1519557
Naphthalene	U		0.124	0.500	1	08/03/2020 21:35	WG1519557
n-Propylbenzene	U	UJ J0	0.0472	0.200	1	08/03/2020 21:35	WG1519557
Styrene	U		0.109	0.500	1	08/03/2020 21:35	WG1519557
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	08/03/2020 21:35	WG1519557
1,1,2,2-Tetrachloroethane	U	UJ J0	0.0156	0.100	1	08/03/2020 21:35	WG1519557
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	08/03/2020 21:35	WG1519557
Tetrachloroethene	165		0.280	1.00	10	08/04/2020 02:50	WG1519721
Toluene	0.268	J	0.0500	0.200	1	08/03/2020 21:35	WG1519557
1,2,3-Trichlorobenzene	U		0.0250	0.500	1	08/03/2020 21:35	WG1519557
1,2,4-Trichlorobenzene	U		0.193	0.500	1	08/03/2020 21:35	WG1519557
1,1,1-Trichloroethane	U		0.0110	0.100	1	08/03/2020 21:35	WG1519557
1,1,2-Trichloroethane	U		0.0353	0.100	1	08/03/2020 21:35	WG1519557
Trichloroethene	46.8		0.0160	0.0400	1	08/03/2020 21:35	WG1519557
Trichlorofluoromethane	U		0.0200	0.100	1	08/03/2020 21:35	WG1519557
1,2,3-Trichloropropane	U	UJ J0	0.204	0.500	1	08/03/2020 21:35	WG1519557
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	08/03/2020 21:35	WG1519557
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	08/03/2020 21:35	WG1519557
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	08/03/2020 21:35	WG1519557
Vinyl chloride	U		0.0273	0.100	1	08/03/2020 21:35	WG1519557
Xylenes, Total	0.217	J	0.191	0.260	1	08/03/2020 21:35	WG1519557
Ethyl Ether	U		0.0170	0.100	1	08/03/2020 21:35	WG1519557
Tetrahydrofuran	U	UJ J0	0.0900	0.500	1	08/03/2020 21:35	WG1519557
Iodomethane	U		0.242	0.500	1	08/03/2020 21:35	WG1519557
Allyl chloride	U		0.580	1.00	1	08/03/2020 21:35	WG1519557
Trans-1,4-Dichloro-2-butene	U	UJ J0	0.0560	0.200	1	08/03/2020 21:35	WG1519557
(S) Toluene-d8	*95.1*			*75.0-131*		*08/03/2020 21:35*	WG1519557
(S) Toluene-d8	*103*			*75.0-131*		*08/04/2020 02:50*	WG1519721
(S) 4-Bromofluorobenzene	*103*			*67.0-138*		*08/03/2020 21:35*	WG1519557
(S) 4-Bromofluorobenzene	*90.8*			*67.0-138*		*08/04/2020 02:50*	WG1519721
(S) 1,2-Dichloroethane-d4	*98.7*			*70.0-130*		*08/03/2020 21:35*	WG1519557
(S) 1,2-Dichloroethane-d4	*115*			*70.0-130*		*08/04/2020 02:50*	WG1519721

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1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	279000		8450	20000	1	08/03/2020 13:13	WG1518557

Sample Narrative:

L1243922-04 WG1518557: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	25100		379	1000	1	07/28/2020 17:31	WG1516343
Nitrate	U		48.0	100	1	07/28/2020 17:31	WG1516343
Sulfate	15500		594	5000	1	07/28/2020 17:31	WG1516343

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	2360		102	1000	1	07/29/2020 19:06	WG1516423

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	3260		48.9	100	1	07/28/2020 23:52	WG1516599
Manganese	869		1.32	5.00	1	07/28/2020 23:52	WG1516599

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	45.2		0.287	0.678	1	07/29/2020 16:17	WG1516856
Ethane	U		0.296	1.29	1	07/29/2020 16:17	WG1516856
Ethene	U		0.422	1.27	1	07/29/2020 16:17	WG1516856

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U		0.548	1.00	1	08/04/2020 22:44	WG1519931
Acrylonitrile	U		0.0760	0.500	1	08/04/2020 22:44	WG1519931
Benzene	U		0.0160	0.0400	1	08/04/2020 22:44	WG1519931
Bromobenzene	U		0.0420	0.500	1	08/04/2020 22:44	WG1519931
Bromodichloromethane	U		0.0315	0.100	1	08/04/2020 22:44	WG1519931
Bromoform	U		0.239	1.00	1	08/04/2020 22:44	WG1519931
Bromomethane	U		0.148	0.500	1	08/04/2020 22:44	WG1519931
n-Butylbenzene	U		0.153	0.500	1	08/04/2020 22:44	WG1519931
sec-Butylbenzene	U		0.101	0.500	1	08/04/2020 22:44	WG1519931
tert-Butylbenzene	U		0.0620	0.200	1	08/04/2020 22:44	WG1519931
Carbon tetrachloride	U		0.0432	0.200	1	08/04/2020 22:44	WG1519931
Chlorobenzene	U		0.0229	0.100	1	08/04/2020 22:44	WG1519931
Chlorodibromomethane	U		0.0180	0.100	1	08/04/2020 22:44	WG1519931
Chloroethane	U		0.0432	0.200	1	08/04/2020 22:44	WG1519931
Chloroform	U		0.0166	0.100	1	08/04/2020 22:44	WG1519931
Chloromethane	U	UJ J0	0.0556	0.500	1	08/04/2020 22:44	WG1519931
2-Chlorotoluene	U		0.0368	0.100	1	08/04/2020 22:44	WG1519931
4-Chlorotoluene	U		0.0452	0.200	1	08/04/2020 22:44	WG1519931
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	08/04/2020 22:44	WG1519931
1,2-Dibromoethane	U		0.0210	0.100	1	08/04/2020 22:44	WG1519931

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Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Dibromomethane	U		0.0400	0.200	1	08/04/2020 22:44	WG1519931
1,2-Dichlorobenzene	U		0.0580	0.200	1	08/04/2020 22:44	WG1519931
1,3-Dichlorobenzene	U		0.0680	0.200	1	08/04/2020 22:44	WG1519931
1,4-Dichlorobenzene	U		0.0788	0.200	1	08/04/2020 22:44	WG1519931
Dichlorodifluoromethane	U	UJ J0	0.0327	0.100	1	08/04/2020 22:44	WG1519931
1,1-Dichloroethane	U		0.0230	0.100	1	08/04/2020 22:44	WG1519931
1,2-Dichloroethane	U		0.0190	0.100	1	08/04/2020 22:44	WG1519931
1,1-Dichloroethene	0.539		0.0200	0.100	1	08/04/2020 22:44	WG1519931
cis-1,2-Dichloroethene	1.56		0.0276	0.100	1	08/04/2020 22:44	WG1519931
trans-1,2-Dichloroethene	0.0983	J	0.0572	0.200	1	08/04/2020 22:44	WG1519931
1,2-Dichloropropane	U		0.0508	0.200	1	08/04/2020 22:44	WG1519931
1,1-Dichloropropene	U		0.0280	0.100	1	08/04/2020 22:44	WG1519931
1,3-Dichloropropane	U		0.0700	0.200	1	08/04/2020 22:44	WG1519931
cis-1,3-Dichloropropene	U		0.0271	0.100	1	08/04/2020 22:44	WG1519931
trans-1,3-Dichloropropene	U		0.0612	0.200	1	08/04/2020 22:44	WG1519931
2,2-Dichloropropane	U		0.0317	0.100	1	08/04/2020 22:44	WG1519931
Di-isopropyl ether	U		0.0140	0.0400	1	08/04/2020 22:44	WG1519931
Ethylbenzene	U		0.0212	0.100	1	08/04/2020 22:44	WG1519931
Hexachloro-1,3-butadiene	U		0.508	1.00	1	08/04/2020 22:44	WG1519931
Isopropylbenzene	U		0.0345	0.100	1	08/04/2020 22:44	WG1519931
p-Isopropyltoluene	U		0.0932	0.200	1	08/04/2020 22:44	WG1519931
2-Butanone (MEK)	U		0.500	1.00	1	08/04/2020 22:44	WG1519931
Methylene Chloride	U		0.265	1.00	1	08/04/2020 22:44	WG1519931
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	08/04/2020 22:44	WG1519931
Methyl tert-butyl ether	U		0.0118	0.0400	1	08/04/2020 22:44	WG1519931
Naphthalene	U		0.124	0.500	1	08/04/2020 22:44	WG1519931
n-Propylbenzene	U		0.0472	0.200	1	08/04/2020 22:44	WG1519931
Styrene	U		0.109	0.500	1	08/04/2020 22:44	WG1519931
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	08/04/2020 22:44	WG1519931
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	08/04/2020 22:44	WG1519931
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	08/04/2020 22:44	WG1519931
Tetrachloroethene	0.324		0.0280	0.100	1	08/04/2020 22:44	WG1519931
Toluene	1.25		0.0500	0.200	1	08/04/2020 22:44	WG1519931
1,2,3-Trichlorobenzene	U		0.0250	0.500	1	08/04/2020 22:44	WG1519931
1,2,4-Trichlorobenzene	U		0.193	0.500	1	08/04/2020 22:44	WG1519931
1,1,1-Trichloroethane	U		0.0110	0.100	1	08/04/2020 22:44	WG1519931
1,1,2-Trichloroethane	U		0.0353	0.100	1	08/04/2020 22:44	WG1519931
Trichloroethene	2.12		0.0160	0.0400	1	08/04/2020 22:44	WG1519931
Trichlorofluoromethane	U	UJ J0 J3 J4	0.0200	0.100	1	08/04/2020 22:44	WG1519931
1,2,3-Trichloropropane	U		0.204	0.500	1	08/04/2020 22:44	WG1519931
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	08/04/2020 22:44	WG1519931
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	08/04/2020 22:44	WG1519931
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	08/04/2020 22:44	WG1519931
Vinyl chloride	0.135		0.0273	0.100	1	08/04/2020 22:44	WG1519931
Xylenes, Total	U		0.191	0.260	1	08/04/2020 22:44	WG1519931
Ethyl Ether	U		0.0170	0.100	1	08/04/2020 22:44	WG1519931
Tetrahydrofuran	U	~~J4~~	0.0900	0.500	1	08/04/2020 22:44	WG1519931
Iodomethane	U		0.242	0.500	1	08/04/2020 22:44	WG1519931
Allyl chloride	U		0.580	1.00	1	08/04/2020 22:44	WG1519931
Trans-1,4-Dichloro-2-butene	U		0.0560	0.200	1	08/04/2020 22:44	WG1519931
(S) Toluene-d8	*106*			*75.0-131*		*08/04/2020 22:44*	WG1519931
(S) 4-Bromofluorobenzene	*97.8*			*67.0-138*		*08/04/2020 22:44*	WG1519931
(S) 1,2-Dichloroethane-d4	*103*			*70.0-130*		*08/04/2020 22:44*	WG1519931

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Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	158000		8450	20000	1	08/03/2020 13:20	WG1518557

Sample Narrative:

L1243922-05 WG1518557: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	14700		379	1000	1	07/28/2020 17:47	WG1516343
Nitrate	U		48.0	100	1	07/28/2020 17:47	WG1516343
Sulfate	49000		594	5000	1	07/28/2020 17:47	WG1516343

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	1690	~~B~~	102	1000	1	07/29/2020 19:17	WG1516423

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	1480		48.9	100	1	07/28/2020 23:56	WG1516599
Manganese	298		1.32	5.00	1	07/28/2020 23:56	WG1516599

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	157		0.287	0.678	1	07/29/2020 16:19	WG1516856
Ethane	U		0.296	1.29	1	07/29/2020 16:19	WG1516856
Ethene	U		0.422	1.27	1	07/29/2020 16:19	WG1516856

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U		0.548	1.00	1	08/04/2020 23:05	WG1519931
Acrylonitrile	U		0.0760	0.500	1	08/04/2020 23:05	WG1519931
Benzene	U		0.0160	0.0400	1	08/04/2020 23:05	WG1519931
Bromobenzene	U		0.0420	0.500	1	08/04/2020 23:05	WG1519931
Bromodichloromethane	U		0.0315	0.100	1	08/04/2020 23:05	WG1519931
Bromoform	U		0.239	1.00	1	08/04/2020 23:05	WG1519931
Bromomethane	U		0.148	0.500	1	08/04/2020 23:05	WG1519931
n-Butylbenzene	U		0.153	0.500	1	08/04/2020 23:05	WG1519931
sec-Butylbenzene	U		0.101	0.500	1	08/04/2020 23:05	WG1519931
tert-Butylbenzene	U		0.0620	0.200	1	08/04/2020 23:05	WG1519931
Carbon tetrachloride	U		0.0432	0.200	1	08/04/2020 23:05	WG1519931
Chlorobenzene	U		0.0229	0.100	1	08/04/2020 23:05	WG1519931
Chlorodibromomethane	U		0.0180	0.100	1	08/04/2020 23:05	WG1519931
Chloroethane	U		0.0432	0.200	1	08/04/2020 23:05	WG1519931
Chloroform	U		0.0166	0.100	1	08/04/2020 23:05	WG1519931
Chloromethane	U	UJ J0	0.0556	0.500	1	08/04/2020 23:05	WG1519931
2-Chlorotoluene	U		0.0368	0.100	1	08/04/2020 23:05	WG1519931
4-Chlorotoluene	U		0.0452	0.200	1	08/04/2020 23:05	WG1519931
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	08/04/2020 23:05	WG1519931
1,2-Dibromoethane	U		0.0210	0.100	1	08/04/2020 23:05	WG1519931

JC 8/19/2020

MW-303-072720

Collected date/time: 07/27/20 11:45

SAMPLE RESULTS - 05

L1243922

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Dibromomethane	U		0.0400	0.200	1	08/04/2020 23:05	WG1519931
1,2-Dichlorobenzene	U		0.0580	0.200	1	08/04/2020 23:05	WG1519931
1,3-Dichlorobenzene	U		0.0680	0.200	1	08/04/2020 23:05	WG1519931
1,4-Dichlorobenzene	U		0.0788	0.200	1	08/04/2020 23:05	WG1519931
Dichlorodifluoromethane	U	UJ J0	0.0327	0.100	1	08/04/2020 23:05	WG1519931
1,1-Dichloroethane	U		0.0230	0.100	1	08/04/2020 23:05	WG1519931
1,2-Dichloroethane	U		0.0190	0.100	1	08/04/2020 23:05	WG1519931
1,1-Dichloroethene	U		0.0200	0.100	1	08/04/2020 23:05	WG1519931
cis-1,2-Dichloroethene	U		0.0276	0.100	1	08/04/2020 23:05	WG1519931
trans-1,2-Dichloroethene	U		0.0572	0.200	1	08/04/2020 23:05	WG1519931
1,2-Dichloropropane	U		0.0508	0.200	1	08/04/2020 23:05	WG1519931
1,1-Dichloropropene	U		0.0280	0.100	1	08/04/2020 23:05	WG1519931
1,3-Dichloropropane	U		0.0700	0.200	1	08/04/2020 23:05	WG1519931
cis-1,3-Dichloropropene	U		0.0271	0.100	1	08/04/2020 23:05	WG1519931
trans-1,3-Dichloropropene	U		0.0612	0.200	1	08/04/2020 23:05	WG1519931
2,2-Dichloropropane	U		0.0317	0.100	1	08/04/2020 23:05	WG1519931
Di-isopropyl ether	U		0.0140	0.0400	1	08/04/2020 23:05	WG1519931
Ethylbenzene	0.0263	J	0.0212	0.100	1	08/04/2020 23:05	WG1519931
Hexachloro-1,3-butadiene	U		0.508	1.00	1	08/04/2020 23:05	WG1519931
Isopropylbenzene	U		0.0345	0.100	1	08/04/2020 23:05	WG1519931
p-Isopropyltoluene	U		0.0932	0.200	1	08/04/2020 23:05	WG1519931
2-Butanone (MEK)	U		0.500	1.00	1	08/04/2020 23:05	WG1519931
Methylene Chloride	U		0.265	1.00	1	08/04/2020 23:05	WG1519931
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	08/04/2020 23:05	WG1519931
Methyl tert-butyl ether	U		0.0118	0.0400	1	08/04/2020 23:05	WG1519931
Naphthalene	U		0.124	0.500	1	08/04/2020 23:05	WG1519931
n-Propylbenzene	U		0.0472	0.200	1	08/04/2020 23:05	WG1519931
Styrene	U		0.109	0.500	1	08/04/2020 23:05	WG1519931
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	08/04/2020 23:05	WG1519931
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	08/04/2020 23:05	WG1519931
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	08/04/2020 23:05	WG1519931
Tetrachloroethene	U		0.0280	0.100	1	08/04/2020 23:05	WG1519931
Toluene	1.56		0.0500	0.200	1	08/04/2020 23:05	WG1519931
1,2,3-Trichlorobenzene	U		0.0250	0.500	1	08/04/2020 23:05	WG1519931
1,2,4-Trichlorobenzene	U		0.193	0.500	1	08/04/2020 23:05	WG1519931
1,1,1-Trichloroethane	U		0.0110	0.100	1	08/04/2020 23:05	WG1519931
1,1,2-Trichloroethane	U		0.0353	0.100	1	08/04/2020 23:05	WG1519931
Trichloroethene	U		0.0160	0.0400	1	08/04/2020 23:05	WG1519931
Trichlorofluoromethane	U	UJ J0 J3 J4	0.0200	0.100	1	08/04/2020 23:05	WG1519931
1,2,3-Trichloropropane	U		0.204	0.500	1	08/04/2020 23:05	WG1519931
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	08/04/2020 23:05	WG1519931
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	08/04/2020 23:05	WG1519931
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	08/04/2020 23:05	WG1519931
Vinyl chloride	U		0.0273	0.100	1	08/04/2020 23:05	WG1519931
Xylenes, Total	U		0.191	0.260	1	08/04/2020 23:05	WG1519931
Ethyl Ether	U		0.0170	0.100	1	08/04/2020 23:05	WG1519931
Tetrahydrofuran	U	~~J4~~	0.0900	0.500	1	08/04/2020 23:05	WG1519931
Iodomethane	U		0.242	0.500	1	08/04/2020 23:05	WG1519931
Allyl chloride	U		0.580	1.00	1	08/04/2020 23:05	WG1519931
Trans-1,4-Dichloro-2-butene	U		0.0560	0.200	1	08/04/2020 23:05	WG1519931
(S) Toluene-d8	*105*			*75.0-131*		*08/04/2020 23:05*	WG1519931
(S) 4-Bromofluorobenzene	*97.1*			*67.0-138*		*08/04/2020 23:05*	WG1519931
(S) 1,2-Dichloroethane-d4	*105*			*70.0-130*		*08/04/2020 23:05*	WG1519931

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Wet Chemistry by Method 2320 B-2011

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Alkalinity	122000		8450	20000	1	08/03/2020 13:28	WG1518557

Sample Narrative:

L1243922-06 WG1518557: Endpoint pH 4.5

Wet Chemistry by Method 9056A

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Chloride	13800		379	1000	1	07/28/2020 18:04	WG1516343
Nitrate	U		48.0	100	1	07/28/2020 18:04	WG1516343
Sulfate	56800		594	5000	1	07/28/2020 18:04	WG1516343

Wet Chemistry by Method 9060A

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
TOC (Total Organic Carbon)	1140	~~B~~	102	1000	1	07/29/2020 20:05	WG1516423

Metals (ICPMS) by Method 6020B

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Iron	4160		48.9	100	1	07/28/2020 23:59	WG1516599
Manganese	488		1.32	5.00	1	07/28/2020 23:59	WG1516599

Volatile Organic Compounds (GC) by Method RSK175

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Methane	23.1		0.287	0.678	1	07/29/2020 16:21	WG1516856
Ethane	U		0.296	1.29	1	07/29/2020 16:21	WG1516856
Ethene	U		0.422	1.27	1	07/29/2020 16:21	WG1516856

Volatile Organic Compounds (GC/MS) by Method 8260D

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Acetone	U		0.548	1.00	1	08/04/2020 23:25	WG1519931
Acrylonitrile	U		0.0760	0.500	1	08/04/2020 23:25	WG1519931
Benzene	U		0.0160	0.0400	1	08/04/2020 23:25	WG1519931
Bromobenzene	U		0.0420	0.500	1	08/04/2020 23:25	WG1519931
Bromodichloromethane	U		0.0315	0.100	1	08/04/2020 23:25	WG1519931
Bromoform	U		0.239	1.00	1	08/04/2020 23:25	WG1519931
Bromomethane	U		0.148	0.500	1	08/04/2020 23:25	WG1519931
n-Butylbenzene	U		0.153	0.500	1	08/04/2020 23:25	WG1519931
sec-Butylbenzene	U		0.101	0.500	1	08/04/2020 23:25	WG1519931
tert-Butylbenzene	U		0.0620	0.200	1	08/04/2020 23:25	WG1519931
Carbon tetrachloride	U		0.0432	0.200	1	08/04/2020 23:25	WG1519931
Chlorobenzene	U		0.0229	0.100	1	08/04/2020 23:25	WG1519931
Chlorodibromomethane	U		0.0180	0.100	1	08/04/2020 23:25	WG1519931
Chloroethane	U		0.0432	0.200	1	08/04/2020 23:25	WG1519931
Chloroform	U		0.0166	0.100	1	08/04/2020 23:25	WG1519931
Chloromethane	U	UJ J0	0.0556	0.500	1	08/04/2020 23:25	WG1519931
2-Chlorotoluene	U		0.0368	0.100	1	08/04/2020 23:25	WG1519931
4-Chlorotoluene	U		0.0452	0.200	1	08/04/2020 23:25	WG1519931
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	08/04/2020 23:25	WG1519931
1,2-Dibromoethane	U		0.0210	0.100	1	08/04/2020 23:25	WG1519931

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Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Dibromomethane	U		0.0400	0.200	1	08/04/2020 23:25	WG1519931
1,2-Dichlorobenzene	U		0.0580	0.200	1	08/04/2020 23:25	WG1519931
1,3-Dichlorobenzene	U		0.0680	0.200	1	08/04/2020 23:25	WG1519931
1,4-Dichlorobenzene	U		0.0788	0.200	1	08/04/2020 23:25	WG1519931
Dichlorodifluoromethane	U	UJ J0	0.0327	0.100	1	08/04/2020 23:25	WG1519931
1,1-Dichloroethane	U		0.0230	0.100	1	08/04/2020 23:25	WG1519931
1,2-Dichloroethane	U		0.0190	0.100	1	08/04/2020 23:25	WG1519931
1,1-Dichloroethene	U		0.0200	0.100	1	08/04/2020 23:25	WG1519931
cis-1,2-Dichloroethene	U		0.0276	0.100	1	08/04/2020 23:25	WG1519931
trans-1,2-Dichloroethene	U		0.0572	0.200	1	08/04/2020 23:25	WG1519931
1,2-Dichloropropane	U		0.0508	0.200	1	08/04/2020 23:25	WG1519931
1,1-Dichloropropene	U		0.0280	0.100	1	08/04/2020 23:25	WG1519931
1,3-Dichloropropane	U		0.0700	0.200	1	08/04/2020 23:25	WG1519931
cis-1,3-Dichloropropene	U		0.0271	0.100	1	08/04/2020 23:25	WG1519931
trans-1,3-Dichloropropene	U		0.0612	0.200	1	08/04/2020 23:25	WG1519931
2,2-Dichloropropane	U		0.0317	0.100	1	08/04/2020 23:25	WG1519931
Di-isopropyl ether	U		0.0140	0.0400	1	08/04/2020 23:25	WG1519931
Ethylbenzene	0.0657	J	0.0212	0.100	1	08/04/2020 23:25	WG1519931
Hexachloro-1,3-butadiene	U		0.508	1.00	1	08/04/2020 23:25	WG1519931
Isopropylbenzene	U		0.0345	0.100	1	08/04/2020 23:25	WG1519931
p-Isopropyltoluene	U		0.0932	0.200	1	08/04/2020 23:25	WG1519931
2-Butanone (MEK)	U		0.500	1.00	1	08/04/2020 23:25	WG1519931
Methylene Chloride	U		0.265	1.00	1	08/04/2020 23:25	WG1519931
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	08/04/2020 23:25	WG1519931
Methyl tert-butyl ether	U		0.0118	0.0400	1	08/04/2020 23:25	WG1519931
Naphthalene	U		0.124	0.500	1	08/04/2020 23:25	WG1519931
n-Propylbenzene	U		0.0472	0.200	1	08/04/2020 23:25	WG1519931
Styrene	U		0.109	0.500	1	08/04/2020 23:25	WG1519931
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	08/04/2020 23:25	WG1519931
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	08/04/2020 23:25	WG1519931
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	08/04/2020 23:25	WG1519931
Tetrachloroethene	U		0.0280	0.100	1	08/04/2020 23:25	WG1519931
Toluene	0.468		0.0500	0.200	1	08/04/2020 23:25	WG1519931
1,2,3-Trichlorobenzene	U		0.0250	0.500	1	08/04/2020 23:25	WG1519931
1,2,4-Trichlorobenzene	U		0.193	0.500	1	08/04/2020 23:25	WG1519931
1,1,1-Trichloroethane	U		0.0110	0.100	1	08/04/2020 23:25	WG1519931
1,1,2-Trichloroethane	U		0.0353	0.100	1	08/04/2020 23:25	WG1519931
Trichloroethene	U		0.0160	0.0400	1	08/04/2020 23:25	WG1519931
Trichlorofluoromethane	U	UJ J0 J3 J4	0.0200	0.100	1	08/04/2020 23:25	WG1519931
1,2,3-Trichloropropane	U		0.204	0.500	1	08/04/2020 23:25	WG1519931
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	08/04/2020 23:25	WG1519931
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	08/04/2020 23:25	WG1519931
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	08/04/2020 23:25	WG1519931
Vinyl chloride	U		0.0273	0.100	1	08/04/2020 23:25	WG1519931
Xylenes, Total	0.356		0.191	0.260	1	08/04/2020 23:25	WG1519931
Ethyl Ether	U		0.0170	0.100	1	08/04/2020 23:25	WG1519931
Tetrahydrofuran	U	~~J4~~	0.0900	0.500	1	08/04/2020 23:25	WG1519931
Iodomethane	U		0.242	0.500	1	08/04/2020 23:25	WG1519931
Allyl chloride	U		0.580	1.00	1	08/04/2020 23:25	WG1519931
Trans-1,4-Dichloro-2-butene	U		0.0560	0.200	1	08/04/2020 23:25	WG1519931
(S) Toluene-d8	*105*			*75.0-131*		*08/04/2020 23:25*	WG1519931
(S) 4-Bromofluorobenzene	*99.6*			*67.0-138*		*08/04/2020 23:25*	WG1519931
(S) 1,2-Dichloroethane-d4	*106*			*70.0-130*		*08/04/2020 23:25*	WG1519931

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1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Wet Chemistry by Method 2320 B-2011

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Alkalinity	148000		8450	20000	1	08/03/2020 13:36	WG1518557

Sample Narrative:

L1243922-07 WG1518557: Endpoint pH 4.5

Wet Chemistry by Method 9056A

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Chloride	11300		379	1000	1	07/28/2020 18:20	WG1516343
Nitrate	U		48.0	100	1	07/28/2020 18:20	WG1516343
Sulfate	13400		594	5000	1	07/28/2020 18:20	WG1516343

Wet Chemistry by Method 9060A

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
TOC (Total Organic Carbon)	1970	~~B~~	102	1000	1	07/29/2020 20:18	WG1516423

Metals (ICPMS) by Method 6020B

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Iron	3070		48.9	100	1	07/29/2020 00:02	WG1516599
Manganese	420		1.32	5.00	1	07/29/2020 00:02	WG1516599

Volatile Organic Compounds (GC) by Method RSK175

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Methane	116		0.287	0.678	1	07/30/2020 12:46	WG1517565
Ethane	U		0.296	1.29	1	07/30/2020 12:46	WG1517565
Ethene	U		0.422	1.27	1	07/30/2020 12:46	WG1517565

Volatile Organic Compounds (GC/MS) by Method 8260D

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Acetone	U		0.548	1.00	1	08/04/2020 23:46	WG1519931
Acrylonitrile	U		0.0760	0.500	1	08/04/2020 23:46	WG1519931
Benzene	U		0.0160	0.0400	1	08/04/2020 23:46	WG1519931
Bromobenzene	U		0.0420	0.500	1	08/04/2020 23:46	WG1519931
Bromodichloromethane	U		0.0315	0.100	1	08/04/2020 23:46	WG1519931
Bromoform	U		0.239	1.00	1	08/04/2020 23:46	WG1519931
Bromomethane	U		0.148	0.500	1	08/04/2020 23:46	WG1519931
n-Butylbenzene	U		0.153	0.500	1	08/04/2020 23:46	WG1519931
sec-Butylbenzene	U		0.101	0.500	1	08/04/2020 23:46	WG1519931
tert-Butylbenzene	U		0.0620	0.200	1	08/04/2020 23:46	WG1519931
Carbon tetrachloride	U		0.0432	0.200	1	08/04/2020 23:46	WG1519931
Chlorobenzene	U		0.0229	0.100	1	08/04/2020 23:46	WG1519931
Chlorodibromomethane	U		0.0180	0.100	1	08/04/2020 23:46	WG1519931
Chloroethane	U		0.0432	0.200	1	08/04/2020 23:46	WG1519931
Chloroform	U		0.0166	0.100	1	08/04/2020 23:46	WG1519931
Chloromethane	U	UJ J0	0.0556	0.500	1	08/04/2020 23:46	WG1519931
2-Chlorotoluene	U		0.0368	0.100	1	08/04/2020 23:46	WG1519931
4-Chlorotoluene	U		0.0452	0.200	1	08/04/2020 23:46	WG1519931
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	08/04/2020 23:46	WG1519931
1,2-Dibromoethane	U		0.0210	0.100	1	08/04/2020 23:46	WG1519931

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Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Dibromomethane	U		0.0400	0.200	1	08/04/2020 23:46	WG1519931
1,2-Dichlorobenzene	U		0.0580	0.200	1	08/04/2020 23:46	WG1519931
1,3-Dichlorobenzene	U		0.0680	0.200	1	08/04/2020 23:46	WG1519931
1,4-Dichlorobenzene	U		0.0788	0.200	1	08/04/2020 23:46	WG1519931
Dichlorodifluoromethane	U	UJ J0	0.0327	0.100	1	08/04/2020 23:46	WG1519931
1,1-Dichloroethane	U		0.0230	0.100	1	08/04/2020 23:46	WG1519931
1,2-Dichloroethane	U		0.0190	0.100	1	08/04/2020 23:46	WG1519931
1,1-Dichloroethene	U		0.0200	0.100	1	08/04/2020 23:46	WG1519931
cis-1,2-Dichloroethene	U		0.0276	0.100	1	08/04/2020 23:46	WG1519931
trans-1,2-Dichloroethene	U		0.0572	0.200	1	08/04/2020 23:46	WG1519931
1,2-Dichloropropane	U		0.0508	0.200	1	08/04/2020 23:46	WG1519931
1,1-Dichloropropene	U		0.0280	0.100	1	08/04/2020 23:46	WG1519931
1,3-Dichloropropane	U		0.0700	0.200	1	08/04/2020 23:46	WG1519931
cis-1,3-Dichloropropene	U		0.0271	0.100	1	08/04/2020 23:46	WG1519931
trans-1,3-Dichloropropene	U		0.0612	0.200	1	08/04/2020 23:46	WG1519931
2,2-Dichloropropane	U		0.0317	0.100	1	08/04/2020 23:46	WG1519931
Di-isopropyl ether	U		0.0140	0.0400	1	08/04/2020 23:46	WG1519931
Ethylbenzene	U		0.0212	0.100	1	08/04/2020 23:46	WG1519931
Hexachloro-1,3-butadiene	U		0.508	1.00	1	08/04/2020 23:46	WG1519931
Isopropylbenzene	U		0.0345	0.100	1	08/04/2020 23:46	WG1519931
p-Isopropyltoluene	U		0.0932	0.200	1	08/04/2020 23:46	WG1519931
2-Butanone (MEK)	U		0.500	1.00	1	08/04/2020 23:46	WG1519931
Methylene Chloride	U		0.265	1.00	1	08/04/2020 23:46	WG1519931
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	08/04/2020 23:46	WG1519931
Methyl tert-butyl ether	U		0.0118	0.0400	1	08/04/2020 23:46	WG1519931
Naphthalene	U		0.124	0.500	1	08/04/2020 23:46	WG1519931
n-Propylbenzene	U		0.0472	0.200	1	08/04/2020 23:46	WG1519931
Styrene	U		0.109	0.500	1	08/04/2020 23:46	WG1519931
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	08/04/2020 23:46	WG1519931
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	08/04/2020 23:46	WG1519931
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	08/04/2020 23:46	WG1519931
Tetrachloroethene	U		0.0280	0.100	1	08/04/2020 23:46	WG1519931
Toluene	2.63		0.0500	0.200	1	08/04/2020 23:46	WG1519931
1,2,3-Trichlorobenzene	U		0.0250	0.500	1	08/04/2020 23:46	WG1519931
1,2,4-Trichlorobenzene	U		0.193	0.500	1	08/04/2020 23:46	WG1519931
1,1,1-Trichloroethane	U		0.0110	0.100	1	08/04/2020 23:46	WG1519931
1,1,2-Trichloroethane	U		0.0353	0.100	1	08/04/2020 23:46	WG1519931
Trichloroethene	U		0.0160	0.0400	1	08/04/2020 23:46	WG1519931
Trichlorofluoromethane	U	UJ J0 J3 J4	0.0200	0.100	1	08/04/2020 23:46	WG1519931
1,2,3-Trichloropropane	U		0.204	0.500	1	08/04/2020 23:46	WG1519931
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	08/04/2020 23:46	WG1519931
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	08/04/2020 23:46	WG1519931
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	08/04/2020 23:46	WG1519931
Vinyl chloride	U		0.0273	0.100	1	08/04/2020 23:46	WG1519931
Xylenes, Total	U		0.191	0.260	1	08/04/2020 23:46	WG1519931
Ethyl Ether	U		0.0170	0.100	1	08/04/2020 23:46	WG1519931
Tetrahydrofuran	U	~~J4~~	0.0900	0.500	1	08/04/2020 23:46	WG1519931
Iodomethane	U		0.242	0.500	1	08/04/2020 23:46	WG1519931
Allyl chloride	U		0.580	1.00	1	08/04/2020 23:46	WG1519931
Trans-1,4-Dichloro-2-butene	U		0.0560	0.200	1	08/04/2020 23:46	WG1519931
(S) Toluene-d8	*106*			*75.0-131*		*08/04/2020 23:46*	WG1519931
(S) 4-Bromofluorobenzene	*99.2*			*67.0-138*		*08/04/2020 23:46*	WG1519931
(S) 1,2-Dichloroethane-d4	*103*			*70.0-130*		*08/04/2020 23:46*	WG1519931

JC 8/19/2020

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Wet Chemistry by Method 2320 B-2011

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Alkalinity	106000		8450	20000	1	08/03/2020 13:43	WG1518557

Sample Narrative:

L1243922-08 WG1518557: Endpoint pH 4.5

Wet Chemistry by Method 9056A

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Chloride	9080		379	1000	1	07/28/2020 19:09	WG1516343
Nitrate	U		48.0	100	1	07/28/2020 19:09	WG1516343
Sulfate	11000		594	5000	1	07/28/2020 19:09	WG1516343

Wet Chemistry by Method 9060A

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
TOC (Total Organic Carbon)	2860		102	1000	1	07/29/2020 20:30	WG1516423

Metals (ICPMS) by Method 6020B

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Iron	1680		48.9	100	1	07/29/2020 00:12	WG1516599
Manganese	213		1.32	5.00	1	07/29/2020 00:12	WG1516599

Volatile Organic Compounds (GC) by Method RSK175

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Methane	592		0.287	0.678	1	07/30/2020 12:48	WG1517565
Ethane	U		0.296	1.29	1	07/30/2020 12:48	WG1517565
Ethene	U		0.422	1.27	1	07/30/2020 12:48	WG1517565

Volatile Organic Compounds (GC/MS) by Method 8260D

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Acetone	U		0.548	1.00	1	08/05/2020 00:06	WG1519931
Acrylonitrile	U		0.0760	0.500	1	08/05/2020 00:06	WG1519931
Benzene	U		0.0160	0.0400	1	08/05/2020 00:06	WG1519931
Bromobenzene	U		0.0420	0.500	1	08/05/2020 00:06	WG1519931
Bromodichloromethane	U		0.0315	0.100	1	08/05/2020 00:06	WG1519931
Bromoform	U		0.239	1.00	1	08/05/2020 00:06	WG1519931
Bromomethane	U		0.148	0.500	1	08/05/2020 00:06	WG1519931
n-Butylbenzene	U		0.153	0.500	1	08/05/2020 00:06	WG1519931
sec-Butylbenzene	U		0.101	0.500	1	08/05/2020 00:06	WG1519931
tert-Butylbenzene	U		0.0620	0.200	1	08/05/2020 00:06	WG1519931
Carbon tetrachloride	U		0.0432	0.200	1	08/05/2020 00:06	WG1519931
Chlorobenzene	U		0.0229	0.100	1	08/05/2020 00:06	WG1519931
Chlorodibromomethane	U		0.0180	0.100	1	08/05/2020 00:06	WG1519931
Chloroethane	U		0.0432	0.200	1	08/05/2020 00:06	WG1519931
Chloroform	U		0.0166	0.100	1	08/05/2020 00:06	WG1519931
Chloromethane	U	UJ J0	0.0556	0.500	1	08/05/2020 00:06	WG1519931
2-Chlorotoluene	U		0.0368	0.100	1	08/05/2020 00:06	WG1519931
4-Chlorotoluene	U		0.0452	0.200	1	08/05/2020 00:06	WG1519931
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	08/05/2020 00:06	WG1519931
1,2-Dibromoethane	U		0.0210	0.100	1	08/05/2020 00:06	WG1519931

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Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Dibromomethane	U		0.0400	0.200	1	08/05/2020 00:06	WG1519931
1,2-Dichlorobenzene	U		0.0580	0.200	1	08/05/2020 00:06	WG1519931
1,3-Dichlorobenzene	U		0.0680	0.200	1	08/05/2020 00:06	WG1519931
1,4-Dichlorobenzene	U		0.0788	0.200	1	08/05/2020 00:06	WG1519931
Dichlorodifluoromethane	U	UJ J0	0.0327	0.100	1	08/05/2020 00:06	WG1519931
1,1-Dichloroethane	U		0.0230	0.100	1	08/05/2020 00:06	WG1519931
1,2-Dichloroethane	U		0.0190	0.100	1	08/05/2020 00:06	WG1519931
1,1-Dichloroethene	U		0.0200	0.100	1	08/05/2020 00:06	WG1519931
cis-1,2-Dichloroethene	U		0.0276	0.100	1	08/05/2020 00:06	WG1519931
trans-1,2-Dichloroethene	U		0.0572	0.200	1	08/05/2020 00:06	WG1519931
1,2-Dichloropropane	U		0.0508	0.200	1	08/05/2020 00:06	WG1519931
1,1-Dichloropropene	U		0.0280	0.100	1	08/05/2020 00:06	WG1519931
1,3-Dichloropropane	U		0.0700	0.200	1	08/05/2020 00:06	WG1519931
cis-1,3-Dichloropropene	U		0.0271	0.100	1	08/05/2020 00:06	WG1519931
trans-1,3-Dichloropropene	U		0.0612	0.200	1	08/05/2020 00:06	WG1519931
2,2-Dichloropropane	U		0.0317	0.100	1	08/05/2020 00:06	WG1519931
Di-isopropyl ether	U		0.0140	0.0400	1	08/05/2020 00:06	WG1519931
Ethylbenzene	0.0221	J	0.0212	0.100	1	08/05/2020 00:06	WG1519931
Hexachloro-1,3-butadiene	U		0.508	1.00	1	08/05/2020 00:06	WG1519931
Isopropylbenzene	U		0.0345	0.100	1	08/05/2020 00:06	WG1519931
p-Isopropyltoluene	U		0.0932	0.200	1	08/05/2020 00:06	WG1519931
2-Butanone (MEK)	U		0.500	1.00	1	08/05/2020 00:06	WG1519931
Methylene Chloride	U		0.265	1.00	1	08/05/2020 00:06	WG1519931
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	08/05/2020 00:06	WG1519931
Methyl tert-butyl ether	U		0.0118	0.0400	1	08/05/2020 00:06	WG1519931
Naphthalene	U		0.124	0.500	1	08/05/2020 00:06	WG1519931
n-Propylbenzene	U		0.0472	0.200	1	08/05/2020 00:06	WG1519931
Styrene	U		0.109	0.500	1	08/05/2020 00:06	WG1519931
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	08/05/2020 00:06	WG1519931
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	08/05/2020 00:06	WG1519931
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	08/05/2020 00:06	WG1519931
Tetrachloroethene	U		0.0280	0.100	1	08/05/2020 00:06	WG1519931
Toluene	1.93		0.0500	0.200	1	08/05/2020 00:06	WG1519931
1,2,3-Trichlorobenzene	U		0.0250	0.500	1	08/05/2020 00:06	WG1519931
1,2,4-Trichlorobenzene	U		0.193	0.500	1	08/05/2020 00:06	WG1519931
1,1,1-Trichloroethane	U		0.0110	0.100	1	08/05/2020 00:06	WG1519931
1,1,2-Trichloroethane	U		0.0353	0.100	1	08/05/2020 00:06	WG1519931
Trichloroethene	U		0.0160	0.0400	1	08/05/2020 00:06	WG1519931
Trichlorofluoromethane	U	UJ J0 J3 J4	0.0200	0.100	1	08/05/2020 00:06	WG1519931
1,2,3-Trichloropropane	U		0.204	0.500	1	08/05/2020 00:06	WG1519931
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	08/05/2020 00:06	WG1519931
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	08/05/2020 00:06	WG1519931
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	08/05/2020 00:06	WG1519931
Vinyl chloride	U		0.0273	0.100	1	08/05/2020 00:06	WG1519931
Xylenes, Total	U		0.191	0.260	1	08/05/2020 00:06	WG1519931
Ethyl Ether	U		0.0170	0.100	1	08/05/2020 00:06	WG1519931
Tetrahydrofuran	U	~~J4~~	0.0900	0.500	1	08/05/2020 00:06	WG1519931
Iodomethane	U		0.242	0.500	1	08/05/2020 00:06	WG1519931
Allyl chloride	U		0.580	1.00	1	08/05/2020 00:06	WG1519931
Trans-1,4-Dichloro-2-butene	U		0.0560	0.200	1	08/05/2020 00:06	WG1519931
(S) Toluene-d8	*105*			*75.0-131*		*08/05/2020 00:06*	WG1519931
(S) 4-Bromofluorobenzene	*98.3*			*67.0-138*		*08/05/2020 00:06*	WG1519931
(S) 1,2-Dichloroethane-d4	*103*			*70.0-130*		*08/05/2020 00:06*	WG1519931

JC 8/19/2020

SAMPLE RESULTS - 09

L1243922

Wet Chemistry by Method 2320 B-2011

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Alkalinity	241000		8450	20000	1	08/03/2020 13:51	WG1518557

Sample Narrative:

L1243922-09 WG1518557: Endpoint pH 4.5

Wet Chemistry by Method 9056A

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Chloride	17400		379	1000	1	07/28/2020 19:26	WG1516343
Nitrate	U		48.0	100	1	07/28/2020 19:26	WG1516343
Sulfate	79800		594	5000	1	07/28/2020 19:26	WG1516343

Wet Chemistry by Method 9060A

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
TOC (Total Organic Carbon)	1810	~~B~~	102	1000	1	07/29/2020 20:44	WG1516423

Metals (ICPMS) by Method 6020B

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Iron	2880		48.9	100	1	07/29/2020 00:16	WG1516599
Manganese	830		1.32	5.00	1	07/29/2020 00:16	WG1516599

Volatile Organic Compounds (GC) by Method RSK175

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Methane	118		0.287	0.678	1	07/30/2020 12:50	WG1517565
Ethane	U		0.296	1.29	1	07/30/2020 12:50	WG1517565
Ethene	U		0.422	1.27	1	07/30/2020 12:50	WG1517565

Volatile Organic Compounds (GC/MS) by Method 8260D

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Acetone	U		0.548	1.00	1	08/05/2020 00:26	WG1519931
Acrylonitrile	U		0.0760	0.500	1	08/05/2020 00:26	WG1519931
Benzene	0.0336	J	0.0160	0.0400	1	08/05/2020 00:26	WG1519931
Bromobenzene	U		0.0420	0.500	1	08/05/2020 00:26	WG1519931
Bromodichloromethane	U		0.0315	0.100	1	08/05/2020 00:26	WG1519931
Bromoform	U		0.239	1.00	1	08/05/2020 00:26	WG1519931
Bromomethane	U		0.148	0.500	1	08/05/2020 00:26	WG1519931
n-Butylbenzene	U		0.153	0.500	1	08/05/2020 00:26	WG1519931
sec-Butylbenzene	U		0.101	0.500	1	08/05/2020 00:26	WG1519931
tert-Butylbenzene	U		0.0620	0.200	1	08/05/2020 00:26	WG1519931
Carbon tetrachloride	U		0.0432	0.200	1	08/05/2020 00:26	WG1519931
Chlorobenzene	U		0.0229	0.100	1	08/05/2020 00:26	WG1519931
Chlorodibromomethane	U		0.0180	0.100	1	08/05/2020 00:26	WG1519931
Chloroethane	U		0.0432	0.200	1	08/05/2020 00:26	WG1519931
Chloroform	U		0.0166	0.100	1	08/05/2020 00:26	WG1519931
Chloromethane	U	UJ J0	0.0556	0.500	1	08/05/2020 00:26	WG1519931
2-Chlorotoluene	U		0.0368	0.100	1	08/05/2020 00:26	WG1519931
4-Chlorotoluene	U		0.0452	0.200	1	08/05/2020 00:26	WG1519931
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	08/05/2020 00:26	WG1519931
1,2-Dibromoethane	U		0.0210	0.100	1	08/05/2020 00:26	WG1519931

JC 8/19/2020

MW-319-072720
Collected date/time: 07/27/20 14:45

SAMPLE RESULTS - 09

L1243922

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Dibromomethane	U		0.0400	0.200	1	08/05/2020 00:26	WG1519931
1,2-Dichlorobenzene	U		0.0580	0.200	1	08/05/2020 00:26	WG1519931
1,3-Dichlorobenzene	U		0.0680	0.200	1	08/05/2020 00:26	WG1519931
1,4-Dichlorobenzene	U		0.0788	0.200	1	08/05/2020 00:26	WG1519931
Dichlorodifluoromethane	U	UJ J0	0.0327	0.100	1	08/05/2020 00:26	WG1519931
1,1-Dichloroethane	0.246		0.0230	0.100	1	08/05/2020 00:26	WG1519931
1,2-Dichloroethane	U		0.0190	0.100	1	08/05/2020 00:26	WG1519931
1,1-Dichloroethene	0.138		0.0200	0.100	1	08/05/2020 00:26	WG1519931
cis-1,2-Dichloroethene	49.2		0.0276	0.100	1	08/05/2020 00:26	WG1519931
trans-1,2-Dichloroethene	0.0806	J	0.0572	0.200	1	08/05/2020 00:26	WG1519931
1,2-Dichloropropane	U		0.0508	0.200	1	08/05/2020 00:26	WG1519931
1,1-Dichloropropene	U		0.0280	0.100	1	08/05/2020 00:26	WG1519931
1,3-Dichloropropane	U		0.0700	0.200	1	08/05/2020 00:26	WG1519931
cis-1,3-Dichloropropene	U		0.0271	0.100	1	08/05/2020 00:26	WG1519931
trans-1,3-Dichloropropene	U		0.0612	0.200	1	08/05/2020 00:26	WG1519931
2,2-Dichloropropane	U		0.0317	0.100	1	08/05/2020 00:26	WG1519931
Di-isopropyl ether	U		0.0140	0.0400	1	08/05/2020 00:26	WG1519931
Ethylbenzene	0.0450	J	0.0212	0.100	1	08/05/2020 00:26	WG1519931
Hexachloro-1,3-butadiene	U		0.508	1.00	1	08/05/2020 00:26	WG1519931
Isopropylbenzene	U		0.0345	0.100	1	08/05/2020 00:26	WG1519931
p-Isopropyltoluene	U		0.0932	0.200	1	08/05/2020 00:26	WG1519931
2-Butanone (MEK)	U		0.500	1.00	1	08/05/2020 00:26	WG1519931
Methylene Chloride	U		0.265	1.00	1	08/05/2020 00:26	WG1519931
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	08/05/2020 00:26	WG1519931
Methyl tert-butyl ether	U		0.0118	0.0400	1	08/05/2020 00:26	WG1519931
Naphthalene	U		0.124	0.500	1	08/05/2020 00:26	WG1519931
n-Propylbenzene	U		0.0472	0.200	1	08/05/2020 00:26	WG1519931
Styrene	U		0.109	0.500	1	08/05/2020 00:26	WG1519931
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	08/05/2020 00:26	WG1519931
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	08/05/2020 00:26	WG1519931
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	08/05/2020 00:26	WG1519931
Tetrachloroethene	0.0933	J	0.0280	0.100	1	08/05/2020 00:26	WG1519931
Toluene	0.399		0.0500	0.200	1	08/05/2020 00:26	WG1519931
1,2,3-Trichlorobenzene	U		0.0250	0.500	1	08/05/2020 00:26	WG1519931
1,2,4-Trichlorobenzene	U		0.193	0.500	1	08/05/2020 00:26	WG1519931
1,1,1-Trichloroethane	U		0.0110	0.100	1	08/05/2020 00:26	WG1519931
1,1,2-Trichloroethane	U		0.0353	0.100	1	08/05/2020 00:26	WG1519931
Trichloroethene	13.6		0.0160	0.0400	1	08/05/2020 00:26	WG1519931
Trichlorofluoromethane	U	UJ J0 J3 J4	0.0200	0.100	1	08/05/2020 00:26	WG1519931
1,2,3-Trichloropropane	U		0.204	0.500	1	08/05/2020 00:26	WG1519931
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	08/05/2020 00:26	WG1519931
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	08/05/2020 00:26	WG1519931
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	08/05/2020 00:26	WG1519931
Vinyl chloride	4.77		0.0273	0.100	1	08/05/2020 00:26	WG1519931
Xylenes, Total	0.207	J	0.191	0.260	1	08/05/2020 00:26	WG1519931
Ethyl Ether	U		0.0170	0.100	1	08/05/2020 00:26	WG1519931
Tetrahydrofuran	U	~~J4~~	0.0900	0.500	1	08/05/2020 00:26	WG1519931
Iodomethane	U		0.242	0.500	1	08/05/2020 00:26	WG1519931
Allyl chloride	U		0.580	1.00	1	08/05/2020 00:26	WG1519931
Trans-1,4-Dichloro-2-butene	U		0.0560	0.200	1	08/05/2020 00:26	WG1519931
(S) Toluene-d8	*106*			*75.0-131*		*08/05/2020 00:26*	WG1519931
(S) 4-Bromofluorobenzene	*97.4*			*67.0-138*		*08/05/2020 00:26*	WG1519931
(S) 1,2-Dichloroethane-d4	*102*			*70.0-130*		*08/05/2020 00:26*	WG1519931

JC 8/19/2020

EQ-072720
Collected date/time: 07/27/20 15:15

SAMPLE RESULTS - 10

L1243922

Wet Chemistry by Method 2320 B-2011

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Alkalinity	U		8450	20000	1	08/03/2020 13:58	WG1518557

Sample Narrative:

L1243922-10 WG1518557: Endpoint pH 4.5

Wet Chemistry by Method 9056A

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Chloride	U		379	1000	1	07/28/2020 19:42	WG1516343
Nitrate	51.6	J	48.0	100	1	07/28/2020 19:42	WG1516343
Sulfate	U		594	5000	1	07/28/2020 19:42	WG1516343

Wet Chemistry by Method 9060A

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
TOC (Total Organic Carbon)	354	B J	102	1000	1	07/29/2020 20:59	WG1516423

Metals (ICPMS) by Method 6020B

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Iron	U		48.9	100	1	07/29/2020 00:19	WG1516599
Manganese	1.77	J	1.32	5.00	1	07/29/2020 00:19	WG1516599

Volatile Organic Compounds (GC) by Method RSK175

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Methane	U		0.287	0.678	1	07/30/2020 13:08	WG1517565
Ethane	U		0.296	1.29	1	07/30/2020 13:08	WG1517565
Ethene	U		0.422	1.27	1	07/30/2020 13:08	WG1517565

Volatile Organic Compounds (GC/MS) by Method 8260D

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Acetone	1.62		0.548	1.00	1	08/04/2020 20:41	WG1519931
Acrylonitrile	U		0.0760	0.500	1	08/04/2020 20:41	WG1519931
Benzene	U		0.0160	0.0400	1	08/04/2020 20:41	WG1519931
Bromobenzene	U		0.0420	0.500	1	08/04/2020 20:41	WG1519931
Bromodichloromethane	U		0.0315	0.100	1	08/04/2020 20:41	WG1519931
Bromoform	U		0.239	1.00	1	08/04/2020 20:41	WG1519931
Bromomethane	U		0.148	0.500	1	08/04/2020 20:41	WG1519931
n-Butylbenzene	U		0.153	0.500	1	08/04/2020 20:41	WG1519931
sec-Butylbenzene	U		0.101	0.500	1	08/04/2020 20:41	WG1519931
tert-Butylbenzene	U		0.0620	0.200	1	08/04/2020 20:41	WG1519931
Carbon tetrachloride	U		0.0432	0.200	1	08/04/2020 20:41	WG1519931
Chlorobenzene	U		0.0229	0.100	1	08/04/2020 20:41	WG1519931
Chlorodibromomethane	U		0.0180	0.100	1	08/04/2020 20:41	WG1519931
Chloroethane	U		0.0432	0.200	1	08/04/2020 20:41	WG1519931
Chloroform	U		0.0166	0.100	1	08/04/2020 20:41	WG1519931
Chloromethane	U	J0	0.0556	0.500	1	08/04/2020 20:41	WG1519931
2-Chlorotoluene	U		0.0368	0.100	1	08/04/2020 20:41	WG1519931
4-Chlorotoluene	U		0.0452	0.200	1	08/04/2020 20:41	WG1519931
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	08/04/2020 20:41	WG1519931
1,2-Dibromoethane	U		0.0210	0.100	1	08/04/2020 20:41	WG1519931

JC 8/19/2020

EQ-072720

Collected date/time: 07/27/20 15:15

SAMPLE RESULTS - 10

L1243922

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Dibromomethane	U		0.0400	0.200	1	08/04/2020 20:41	WG1519931
1,2-Dichlorobenzene	U		0.0580	0.200	1	08/04/2020 20:41	WG1519931
1,3-Dichlorobenzene	U		0.0680	0.200	1	08/04/2020 20:41	WG1519931
1,4-Dichlorobenzene	U		0.0788	0.200	1	08/04/2020 20:41	WG1519931
Dichlorodifluoromethane	U	J0	0.0327	0.100	1	08/04/2020 20:41	WG1519931
1,1-Dichloroethane	U		0.0230	0.100	1	08/04/2020 20:41	WG1519931
1,2-Dichloroethane	U		0.0190	0.100	1	08/04/2020 20:41	WG1519931
1,1-Dichloroethene	U		0.0200	0.100	1	08/04/2020 20:41	WG1519931
cis-1,2-Dichloroethene	U		0.0276	0.100	1	08/04/2020 20:41	WG1519931
trans-1,2-Dichloroethene	U		0.0572	0.200	1	08/04/2020 20:41	WG1519931
1,2-Dichloropropane	U		0.0508	0.200	1	08/04/2020 20:41	WG1519931
1,1-Dichloropropene	U		0.0280	0.100	1	08/04/2020 20:41	WG1519931
1,3-Dichloropropane	U		0.0700	0.200	1	08/04/2020 20:41	WG1519931
cis-1,3-Dichloropropene	U		0.0271	0.100	1	08/04/2020 20:41	WG1519931
trans-1,3-Dichloropropene	U		0.0612	0.200	1	08/04/2020 20:41	WG1519931
2,2-Dichloropropane	U		0.0317	0.100	1	08/04/2020 20:41	WG1519931
Di-isopropyl ether	U		0.0140	0.0400	1	08/04/2020 20:41	WG1519931
Ethylbenzene	U		0.0212	0.100	1	08/04/2020 20:41	WG1519931
Hexachloro-1,3-butadiene	U		0.508	1.00	1	08/04/2020 20:41	WG1519931
Isopropylbenzene	U		0.0345	0.100	1	08/04/2020 20:41	WG1519931
p-Isopropyltoluene	U		0.0932	0.200	1	08/04/2020 20:41	WG1519931
2-Butanone (MEK)	1.13		0.500	1.00	1	08/04/2020 20:41	WG1519931
Methylene Chloride	U		0.265	1.00	1	08/04/2020 20:41	WG1519931
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	08/04/2020 20:41	WG1519931
Methyl tert-butyl ether	U		0.0118	0.0400	1	08/04/2020 20:41	WG1519931
Naphthalene	U		0.124	0.500	1	08/04/2020 20:41	WG1519931
n-Propylbenzene	U		0.0472	0.200	1	08/04/2020 20:41	WG1519931
Styrene	U		0.109	0.500	1	08/04/2020 20:41	WG1519931
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	08/04/2020 20:41	WG1519931
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	08/04/2020 20:41	WG1519931
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	08/04/2020 20:41	WG1519931
Tetrachloroethene	U		0.0280	0.100	1	08/04/2020 20:41	WG1519931
Toluene	U		0.0500	0.200	1	08/04/2020 20:41	WG1519931
1,2,3-Trichlorobenzene	U		0.0250	0.500	1	08/04/2020 20:41	WG1519931
1,2,4-Trichlorobenzene	U		0.193	0.500	1	08/04/2020 20:41	WG1519931
1,1,1-Trichloroethane	U		0.0110	0.100	1	08/04/2020 20:41	WG1519931
1,1,2-Trichloroethane	U		0.0353	0.100	1	08/04/2020 20:41	WG1519931
Trichloroethene	U		0.0160	0.0400	1	08/04/2020 20:41	WG1519931
Trichlorofluoromethane	U	J0 J3 J4	0.0200	0.100	1	08/04/2020 20:41	WG1519931
1,2,3-Trichloropropane	U		0.204	0.500	1	08/04/2020 20:41	WG1519931
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	08/04/2020 20:41	WG1519931
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	08/04/2020 20:41	WG1519931
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	08/04/2020 20:41	WG1519931
Vinyl chloride	U		0.0273	0.100	1	08/04/2020 20:41	WG1519931
Xylenes, Total	U		0.191	0.260	1	08/04/2020 20:41	WG1519931
Ethyl Ether	U		0.0170	0.100	1	08/04/2020 20:41	WG1519931
Tetrahydrofuran	U	J4	0.0900	0.500	1	08/04/2020 20:41	WG1519931
Iodomethane	U		0.242	0.500	1	08/04/2020 20:41	WG1519931
Allyl chloride	U		0.580	1.00	1	08/04/2020 20:41	WG1519931
Trans-1,4-Dichloro-2-butene	U		0.0560	0.200	1	08/04/2020 20:41	WG1519931
(S) Toluene-d8	*105*			*75.0-131*		*08/04/2020 20:41*	WG1519931
(S) 4-Bromofluorobenzene	*100*			*67.0-138*		*08/04/2020 20:41*	WG1519931
(S) 1,2-Dichloroethane-d4	*103*			*70.0-130*		*08/04/2020 20:41*	WG1519931

JC 8/19/2020

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Wet Chemistry by Method 2320 B-2011

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Alkalinity	242000		8450	20000	1	08/03/2020 21:42	WG1518564

Sample Narrative:

L1244396-01 WG1518564: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 9056A

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Chloride	44300		379	1000	1	07/29/2020 22:40	WG1517060
Nitrate	U		48.0	100	1	07/29/2020 22:40	WG1517060
Sulfate	112000		2970	25000	5	08/05/2020 01:44	WG1517686

Wet Chemistry by Method 9060A

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
TOC (Total Organic Carbon)	3750		102	1000	1	07/31/2020 16:48	WG1518323

Metals (ICPMS) by Method 6020B

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Iron	3700		48.9	100	1	07/30/2020 14:27	WG1517393
Manganese	3220		1.32	5.00	1	07/30/2020 14:27	WG1517393

Volatile Organic Compounds (GC) by Method RSK175

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Methane	52.0		0.287	0.678	1	07/30/2020 16:01	WG1517569
Ethane	U		0.296	1.29	1	07/30/2020 16:01	WG1517569
Ethene	U		0.422	1.27	1	07/30/2020 16:01	WG1517569

Volatile Organic Compounds (GC/MS) by Method 8260D

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Acetone	U		11.3	25.0	1	07/31/2020 06:54	WG1518130
Acrylonitrile	U		0.671	5.00	1	07/31/2020 06:54	WG1518130
Benzene	U		0.0941	0.500	1	07/31/2020 06:54	WG1518130
Bromobenzene	U		0.118	0.500	1	07/31/2020 06:54	WG1518130
Bromodichloromethane	U		0.136	0.500	1	07/31/2020 06:54	WG1518130
Bromochloromethane	U		0.128	0.500	1	07/31/2020 06:54	WG1518130
Bromoform	U		0.129	0.500	1	07/31/2020 06:54	WG1518130
Bromomethane	U		0.605	2.50	1	07/31/2020 06:54	WG1518130
n-Butylbenzene	U		0.157	0.500	1	07/31/2020 06:54	WG1518130
sec-Butylbenzene	U		0.125	0.500	1	07/31/2020 06:54	WG1518130
tert-Butylbenzene	U		0.127	0.500	1	07/31/2020 06:54	WG1518130
Carbon disulfide	U	UJ J0	0.0962	0.500	1	07/31/2020 06:54	WG1518130
Carbon tetrachloride	U		0.128	0.500	1	07/31/2020 06:54	WG1518130
Chlorobenzene	U		0.117	0.500	1	07/31/2020 06:54	WG1518130
Chlorodibromomethane	U		0.140	0.500	1	07/31/2020 06:54	WG1518130
Chloroethane	U		0.192	2.50	1	07/31/2020 06:54	WG1518130
Chloroform	U		0.111	0.500	1	07/31/2020 06:54	WG1518130
Chloromethane	U		0.960	1.25	1	07/31/2020 06:54	WG1518130
2-Chlorotoluene	U		0.106	0.500	1	07/31/2020 06:54	WG1518130
4-Chlorotoluene	U		0.114	0.500	1	07/31/2020 06:54	WG1518130

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Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,2-Dibromo-3-Chloropropane	U		0.276	2.50	1	07/31/2020 06:54	WG1518130
1,2-Dibromoethane	U		0.126	0.500	1	07/31/2020 06:54	WG1518130
Dibromomethane	U		0.122	0.500	1	07/31/2020 06:54	WG1518130
1,2-Dichlorobenzene	U		0.107	0.500	1	07/31/2020 06:54	WG1518130
1,3-Dichlorobenzene	U		0.299	0.500	1	07/31/2020 06:54	WG1518130
1,4-Dichlorobenzene	U		0.120	0.500	1	07/31/2020 06:54	WG1518130
Dichlorodifluoromethane	U		0.374	2.50	1	07/31/2020 06:54	WG1518130
1,1-Dichloroethane	U		0.100	0.500	1	07/31/2020 06:54	WG1518130
1,2-Dichloroethane	U		0.0819	0.500	1	07/31/2020 06:54	WG1518130
1,1-Dichloroethene	U		0.188	0.500	1	07/31/2020 06:54	WG1518130
cis-1,2-Dichloroethene	U		0.126	0.500	1	07/31/2020 06:54	WG1518130
trans-1,2-Dichloroethene	U		0.149	0.500	1	07/31/2020 06:54	WG1518130
1,2-Dichloropropane	U		0.149	0.500	1	07/31/2020 06:54	WG1518130
1,1-Dichloropropene	U		0.142	0.500	1	07/31/2020 06:54	WG1518130
1,3-Dichloropropane	U		0.109	1.00	1	07/31/2020 06:54	WG1518130
cis-1,3-Dichloropropene	U		0.111	0.500	1	07/31/2020 06:54	WG1518130
trans-1,3-Dichloropropene	U		0.118	0.500	1	07/31/2020 06:54	WG1518130
trans-1,4-Dichloro-2-butene	U		0.467	5.00	1	07/31/2020 06:54	WG1518130
2,2-Dichloropropane	U	UJ J0	0.161	0.500	1	07/31/2020 06:54	WG1518130
Di-isopropyl ether	U		0.105	0.500	1	07/31/2020 06:54	WG1518130
Ethylbenzene	U		0.137	0.500	1	07/31/2020 06:54	WG1518130
Hexachloro-1,3-butadiene	U		0.337	1.00	1	07/31/2020 06:54	WG1518130
2-Hexanone	U		0.787	5.00	1	07/31/2020 06:54	WG1518130
n-Hexane	U		0.749	5.00	1	07/31/2020 06:54	WG1518130
Iodomethane	U	UJ J0	0.554	5.00	1	07/31/2020 06:54	WG1518130
Isopropylbenzene	U		0.105	0.500	1	07/31/2020 06:54	WG1518130
p-Isopropyltoluene	U		0.120	0.500	1	07/31/2020 06:54	WG1518130
2-Butanone (MEK)	U		1.19	5.00	1	07/31/2020 06:54	WG1518130
Methylene Chloride	U		0.430	2.50	1	07/31/2020 06:54	WG1518130
4-Methyl-2-pentanone (MIBK)	U		0.478	5.00	1	07/31/2020 06:54	WG1518130
Methyl tert-butyl ether	U		0.101	0.500	1	07/31/2020 06:54	WG1518130
Naphthalene	U		0.174	2.50	1	07/31/2020 06:54	WG1518130
n-Propylbenzene	U		0.0993	0.500	1	07/31/2020 06:54	WG1518130
Styrene	U		0.118	0.500	1	07/31/2020 06:54	WG1518130
1,1,1,2-Tetrachloroethane	U		0.147	0.500	1	07/31/2020 06:54	WG1518130
1,1,2,2-Tetrachloroethane	U		0.133	0.500	1	07/31/2020 06:54	WG1518130
1,1,2-Trichlorotrifluoroethane	U	UJ J0	0.180	0.500	1	07/31/2020 06:54	WG1518130
Tetrachloroethene	U		0.300	0.500	1	07/31/2020 06:54	WG1518130
Toluene	U		0.278	0.500	1	07/31/2020 06:54	WG1518130
1,2,3-Trichlorobenzene	U		0.164	0.500	1	07/31/2020 06:54	WG1518130
1,2,4-Trichlorobenzene	U		0.481	1.00	1	07/31/2020 06:54	WG1518130
1,1,1-Trichloroethane	U		0.149	0.500	1	07/31/2020 06:54	WG1518130
1,1,2-Trichloroethane	U		0.158	0.500	1	07/31/2020 06:54	WG1518130
Trichloroethene	U		0.190	0.500	1	07/31/2020 06:54	WG1518130
Trichlorofluoromethane	U		0.160	2.50	1	07/31/2020 06:54	WG1518130
1,2,3-Trichloropropane	U		0.237	2.50	1	07/31/2020 06:54	WG1518130
1,2,4-Trimethylbenzene	U		0.322	0.500	1	07/31/2020 06:54	WG1518130
1,2,3-Trimethylbenzene	U		0.104	0.500	1	07/31/2020 06:54	WG1518130
1,3,5-Trimethylbenzene	U		0.104	0.500	1	07/31/2020 06:54	WG1518130
Vinyl acetate	U		0.692	5.00	1	07/31/2020 06:54	WG1518130
Vinyl chloride	U		0.234	0.500	1	07/31/2020 06:54	WG1518130
Xylenes, Total	U		0.174	1.50	1	07/31/2020 06:54	WG1518130
(S) Toluene-d8	*104*			*80.0-120*		*07/31/2020 06:54*	WG1518130
(S) 4-Bromofluorobenzene	*95.8*			*77.0-126*		*07/31/2020 06:54*	WG1518130
(S) 1,2-Dichloroethane-d4	*101*			*70.0-130*		*07/31/2020 06:54*	WG1518130

JC 8/21/2020

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	370000		8450	20000	1	08/03/2020 21:49	WG1518564

Sample Narrative:

L1244396-02 WG1518564: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	25800		379	1000	1	07/29/2020 23:31	WG1517060
Nitrate	U		48.0	100	1	07/29/2020 23:31	WG1517060
Sulfate	22000		594	5000	1	07/29/2020 23:31	WG1517060

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	1640	~~B~~	102	1000	1	07/31/2020 16:59	WG1518323

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	1640		48.9	100	1	07/30/2020 14:30	WG1517393
Manganese	335		1.32	5.00	1	07/30/2020 14:30	WG1517393

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	299		0.287	0.678	1	07/30/2020 16:03	WG1517569
Ethane	U		0.296	1.29	1	07/30/2020 16:03	WG1517569
Ethene	U		0.422	1.27	1	07/30/2020 16:03	WG1517569

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U		11.3	25.0	1	07/31/2020 07:14	WG1518130
Acrylonitrile	U		0.671	5.00	1	07/31/2020 07:14	WG1518130
Benzene	U		0.0941	0.500	1	07/31/2020 07:14	WG1518130
Bromobenzene	U		0.118	0.500	1	07/31/2020 07:14	WG1518130
Bromodichloromethane	U		0.136	0.500	1	07/31/2020 07:14	WG1518130
Bromochloromethane	U		0.128	0.500	1	07/31/2020 07:14	WG1518130
Bromoform	U		0.129	0.500	1	07/31/2020 07:14	WG1518130
Bromomethane	U		0.605	2.50	1	07/31/2020 07:14	WG1518130
n-Butylbenzene	U		0.157	0.500	1	07/31/2020 07:14	WG1518130
sec-Butylbenzene	U		0.125	0.500	1	07/31/2020 07:14	WG1518130
tert-Butylbenzene	U		0.127	0.500	1	07/31/2020 07:14	WG1518130
Carbon disulfide	U UJ	J0	0.0962	0.500	1	07/31/2020 07:14	WG1518130
Carbon tetrachloride	U		0.128	0.500	1	07/31/2020 07:14	WG1518130
Chlorobenzene	U		0.117	0.500	1	07/31/2020 07:14	WG1518130
Chlorodibromomethane	U		0.140	0.500	1	07/31/2020 07:14	WG1518130
Chloroethane	U		0.192	2.50	1	07/31/2020 07:14	WG1518130
Chloroform	U		0.111	0.500	1	07/31/2020 07:14	WG1518130
Chloromethane	U		0.960	1.25	1	07/31/2020 07:14	WG1518130
2-Chlorotoluene	U		0.106	0.500	1	07/31/2020 07:14	WG1518130
4-Chlorotoluene	U		0.114	0.500	1	07/31/2020 07:14	WG1518130

JC 8/21/2020

MW-302-072820

Collected date/time: 07/28/20 09:55

SAMPLE RESULTS - 02

L1244396

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,2-Dibromo-3-Chloropropane	U		0.276	2.50	1	07/31/2020 07:14	WG1518130
1,2-Dibromoethane	U		0.126	0.500	1	07/31/2020 07:14	WG1518130
Dibromomethane	U		0.122	0.500	1	07/31/2020 07:14	WG1518130
1,2-Dichlorobenzene	U		0.107	0.500	1	07/31/2020 07:14	WG1518130
1,3-Dichlorobenzene	U		0.299	0.500	1	07/31/2020 07:14	WG1518130
1,4-Dichlorobenzene	U		0.120	0.500	1	07/31/2020 07:14	WG1518130
Dichlorodifluoromethane	U		0.374	2.50	1	07/31/2020 07:14	WG1518130
1,1-Dichloroethane	U		0.100	0.500	1	07/31/2020 07:14	WG1518130
1,2-Dichloroethane	U		0.0819	0.500	1	07/31/2020 07:14	WG1518130
1,1-Dichloroethene	U		0.188	0.500	1	07/31/2020 07:14	WG1518130
cis-1,2-Dichloroethene	U		0.126	0.500	1	07/31/2020 07:14	WG1518130
trans-1,2-Dichloroethene	U		0.149	0.500	1	07/31/2020 07:14	WG1518130
1,2-Dichloropropane	U		0.149	0.500	1	07/31/2020 07:14	WG1518130
1,1-Dichloropropene	U		0.142	0.500	1	07/31/2020 07:14	WG1518130
1,3-Dichloropropane	U		0.109	1.00	1	07/31/2020 07:14	WG1518130
cis-1,3-Dichloropropene	U		0.111	0.500	1	07/31/2020 07:14	WG1518130
trans-1,3-Dichloropropene	U		0.118	0.500	1	07/31/2020 07:14	WG1518130
trans-1,4-Dichloro-2-butene	U		0.467	5.00	1	07/31/2020 07:14	WG1518130
2,2-Dichloropropane	U	UJ J0	0.161	0.500	1	07/31/2020 07:14	WG1518130
Di-isopropyl ether	U		0.105	0.500	1	07/31/2020 07:14	WG1518130
Ethylbenzene	U		0.137	0.500	1	07/31/2020 07:14	WG1518130
Hexachloro-1,3-butadiene	U		0.337	1.00	1	07/31/2020 07:14	WG1518130
2-Hexanone	U		0.787	5.00	1	07/31/2020 07:14	WG1518130
n-Hexane	U		0.749	5.00	1	07/31/2020 07:14	WG1518130
Iodomethane	U	UJ J0	0.554	5.00	1	07/31/2020 07:14	WG1518130
Isopropylbenzene	U		0.105	0.500	1	07/31/2020 07:14	WG1518130
p-Isopropyltoluene	U		0.120	0.500	1	07/31/2020 07:14	WG1518130
2-Butanone (MEK)	U		1.19	5.00	1	07/31/2020 07:14	WG1518130
Methylene Chloride	U		0.430	2.50	1	07/31/2020 07:14	WG1518130
4-Methyl-2-pentanone (MIBK)	U		0.478	5.00	1	07/31/2020 07:14	WG1518130
Methyl tert-butyl ether	U		0.101	0.500	1	07/31/2020 07:14	WG1518130
Naphthalene	U		0.174	2.50	1	07/31/2020 07:14	WG1518130
n-Propylbenzene	U		0.0993	0.500	1	07/31/2020 07:14	WG1518130
Styrene	U		0.118	0.500	1	07/31/2020 07:14	WG1518130
1,1,1,2-Tetrachloroethane	U		0.147	0.500	1	07/31/2020 07:14	WG1518130
1,1,2,2-Tetrachloroethane	U		0.133	0.500	1	07/31/2020 07:14	WG1518130
1,1,2-Trichlorotrifluoroethane	U	UJ J0	0.180	0.500	1	07/31/2020 07:14	WG1518130
Tetrachloroethene	U		0.300	0.500	1	07/31/2020 07:14	WG1518130
Toluene	U		0.278	0.500	1	07/31/2020 07:14	WG1518130
1,2,3-Trichlorobenzene	U		0.164	0.500	1	07/31/2020 07:14	WG1518130
1,2,4-Trichlorobenzene	U		0.481	1.00	1	07/31/2020 07:14	WG1518130
1,1,1-Trichloroethane	U		0.149	0.500	1	07/31/2020 07:14	WG1518130
1,1,2-Trichloroethane	U		0.158	0.500	1	07/31/2020 07:14	WG1518130
Trichloroethene	U		0.190	0.500	1	07/31/2020 07:14	WG1518130
Trichlorofluoromethane	U		0.160	2.50	1	07/31/2020 07:14	WG1518130
1,2,3-Trichloropropane	U		0.237	2.50	1	07/31/2020 07:14	WG1518130
1,2,4-Trimethylbenzene	U		0.322	0.500	1	07/31/2020 07:14	WG1518130
1,2,3-Trimethylbenzene	U		0.104	0.500	1	07/31/2020 07:14	WG1518130
1,3,5-Trimethylbenzene	U		0.104	0.500	1	07/31/2020 07:14	WG1518130
Vinyl acetate	U		0.692	5.00	1	07/31/2020 07:14	WG1518130
Vinyl chloride	U		0.234	0.500	1	07/31/2020 07:14	WG1518130
Xylenes, Total	U		0.174	1.50	1	07/31/2020 07:14	WG1518130
(S) Toluene-d8	*107*			*80.0-120*		*07/31/2020 07:14*	WG1518130
(S) 4-Bromofluorobenzene	*95.3*			*77.0-126*		*07/31/2020 07:14*	WG1518130
(S) 1,2-Dichloroethane-d4	*99.9*			*70.0-130*		*07/31/2020 07:14*	WG1518130

JC 8/21/2020

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	396000		8450	20000	1	08/03/2020 21:56	WG1518564

Sample Narrative:

L1244396-03 WG1518564: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	39200		379	1000	1	07/29/2020 23:48	WG1517060
Nitrate	U		48.0	100	1	07/29/2020 23:48	WG1517060
Sulfate	64200		594	5000	1	07/29/2020 23:48	WG1517060

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	7850		102	1000	1	07/31/2020 17:45	WG1518323

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	5910		48.9	100	1	07/30/2020 14:33	WG1517393
Manganese	599		1.32	5.00	1	07/30/2020 14:33	WG1517393

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	3060		0.287	0.678	1	07/30/2020 16:05	WG1517569
Ethane	59.4		0.296	1.29	1	07/30/2020 16:05	WG1517569
Ethene	16.6		0.422	1.27	1	07/30/2020 16:05	WG1517569

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U		1130	2500	100	07/31/2020 07:34	WG1518130
Acrylonitrile	U		67.1	500	100	07/31/2020 07:34	WG1518130
Benzene	U		9.41	50.0	100	07/31/2020 07:34	WG1518130
Bromobenzene	U		11.8	50.0	100	07/31/2020 07:34	WG1518130
Bromodichloromethane	U		13.6	50.0	100	07/31/2020 07:34	WG1518130
Bromochloromethane	U		12.8	50.0	100	07/31/2020 07:34	WG1518130
Bromoform	U		12.9	50.0	100	07/31/2020 07:34	WG1518130
Bromomethane	U		60.5	250	100	07/31/2020 07:34	WG1518130
n-Butylbenzene	U		15.7	50.0	100	07/31/2020 07:34	WG1518130
sec-Butylbenzene	U		12.5	50.0	100	07/31/2020 07:34	WG1518130
tert-Butylbenzene	U		12.7	50.0	100	07/31/2020 07:34	WG1518130
Carbon disulfide	U	UJ J0	9.62	50.0	100	07/31/2020 07:34	WG1518130
Carbon tetrachloride	U		12.8	50.0	100	07/31/2020 07:34	WG1518130
Chlorobenzene	U		11.7	50.0	100	07/31/2020 07:34	WG1518130
Chlorodibromomethane	U		14.0	50.0	100	07/31/2020 07:34	WG1518130
Chloroethane	U		19.2	250	100	07/31/2020 07:34	WG1518130
Chloroform	U		11.1	50.0	100	07/31/2020 07:34	WG1518130
Chloromethane	U		96.0	125	100	07/31/2020 07:34	WG1518130
2-Chlorotoluene	U		10.6	50.0	100	07/31/2020 07:34	WG1518130
4-Chlorotoluene	U		11.4	50.0	100	07/31/2020 07:34	WG1518130

JC 8/21/2020

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,2-Dibromo-3-Chloropropane	U		27.6	250	100	07/31/2020 07:34	WG1518130
1,2-Dibromoethane	U		12.6	50.0	100	07/31/2020 07:34	WG1518130
Dibromomethane	U		12.2	50.0	100	07/31/2020 07:34	WG1518130
1,2-Dichlorobenzene	U		10.7	50.0	100	07/31/2020 07:34	WG1518130
1,3-Dichlorobenzene	U		29.9	50.0	100	07/31/2020 07:34	WG1518130
1,4-Dichlorobenzene	U		12.0	50.0	100	07/31/2020 07:34	WG1518130
Dichlorodifluoromethane	U		37.4	250	100	07/31/2020 07:34	WG1518130
1,1-Dichloroethane	U		10.0	50.0	100	07/31/2020 07:34	WG1518130
1,2-Dichloroethane	U		8.19	50.0	100	07/31/2020 07:34	WG1518130
1,1-Dichloroethene	U		18.8	50.0	100	07/31/2020 07:34	WG1518130
cis-1,2-Dichloroethene	3100		12.6	50.0	100	07/31/2020 07:34	WG1518130
trans-1,2-Dichloroethene	U		14.9	50.0	100	07/31/2020 07:34	WG1518130
1,2-Dichloropropane	U		14.9	50.0	100	07/31/2020 07:34	WG1518130
1,1-Dichloropropene	U		14.2	50.0	100	07/31/2020 07:34	WG1518130
1,3-Dichloropropane	U		10.9	100	100	07/31/2020 07:34	WG1518130
cis-1,3-Dichloropropene	U		11.1	50.0	100	07/31/2020 07:34	WG1518130
trans-1,3-Dichloropropene	U		11.8	50.0	100	07/31/2020 07:34	WG1518130
trans-1,4-Dichloro-2-butene	U		46.7	500	100	07/31/2020 07:34	WG1518130
2,2-Dichloropropane	U	UJ J0	16.1	50.0	100	07/31/2020 07:34	WG1518130
Di-isopropyl ether	U		10.5	50.0	100	07/31/2020 07:34	WG1518130
Ethylbenzene	U		13.7	50.0	100	07/31/2020 07:34	WG1518130
Hexachloro-1,3-butadiene	U		33.7	100	100	07/31/2020 07:34	WG1518130
2-Hexanone	U		78.7	500	100	07/31/2020 07:34	WG1518130
n-Hexane	U		74.9	500	100	07/31/2020 07:34	WG1518130
Iodomethane	U	UJ J0	55.4	500	100	07/31/2020 07:34	WG1518130
Isopropylbenzene	U		10.5	50.0	100	07/31/2020 07:34	WG1518130
p-Isopropyltoluene	U		12.0	50.0	100	07/31/2020 07:34	WG1518130
2-Butanone (MEK)	U		119	500	100	07/31/2020 07:34	WG1518130
Methylene Chloride	U		43.0	250	100	07/31/2020 07:34	WG1518130
4-Methyl-2-pentanone (MIBK)	U		47.8	500	100	07/31/2020 07:34	WG1518130
Methyl tert-butyl ether	U		10.1	50.0	100	07/31/2020 07:34	WG1518130
Naphthalene	U		17.4	250	100	07/31/2020 07:34	WG1518130
n-Propylbenzene	U		9.93	50.0	100	07/31/2020 07:34	WG1518130
Styrene	U		11.8	50.0	100	07/31/2020 07:34	WG1518130
1,1,1,2-Tetrachloroethane	U		14.7	50.0	100	07/31/2020 07:34	WG1518130
1,1,2,2-Tetrachloroethane	U		13.3	50.0	100	07/31/2020 07:34	WG1518130
1,1,2-Trichlorotrifluoroethane	U	UJ J0	18.0	50.0	100	07/31/2020 07:34	WG1518130
Tetrachloroethene	212		30.0	50.0	100	07/31/2020 07:34	WG1518130
Toluene	U		27.8	50.0	100	07/31/2020 07:34	WG1518130
1,2,3-Trichlorobenzene	U		16.4	50.0	100	07/31/2020 07:34	WG1518130
1,2,4-Trichlorobenzene	U		48.1	100	100	07/31/2020 07:34	WG1518130
1,1,1-Trichloroethane	U		14.9	50.0	100	07/31/2020 07:34	WG1518130
1,1,2-Trichloroethane	U		15.8	50.0	100	07/31/2020 07:34	WG1518130
Trichloroethene	1540		19.0	50.0	100	07/31/2020 07:34	WG1518130
Trichlorofluoromethane	U		16.0	250	100	07/31/2020 07:34	WG1518130
1,2,3-Trichloropropane	U		23.7	250	100	07/31/2020 07:34	WG1518130
1,2,4-Trimethylbenzene	U		32.2	50.0	100	07/31/2020 07:34	WG1518130
1,2,3-Trimethylbenzene	U		10.4	50.0	100	07/31/2020 07:34	WG1518130
1,3,5-Trimethylbenzene	U		10.4	50.0	100	07/31/2020 07:34	WG1518130
Vinyl acetate	U		69.2	500	100	07/31/2020 07:34	WG1518130
Vinyl chloride	76.0		23.4	50.0	100	07/31/2020 07:34	WG1518130
Xylenes, Total	U		17.4	150	100	07/31/2020 07:34	WG1518130
(S) Toluene-d8	*109*			*80.0-120*		*07/31/2020 07:34*	WG1518130
(S) 4-Bromofluorobenzene	*96.3*			*77.0-126*		*07/31/2020 07:34*	WG1518130
(S) 1,2-Dichloroethane-d4	*100*			*70.0-130*		*07/31/2020 07:34*	WG1518130

JC 8/21/2020

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	314000		8450	20000	1	08/03/2020 22:03	WG1518564

Sample Narrative:

L1244396-04 WG1518564: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	25400		379	1000	1	07/30/2020 00:05	WG1517060
Nitrate	U		48.0	100	1	07/30/2020 00:05	WG1517060
Sulfate	U		594	5000	1	07/30/2020 00:05	WG1517060

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	5950		102	1000	1	07/31/2020 18:54	WG1518323

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	17700		489	1000	10	08/01/2020 15:37	WG1517395
Manganese	911		1.32	5.00	1	08/01/2020 13:52	WG1517395

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	8900		2.87	6.78	10	07/31/2020 16:14	WG1518525
Ethane	U		0.296	1.29	1	07/30/2020 16:08	WG1517569
Ethene	U		0.422	1.27	1	07/30/2020 16:08	WG1517569

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U		11.3	25.0	1	07/31/2020 07:55	WG1518130
Acrylonitrile	U		0.671	5.00	1	07/31/2020 07:55	WG1518130
Benzene	U		0.0941	0.500	1	07/31/2020 07:55	WG1518130
Bromobenzene	U		0.118	0.500	1	07/31/2020 07:55	WG1518130
Bromodichloromethane	U		0.136	0.500	1	07/31/2020 07:55	WG1518130
Bromochloromethane	U		0.128	0.500	1	07/31/2020 07:55	WG1518130
Bromoform	U		0.129	0.500	1	07/31/2020 07:55	WG1518130
Bromomethane	U		0.605	2.50	1	07/31/2020 07:55	WG1518130
n-Butylbenzene	U		0.157	0.500	1	07/31/2020 07:55	WG1518130
sec-Butylbenzene	U		0.125	0.500	1	07/31/2020 07:55	WG1518130
tert-Butylbenzene	U		0.127	0.500	1	07/31/2020 07:55	WG1518130
Carbon disulfide	U	UJ J0	0.0962	0.500	1	07/31/2020 07:55	WG1518130
Carbon tetrachloride	U		0.128	0.500	1	07/31/2020 07:55	WG1518130
Chlorobenzene	U		0.117	0.500	1	07/31/2020 07:55	WG1518130
Chlorodibromomethane	U		0.140	0.500	1	07/31/2020 07:55	WG1518130
Chloroethane	U		0.192	2.50	1	07/31/2020 07:55	WG1518130
Chloroform	U		0.111	0.500	1	07/31/2020 07:55	WG1518130
Chloromethane	U		0.960	1.25	1	07/31/2020 07:55	WG1518130
2-Chlorotoluene	U		0.106	0.500	1	07/31/2020 07:55	WG1518130
4-Chlorotoluene	U		0.114	0.500	1	07/31/2020 07:55	WG1518130

JC 8/21/2020

MW116-072820

Collected date/time: 07/28/20 12:30

SAMPLE RESULTS - 04

L1244396

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,2-Dibromo-3-Chloropropane	U		0.276	2.50	1	07/31/2020 07:55	WG1518130
1,2-Dibromoethane	U		0.126	0.500	1	07/31/2020 07:55	WG1518130
Dibromomethane	U		0.122	0.500	1	07/31/2020 07:55	WG1518130
1,2-Dichlorobenzene	U		0.107	0.500	1	07/31/2020 07:55	WG1518130
1,3-Dichlorobenzene	U		0.299	0.500	1	07/31/2020 07:55	WG1518130
1,4-Dichlorobenzene	U		0.120	0.500	1	07/31/2020 07:55	WG1518130
Dichlorodifluoromethane	U		0.374	2.50	1	07/31/2020 07:55	WG1518130
1,1-Dichloroethane	U		0.100	0.500	1	07/31/2020 07:55	WG1518130
1,2-Dichloroethane	U		0.0819	0.500	1	07/31/2020 07:55	WG1518130
1,1-Dichloroethene	U		0.188	0.500	1	07/31/2020 07:55	WG1518130
cis-1,2-Dichloroethene	U		0.126	0.500	1	07/31/2020 07:55	WG1518130
trans-1,2-Dichloroethene	U		0.149	0.500	1	07/31/2020 07:55	WG1518130
1,2-Dichloropropane	U		0.149	0.500	1	07/31/2020 07:55	WG1518130
1,1-Dichloropropene	U		0.142	0.500	1	07/31/2020 07:55	WG1518130
1,3-Dichloropropane	U		0.109	1.00	1	07/31/2020 07:55	WG1518130
cis-1,3-Dichloropropene	U		0.111	0.500	1	07/31/2020 07:55	WG1518130
trans-1,3-Dichloropropene	U		0.118	0.500	1	07/31/2020 07:55	WG1518130
trans-1,4-Dichloro-2-butene	U		0.467	5.00	1	07/31/2020 07:55	WG1518130
2,2-Dichloropropane	U	UJ J0	0.161	0.500	1	07/31/2020 07:55	WG1518130
Di-isopropyl ether	U		0.105	0.500	1	07/31/2020 07:55	WG1518130
Ethylbenzene	U		0.137	0.500	1	07/31/2020 07:55	WG1518130
Hexachloro-1,3-butadiene	U		0.337	1.00	1	07/31/2020 07:55	WG1518130
2-Hexanone	U		0.787	5.00	1	07/31/2020 07:55	WG1518130
n-Hexane	U		0.749	5.00	1	07/31/2020 07:55	WG1518130
Iodomethane	U	UJ J0	0.554	5.00	1	07/31/2020 07:55	WG1518130
Isopropylbenzene	U		0.105	0.500	1	07/31/2020 07:55	WG1518130
p-Isopropyltoluene	U		0.120	0.500	1	07/31/2020 07:55	WG1518130
2-Butanone (MEK)	U		1.19	5.00	1	07/31/2020 07:55	WG1518130
Methylene Chloride	U		0.430	2.50	1	07/31/2020 07:55	WG1518130
4-Methyl-2-pentanone (MIBK)	U		0.478	5.00	1	07/31/2020 07:55	WG1518130
Methyl tert-butyl ether	U		0.101	0.500	1	07/31/2020 07:55	WG1518130
Naphthalene	U		0.174	2.50	1	07/31/2020 07:55	WG1518130
n-Propylbenzene	U		0.0993	0.500	1	07/31/2020 07:55	WG1518130
Styrene	U		0.118	0.500	1	07/31/2020 07:55	WG1518130
1,1,1,2-Tetrachloroethane	U		0.147	0.500	1	07/31/2020 07:55	WG1518130
1,1,2,2-Tetrachloroethane	U		0.133	0.500	1	07/31/2020 07:55	WG1518130
1,1,2-Trichlorotrifluoroethane	U	UJ J0	0.180	0.500	1	07/31/2020 07:55	WG1518130
Tetrachloroethene	U		0.300	0.500	1	07/31/2020 07:55	WG1518130
Toluene	U		0.278	0.500	1	07/31/2020 07:55	WG1518130
1,2,3-Trichlorobenzene	U		0.164	0.500	1	07/31/2020 07:55	WG1518130
1,2,4-Trichlorobenzene	U		0.481	1.00	1	07/31/2020 07:55	WG1518130
1,1,1-Trichloroethane	U		0.149	0.500	1	07/31/2020 07:55	WG1518130
1,1,2-Trichloroethane	U		0.158	0.500	1	07/31/2020 07:55	WG1518130
Trichloroethene	U		0.190	0.500	1	07/31/2020 07:55	WG1518130
Trichlorofluoromethane	U		0.160	2.50	1	07/31/2020 07:55	WG1518130
1,2,3-Trichloropropane	U		0.237	2.50	1	07/31/2020 07:55	WG1518130
1,2,4-Trimethylbenzene	U		0.322	0.500	1	07/31/2020 07:55	WG1518130
1,2,3-Trimethylbenzene	U		0.104	0.500	1	07/31/2020 07:55	WG1518130
1,3,5-Trimethylbenzene	U		0.104	0.500	1	07/31/2020 07:55	WG1518130
Vinyl acetate	U		0.692	5.00	1	07/31/2020 07:55	WG1518130
Vinyl chloride	U		0.234	0.500	1	07/31/2020 07:55	WG1518130
Xylenes, Total	U		0.174	1.50	1	07/31/2020 07:55	WG1518130
(S) Toluene-d8	*108*			*80.0-120*		*07/31/2020 07:55*	WG1518130
(S) 4-Bromofluorobenzene	*97.2*			*77.0-126*		*07/31/2020 07:55*	WG1518130
(S) 1,2-Dichloroethane-d4	*99.5*			*70.0-130*		*07/31/2020 07:55*	WG1518130

JC 8/21/2020

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Wet Chemistry by Method 2320 B-2011

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Alkalinity	407000		8450	20000	1	08/03/2020 22:18	WG1518564

Sample Narrative:

L1244396-05 WG1518564: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 9056A

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Chloride	25000		379	1000	1	07/30/2020 00:22	WG1517060
Nitrate	U		48.0	100	1	07/30/2020 00:22	WG1517060
Sulfate	141000		2970	25000	5	08/05/2020 02:02	WG1517686

Wet Chemistry by Method 9060A

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
TOC (Total Organic Carbon)	8580		102	1000	1	07/31/2020 19:55	WG1518323

Metals (ICPMS) by Method 6020B

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Iron	12100		489	1000	10	08/01/2020 15:41	WG1517395
Manganese	1530		1.32	5.00	1	08/01/2020 13:56	WG1517395

Volatile Organic Compounds (GC) by Method RSK175

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Methane	665		0.287	0.678	1	07/30/2020 16:11	WG1517569
Ethane	U		0.296	1.29	1	07/30/2020 16:11	WG1517569
Ethene	U		0.422	1.27	1	07/30/2020 16:11	WG1517569

Volatile Organic Compounds (GC/MS) by Method 8260D

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Acetone	U		11.3	25.0	1	07/31/2020 08:16	WG1518130
Acrylonitrile	U		0.671	5.00	1	07/31/2020 08:16	WG1518130
Benzene	U		0.0941	0.500	1	07/31/2020 08:16	WG1518130
Bromobenzene	U		0.118	0.500	1	07/31/2020 08:16	WG1518130
Bromodichloromethane	U		0.136	0.500	1	07/31/2020 08:16	WG1518130
Bromochloromethane	U		0.128	0.500	1	07/31/2020 08:16	WG1518130
Bromoform	U		0.129	0.500	1	07/31/2020 08:16	WG1518130
Bromomethane	U		0.605	2.50	1	07/31/2020 08:16	WG1518130
n-Butylbenzene	U		0.157	0.500	1	07/31/2020 08:16	WG1518130
sec-Butylbenzene	U		0.125	0.500	1	07/31/2020 08:16	WG1518130
tert-Butylbenzene	U		0.127	0.500	1	07/31/2020 08:16	WG1518130
Carbon disulfide	U	UJ J0	0.0962	0.500	1	07/31/2020 08:16	WG1518130
Carbon tetrachloride	U		0.128	0.500	1	07/31/2020 08:16	WG1518130
Chlorobenzene	U		0.117	0.500	1	07/31/2020 08:16	WG1518130
Chlorodibromomethane	U		0.140	0.500	1	07/31/2020 08:16	WG1518130
Chloroethane	U		0.192	2.50	1	07/31/2020 08:16	WG1518130
Chloroform	U		0.111	0.500	1	07/31/2020 08:16	WG1518130
Chloromethane	U		0.960	1.25	1	07/31/2020 08:16	WG1518130
2-Chlorotoluene	U		0.106	0.500	1	07/31/2020 08:16	WG1518130
4-Chlorotoluene	U		0.114	0.500	1	07/31/2020 08:16	WG1518130

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Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,2-Dibromo-3-Chloropropane	U		0.276	2.50	1	07/31/2020 08:16	WG1518130
1,2-Dibromoethane	U		0.126	0.500	1	07/31/2020 08:16	WG1518130
Dibromomethane	U		0.122	0.500	1	07/31/2020 08:16	WG1518130
1,2-Dichlorobenzene	U		0.107	0.500	1	07/31/2020 08:16	WG1518130
1,3-Dichlorobenzene	U		0.299	0.500	1	07/31/2020 08:16	WG1518130
1,4-Dichlorobenzene	U		0.120	0.500	1	07/31/2020 08:16	WG1518130
Dichlorodifluoromethane	U		0.374	2.50	1	07/31/2020 08:16	WG1518130
1,1-Dichloroethane	U		0.100	0.500	1	07/31/2020 08:16	WG1518130
1,2-Dichloroethane	U		0.0819	0.500	1	07/31/2020 08:16	WG1518130
1,1-Dichloroethene	U		0.188	0.500	1	07/31/2020 08:16	WG1518130
cis-1,2-Dichloroethene	0.354	J	0.126	0.500	1	07/31/2020 08:16	WG1518130
trans-1,2-Dichloroethene	U		0.149	0.500	1	07/31/2020 08:16	WG1518130
1,2-Dichloropropane	U		0.149	0.500	1	07/31/2020 08:16	WG1518130
1,1-Dichloropropene	U		0.142	0.500	1	07/31/2020 08:16	WG1518130
1,3-Dichloropropane	U		0.109	1.00	1	07/31/2020 08:16	WG1518130
cis-1,3-Dichloropropene	U		0.111	0.500	1	07/31/2020 08:16	WG1518130
trans-1,3-Dichloropropene	U		0.118	0.500	1	07/31/2020 08:16	WG1518130
trans-1,4-Dichloro-2-butene	U		0.467	5.00	1	07/31/2020 08:16	WG1518130
2,2-Dichloropropane	U	UJ J0	0.161	0.500	1	07/31/2020 08:16	WG1518130
Di-isopropyl ether	U		0.105	0.500	1	07/31/2020 08:16	WG1518130
Ethylbenzene	U		0.137	0.500	1	07/31/2020 08:16	WG1518130
Hexachloro-1,3-butadiene	U		0.337	1.00	1	07/31/2020 08:16	WG1518130
2-Hexanone	U		0.787	5.00	1	07/31/2020 08:16	WG1518130
n-Hexane	U		0.749	5.00	1	07/31/2020 08:16	WG1518130
Iodomethane	U	UJ J0	0.554	5.00	1	07/31/2020 08:16	WG1518130
Isopropylbenzene	U		0.105	0.500	1	07/31/2020 08:16	WG1518130
p-Isopropyltoluene	U		0.120	0.500	1	07/31/2020 08:16	WG1518130
2-Butanone (MEK)	U		1.19	5.00	1	07/31/2020 08:16	WG1518130
Methylene Chloride	U		0.430	2.50	1	07/31/2020 08:16	WG1518130
4-Methyl-2-pentanone (MIBK)	U		0.478	5.00	1	07/31/2020 08:16	WG1518130
Methyl tert-butyl ether	U		0.101	0.500	1	07/31/2020 08:16	WG1518130
Naphthalene	U		0.174	2.50	1	07/31/2020 08:16	WG1518130
n-Propylbenzene	U		0.0993	0.500	1	07/31/2020 08:16	WG1518130
Styrene	U		0.118	0.500	1	07/31/2020 08:16	WG1518130
1,1,1,2-Tetrachloroethane	U		0.147	0.500	1	07/31/2020 08:16	WG1518130
1,1,2,2-Tetrachloroethane	U		0.133	0.500	1	07/31/2020 08:16	WG1518130
1,1,2-Trichlorotrifluoroethane	U	UJ J0	0.180	0.500	1	07/31/2020 08:16	WG1518130
Tetrachloroethene	U		0.300	0.500	1	07/31/2020 08:16	WG1518130
Toluene	U		0.278	0.500	1	07/31/2020 08:16	WG1518130
1,2,3-Trichlorobenzene	U		0.164	0.500	1	07/31/2020 08:16	WG1518130
1,2,4-Trichlorobenzene	U		0.481	1.00	1	07/31/2020 08:16	WG1518130
1,1,1-Trichloroethane	U		0.149	0.500	1	07/31/2020 08:16	WG1518130
1,1,2-Trichloroethane	U		0.158	0.500	1	07/31/2020 08:16	WG1518130
Trichloroethene	U		0.190	0.500	1	07/31/2020 08:16	WG1518130
Trichlorofluoromethane	U		0.160	2.50	1	07/31/2020 08:16	WG1518130
1,2,3-Trichloropropane	U		0.237	2.50	1	07/31/2020 08:16	WG1518130
1,2,4-Trimethylbenzene	U		0.322	0.500	1	07/31/2020 08:16	WG1518130
1,2,3-Trimethylbenzene	U		0.104	0.500	1	07/31/2020 08:16	WG1518130
1,3,5-Trimethylbenzene	U		0.104	0.500	1	07/31/2020 08:16	WG1518130
Vinyl acetate	U		0.692	5.00	1	07/31/2020 08:16	WG1518130
Vinyl chloride	1.16		0.234	0.500	1	07/31/2020 08:16	WG1518130
Xylenes, Total	U		0.174	1.50	1	07/31/2020 08:16	WG1518130
(S) Toluene-d8	*108*			*80.0-120*		*07/31/2020 08:16*	WG1518130
(S) 4-Bromofluorobenzene	*97.5*			*77.0-126*		*07/31/2020 08:16*	WG1518130
(S) 1,2-Dichloroethane-d4	*103*			*70.0-130*		*07/31/2020 08:16*	WG1518130

JC 8/21/2020

Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	697000		8450	20000	1	08/05/2020 23:52	WG1520680

Sample Narrative:

L1245254-01 WG1520680: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	109000		1900	5000	5	07/31/2020 16:07	WG1518407
Nitrate	U		48.0	100	1	07/31/2020 15:49	WG1518407
Sulfate	2430	J	594	5000	1	07/31/2020 15:49	WG1518407

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	3950		102	1000	1	08/01/2020 20:37	WG1518849

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	11700		48.9	100	1	08/03/2020 21:23	WG1519176
Manganese	6230		1.32	5.00	1	08/03/2020 21:23	WG1519176

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	68.5		0.287	0.678	1	08/04/2020 14:34	WG1519838
Ethane	U		0.296	1.29	1	08/04/2020 14:34	WG1519838
Ethene	U		0.422	1.27	1	08/04/2020 14:34	WG1519838

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch	
Acetone	U UJ	J0	0.548	1.00	1	08/06/2020 18:35	WG1521805	
Acrylonitrile	U		0.0760	0.500	1	08/06/2020 18:35	WG1521805	
Benzene	0.0471		0.0160	0.0400	1	08/06/2020 18:35	WG1521805	
Bromobenzene	U		0.0420	0.500	1	08/06/2020 18:35	WG1521805	
Bromodichloromethane	U		0.0315	0.100	1	08/06/2020 18:35	WG1521805	
Bromoform	U		0.239	1.00	1	08/06/2020 18:35	WG1521805	
Bromomethane	U UJ	J0	0.148	0.500	1	08/06/2020 18:35	WG1521805	
n-Butylbenzene	U		0.153	0.500	1	08/06/2020 18:35	WG1521805	
sec-Butylbenzene	U		0.101	0.500	1	08/06/2020 18:35	WG1521805	
tert-Butylbenzene	U		0.0620	0.200	1	08/06/2020 18:35	WG1521805	
Carbon tetrachloride	U		0.0432	0.200	1	08/06/2020 18:35	WG1521805	
Chlorobenzene	U		0.0229	0.100	1	08/06/2020 18:35	WG1521805	
Chlorodibromomethane	U		0.0180	0.100	1	08/06/2020 18:35	WG1521805	
Chloroethane	U		0.0432	0.200	1	08/06/2020 18:35	WG1521805	
Chloroform	U		0.0166	0.100	1	08/06/2020 18:35	WG1521805	
Chloromethane	U		0.0556	0.500	1	08/06/2020 18:35	WG1521805	
2-Chlorotoluene	U		0.0368	0.100	1	08/06/2020 18:35	WG1521805	
4-Chlorotoluene	U		0.0452	0.200	1	08/06/2020 18:35	WG1521805	
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	08/06/2020 18:35	WG1521805	
1,2-Dibromoethane	U		0.0210	0.100	1	08/06/2020 18:35	WG1521805	JC 8/24/2020

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Dibromomethane	U		0.0400	0.200	1	08/06/2020 18:35	WG1521805
1,2-Dichlorobenzene	U		0.0580	0.200	1	08/06/2020 18:35	WG1521805
1,3-Dichlorobenzene	U		0.0680	0.200	1	08/06/2020 18:35	WG1521805
1,4-Dichlorobenzene	U		0.0788	0.200	1	08/06/2020 18:35	WG1521805
Dichlorodifluoromethane	U		0.0327	0.100	1	08/06/2020 18:35	WG1521805
1,1-Dichloroethane	U		0.0230	0.100	1	08/06/2020 18:35	WG1521805
1,2-Dichloroethane	U		0.0190	0.100	1	08/06/2020 18:35	WG1521805
1,1-Dichloroethene	U	UJ J0	0.0200	0.100	1	08/06/2020 18:35	WG1521805
cis-1,2-Dichloroethene	U	UJ J0	0.0276	0.100	1	08/06/2020 18:35	WG1521805
trans-1,2-Dichloroethene	U	UJ J0	0.0572	0.200	1	08/06/2020 18:35	WG1521805
1,2-Dichloropropane	U		0.0508	0.200	1	08/06/2020 18:35	WG1521805
1,1-Dichloropropene	U		0.0280	0.100	1	08/06/2020 18:35	WG1521805
1,3-Dichloropropane	U		0.0700	0.200	1	08/06/2020 18:35	WG1521805
cis-1,3-Dichloropropene	U		0.0271	0.100	1	08/06/2020 18:35	WG1521805
trans-1,3-Dichloropropene	U		0.0612	0.200	1	08/06/2020 18:35	WG1521805
2,2-Dichloropropane	U	UJ J0	0.0317	0.100	1	08/06/2020 18:35	WG1521805
Di-isopropyl ether	U		0.0140	0.0400	1	08/06/2020 18:35	WG1521805
Ethylbenzene	0.163		0.0212	0.100	1	08/06/2020 18:35	WG1521805
Hexachloro-1,3-butadiene	U		0.508	1.00	1	08/06/2020 18:35	WG1521805
Isopropylbenzene	U		0.0345	0.100	1	08/06/2020 18:35	WG1521805
p-Isopropyltoluene	U		0.0932	0.200	1	08/06/2020 18:35	WG1521805
2-Butanone (MEK)	U		0.500	1.00	1	08/06/2020 18:35	WG1521805
Methylene Chloride	U		0.265	1.00	1	08/06/2020 18:35	WG1521805
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	08/06/2020 18:35	WG1521805
Methyl tert-butyl ether	U		0.0118	0.0400	1	08/06/2020 18:35	WG1521805
Naphthalene	U		0.124	0.500	1	08/06/2020 18:35	WG1521805
n-Propylbenzene	U		0.0472	0.200	1	08/06/2020 18:35	WG1521805
Styrene	U		0.109	0.500	1	08/06/2020 18:35	WG1521805
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	08/06/2020 18:35	WG1521805
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	08/06/2020 18:35	WG1521805
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	08/06/2020 18:35	WG1521805
Tetrachloroethene	U		0.0280	0.100	1	08/06/2020 18:35	WG1521805
Toluene	1.57		0.0500	0.200	1	08/06/2020 18:35	WG1521805
1,2,3-Trichlorobenzene	U		0.0250	0.500	1	08/06/2020 18:35	WG1521805
1,2,4-Trichlorobenzene	U		0.193	0.500	1	08/06/2020 18:35	WG1521805
1,1,1-Trichloroethane	U		0.0110	0.100	1	08/06/2020 18:35	WG1521805
1,1,2-Trichloroethane	U		0.0353	0.100	1	08/06/2020 18:35	WG1521805
Trichloroethene	U		0.0160	0.0400	1	08/06/2020 18:35	WG1521805
Trichlorofluoromethane	U	UJ J0	0.0200	0.100	1	08/06/2020 18:35	WG1521805
1,2,3-Trichloropropane	U		0.204	0.500	1	08/06/2020 18:35	WG1521805
1,2,4-Trimethylbenzene	0.117	J	0.0464	0.200	1	08/06/2020 18:35	WG1521805
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	08/06/2020 18:35	WG1521805
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	08/06/2020 18:35	WG1521805
Vinyl chloride	U		0.0273	0.100	1	08/06/2020 18:35	WG1521805
Xylenes, Total	0.931		0.191	0.260	1	08/06/2020 18:35	WG1521805
Ethyl Ether	U		0.0170	0.100	1	08/06/2020 18:35	WG1521805
Tetrahydrofuran	U	UJ J0	0.0900	0.500	1	08/06/2020 18:35	WG1521805
Iodomethane	U	UJ J0	0.242	0.500	1	08/06/2020 18:35	WG1521805
Allyl chloride	U		0.580	1.00	1	08/06/2020 18:35	WG1521805
Trans-1,4-Dichloro-2-butene	U	UJ J0	0.0560	0.200	1	08/06/2020 18:35	WG1521805
(S) Toluene-d8	*107*			*75.0-131*		*08/06/2020 18:35*	WG1521805
(S) 4-Bromofluorobenzene	*100*			*67.0-138*		*08/06/2020 18:35*	WG1521805
(S) 1,2-Dichloroethane-d4	*103*			*70.0-130*		*08/06/2020 18:35*	WG1521805

JC 8/24/2020

Wet Chemistry by Method 2320 B-2011

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Alkalinity	337000		8450	20000	1	08/05/2020 23:59	WG1520680

Sample Narrative:

L1245254-02 WG1520680: Endpoint pH 4.5

Wet Chemistry by Method 9056A

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Chloride	42300		379	1000	1	07/31/2020 16:26	WG1518407
Nitrate	U		48.0	100	1	07/31/2020 16:26	WG1518407
Sulfate	53300		594	5000	1	07/31/2020 16:26	WG1518407

Wet Chemistry by Method 9060A

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
TOC (Total Organic Carbon)	6880		102	1000	1	08/01/2020 20:53	WG1518849

Metals (ICPMS) by Method 6020B

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Iron	9860		48.9	100	1	08/03/2020 21:26	WG1519176
Manganese	1960		1.32	5.00	1	08/03/2020 21:26	WG1519176

Volatile Organic Compounds (GC) by Method RSK175

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Methane	8220		2.87	6.78	10	08/07/2020 13:49	WG1522285
Ethane	U		0.296	1.29	1	08/04/2020 14:36	WG1519838
Ethene	U		0.422	1.27	1	08/04/2020 14:36	WG1519838

Volatile Organic Compounds (GC/MS) by Method 8260D

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Acetone	U	UJ J0	0.548	1.00	1	08/06/2020 18:55	WG1521805
Acrylonitrile	U		0.0760	0.500	1	08/06/2020 18:55	WG1521805
Benzene	U		0.0160	0.0400	1	08/06/2020 18:55	WG1521805
Bromobenzene	U		0.0420	0.500	1	08/06/2020 18:55	WG1521805
Bromodichloromethane	U		0.0315	0.100	1	08/06/2020 18:55	WG1521805
Bromoform	U		0.239	1.00	1	08/06/2020 18:55	WG1521805
Bromomethane	U	UJ J0	0.148	0.500	1	08/06/2020 18:55	WG1521805
n-Butylbenzene	U		0.153	0.500	1	08/06/2020 18:55	WG1521805
sec-Butylbenzene	U		0.101	0.500	1	08/06/2020 18:55	WG1521805
tert-Butylbenzene	U		0.0620	0.200	1	08/06/2020 18:55	WG1521805
Carbon tetrachloride	U		0.0432	0.200	1	08/06/2020 18:55	WG1521805
Chlorobenzene	U		0.0229	0.100	1	08/06/2020 18:55	WG1521805
Chlorodibromomethane	U		0.0180	0.100	1	08/06/2020 18:55	WG1521805
Chloroethane	U		0.0432	0.200	1	08/06/2020 18:55	WG1521805
Chloroform	U		0.0166	0.100	1	08/06/2020 18:55	WG1521805
Chloromethane	U		0.0556	0.500	1	08/06/2020 18:55	WG1521805
2-Chlorotoluene	U		0.0368	0.100	1	08/06/2020 18:55	WG1521805
4-Chlorotoluene	U		0.0452	0.200	1	08/06/2020 18:55	WG1521805
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	08/06/2020 18:55	WG1521805
1,2-Dibromoethane	U		0.0210	0.100	1	08/06/2020 18:55	WG1521805

JC 8/24/2020

GEI-1-073020

Collected date/time: 07/30/20 09:35

SAMPLE RESULTS - 02

L1245254

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Dibromomethane	U		0.0400	0.200	1	08/06/2020 18:55	WG1521805
1,2-Dichlorobenzene	U		0.0580	0.200	1	08/06/2020 18:55	WG1521805
1,3-Dichlorobenzene	U		0.0680	0.200	1	08/06/2020 18:55	WG1521805
1,4-Dichlorobenzene	U		0.0788	0.200	1	08/06/2020 18:55	WG1521805
Dichlorodifluoromethane	U		0.0327	0.100	1	08/06/2020 18:55	WG1521805
1,1-Dichloroethane	U		0.0230	0.100	1	08/06/2020 18:55	WG1521805
1,2-Dichloroethane	0.0432	J	0.0190	0.100	1	08/06/2020 18:55	WG1521805
1,1-Dichloroethene	U	UJ J0	0.0200	0.100	1	08/06/2020 18:55	WG1521805
cis-1,2-Dichloroethene	U	UJ J0	0.0276	0.100	1	08/06/2020 18:55	WG1521805
trans-1,2-Dichloroethene	U	UJ J0	0.0572	0.200	1	08/06/2020 18:55	WG1521805
1,2-Dichloropropane	U		0.0508	0.200	1	08/06/2020 18:55	WG1521805
1,1-Dichloropropene	U		0.0280	0.100	1	08/06/2020 18:55	WG1521805
1,3-Dichloropropane	U		0.0700	0.200	1	08/06/2020 18:55	WG1521805
cis-1,3-Dichloropropene	U		0.0271	0.100	1	08/06/2020 18:55	WG1521805
trans-1,3-Dichloropropene	U		0.0612	0.200	1	08/06/2020 18:55	WG1521805
2,2-Dichloropropane	U	UJ J0	0.0317	0.100	1	08/06/2020 18:55	WG1521805
Di-isopropyl ether	0.0386	J	0.0140	0.0400	1	08/06/2020 18:55	WG1521805
Ethylbenzene	U		0.0212	0.100	1	08/06/2020 18:55	WG1521805
Hexachloro-1,3-butadiene	U		0.508	1.00	1	08/06/2020 18:55	WG1521805
Isopropylbenzene	U		0.0345	0.100	1	08/06/2020 18:55	WG1521805
p-Isopropyltoluene	U		0.0932	0.200	1	08/06/2020 18:55	WG1521805
2-Butanone (MEK)	U		0.500	1.00	1	08/06/2020 18:55	WG1521805
Methylene Chloride	U		0.265	1.00	1	08/06/2020 18:55	WG1521805
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	08/06/2020 18:55	WG1521805
Methyl tert-butyl ether	U		0.0118	0.0400	1	08/06/2020 18:55	WG1521805
Naphthalene	U		0.124	0.500	1	08/06/2020 18:55	WG1521805
n-Propylbenzene	U		0.0472	0.200	1	08/06/2020 18:55	WG1521805
Styrene	U		0.109	0.500	1	08/06/2020 18:55	WG1521805
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	08/06/2020 18:55	WG1521805
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	08/06/2020 18:55	WG1521805
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	08/06/2020 18:55	WG1521805
Tetrachloroethene	U		0.0280	0.100	1	08/06/2020 18:55	WG1521805
Toluene	0.142	J	0.0500	0.200	1	08/06/2020 18:55	WG1521805
1,2,3-Trichlorobenzene	U		0.0250	0.500	1	08/06/2020 18:55	WG1521805
1,2,4-Trichlorobenzene	U		0.193	0.500	1	08/06/2020 18:55	WG1521805
1,1,1-Trichloroethane	U		0.0110	0.100	1	08/06/2020 18:55	WG1521805
1,1,2-Trichloroethane	U		0.0353	0.100	1	08/06/2020 18:55	WG1521805
Trichloroethene	U		0.0160	0.0400	1	08/06/2020 18:55	WG1521805
Trichlorofluoromethane	U	UJ J0	0.0200	0.100	1	08/06/2020 18:55	WG1521805
1,2,3-Trichloropropane	U		0.204	0.500	1	08/06/2020 18:55	WG1521805
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	08/06/2020 18:55	WG1521805
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	08/06/2020 18:55	WG1521805
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	08/06/2020 18:55	WG1521805
Vinyl chloride	U		0.0273	0.100	1	08/06/2020 18:55	WG1521805
Xylenes, Total	U		0.191	0.260	1	08/06/2020 18:55	WG1521805
Ethyl Ether	U		0.0170	0.100	1	08/06/2020 18:55	WG1521805
Tetrahydrofuran	U	UJ J0	0.0900	0.500	1	08/06/2020 18:55	WG1521805
Iodomethane	U	UJ J0	0.242	0.500	1	08/06/2020 18:55	WG1521805
Allyl chloride	U		0.580	1.00	1	08/06/2020 18:55	WG1521805
Trans-1,4-Dichloro-2-butene	U	UJ J0	0.0560	0.200	1	08/06/2020 18:55	WG1521805
(S) Toluene-d8	*107*			*75.0-131*		*08/06/2020 18:55*	WG1521805
(S) 4-Bromofluorobenzene	*96.2*			*67.0-138*		*08/06/2020 18:55*	WG1521805
(S) 1,2-Dichloroethane-d4	*103*			*70.0-130*		*08/06/2020 18:55*	WG1521805

JC 8/24/2020

MW-318-073020
Collected date/time: 07/30/20 09:25

SAMPLE RESULTS - 03

L1245254

Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	652000		8450	20000	1	08/06/2020 00:05	WG1520680

Sample Narrative:

L1245254-03 WG1520680: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	12100		379	1000	1	07/31/2020 17:02	WG1518407
Nitrate	U		48.0	100	1	07/31/2020 17:02	WG1518407
Sulfate	7790		594	5000	1	07/31/2020 17:02	WG1518407

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	9460		102	1000	1	08/01/2020 21:42	WG1518849

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	13500		48.9	100	1	08/03/2020 21:38	WG1519176
Manganese	3030		1.32	5.00	1	08/03/2020 21:38	WG1519176

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	5380		0.287	0.678	1	08/04/2020 14:39	WG1519838
Ethane	U		0.296	1.29	1	08/04/2020 14:39	WG1519838
Ethene	U		0.422	1.27	1	08/04/2020 14:39	WG1519838

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U	UJ J0	0.548	1.00	1	08/06/2020 19:15	WG1521805
Acrylonitrile	U		0.0760	0.500	1	08/06/2020 19:15	WG1521805
Benzene	5.79		0.0160	0.0400	1	08/06/2020 19:15	WG1521805
Bromobenzene	U		0.0420	0.500	1	08/06/2020 19:15	WG1521805
Bromodichloromethane	U		0.0315	0.100	1	08/06/2020 19:15	WG1521805
Bromoform	U		0.239	1.00	1	08/06/2020 19:15	WG1521805
Bromomethane	U	UJ J0	0.148	0.500	1	08/06/2020 19:15	WG1521805
n-Butylbenzene	U		0.153	0.500	1	08/06/2020 19:15	WG1521805
sec-Butylbenzene	U		0.101	0.500	1	08/06/2020 19:15	WG1521805
tert-Butylbenzene	U		0.0620	0.200	1	08/06/2020 19:15	WG1521805
Carbon tetrachloride	U		0.0432	0.200	1	08/06/2020 19:15	WG1521805
Chlorobenzene	U		0.0229	0.100	1	08/06/2020 19:15	WG1521805
Chlorodibromomethane	U		0.0180	0.100	1	08/06/2020 19:15	WG1521805
Chloroethane	U		0.0432	0.200	1	08/06/2020 19:15	WG1521805
Chloroform	U		0.0166	0.100	1	08/06/2020 19:15	WG1521805
Chloromethane	U		0.0556	0.500	1	08/06/2020 19:15	WG1521805
2-Chlorotoluene	U		0.0368	0.100	1	08/06/2020 19:15	WG1521805
4-Chlorotoluene	U		0.0452	0.200	1	08/06/2020 19:15	WG1521805
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	08/06/2020 19:15	WG1521805
1,2-Dibromoethane	U		0.0210	0.100	1	08/06/2020 19:15	WG1521805

JC 8/24/2020

SAMPLE RESULTS - 03

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Dibromomethane	U		0.0400	0.200	1	08/06/2020 19:15	WG1521805
1,2-Dichlorobenzene	U		0.0580	0.200	1	08/06/2020 19:15	WG1521805
1,3-Dichlorobenzene	U		0.0680	0.200	1	08/06/2020 19:15	WG1521805
1,4-Dichlorobenzene	U		0.0788	0.200	1	08/06/2020 19:15	WG1521805
Dichlorodifluoromethane	U		0.0327	0.100	1	08/06/2020 19:15	WG1521805
1,1-Dichloroethane	0.0964	J	0.0230	0.100	1	08/06/2020 19:15	WG1521805
1,2-Dichloroethane	0.207		0.0190	0.100	1	08/06/2020 19:15	WG1521805
1,1-Dichloroethene	U	UJ J0	0.0200	0.100	1	08/06/2020 19:15	WG1521805
cis-1,2-Dichloroethene	0.525	J J0	0.0276	0.100	1	08/06/2020 19:15	WG1521805
trans-1,2-Dichloroethene	U	UJ J0	0.0572	0.200	1	08/06/2020 19:15	WG1521805
1,2-Dichloropropane	U		0.0508	0.200	1	08/06/2020 19:15	WG1521805
1,1-Dichloropropene	U		0.0280	0.100	1	08/06/2020 19:15	WG1521805
1,3-Dichloropropane	U		0.0700	0.200	1	08/06/2020 19:15	WG1521805
cis-1,3-Dichloropropene	U		0.0271	0.100	1	08/06/2020 19:15	WG1521805
trans-1,3-Dichloropropene	U		0.0612	0.200	1	08/06/2020 19:15	WG1521805
2,2-Dichloropropane	U	UJ J0	0.0317	0.100	1	08/06/2020 19:15	WG1521805
Di-isopropyl ether	0.199		0.0140	0.0400	1	08/06/2020 19:15	WG1521805
Ethylbenzene	0.0775	J	0.0212	0.100	1	08/06/2020 19:15	WG1521805
Hexachloro-1,3-butadiene	U		0.508	1.00	1	08/06/2020 19:15	WG1521805
Isopropylbenzene	U		0.0345	0.100	1	08/06/2020 19:15	WG1521805
p-Isopropyltoluene	U		0.0932	0.200	1	08/06/2020 19:15	WG1521805
2-Butanone (MEK)	U		0.500	1.00	1	08/06/2020 19:15	WG1521805
Methylene Chloride	U		0.265	1.00	1	08/06/2020 19:15	WG1521805
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	08/06/2020 19:15	WG1521805
Methyl tert-butyl ether	0.116		0.0118	0.0400	1	08/06/2020 19:15	WG1521805
Naphthalene	U		0.124	0.500	1	08/06/2020 19:15	WG1521805
n-Propylbenzene	U		0.0472	0.200	1	08/06/2020 19:15	WG1521805
Styrene	U		0.109	0.500	1	08/06/2020 19:15	WG1521805
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	08/06/2020 19:15	WG1521805
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	08/06/2020 19:15	WG1521805
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	08/06/2020 19:15	WG1521805
Tetrachloroethene	U		0.0280	0.100	1	08/06/2020 19:15	WG1521805
Toluene	0.117	J	0.0500	0.200	1	08/06/2020 19:15	WG1521805
1,2,3-Trichlorobenzene	U		0.0250	0.500	1	08/06/2020 19:15	WG1521805
1,2,4-Trichlorobenzene	U		0.193	0.500	1	08/06/2020 19:15	WG1521805
1,1,1-Trichloroethane	U		0.0110	0.100	1	08/06/2020 19:15	WG1521805
1,1,2-Trichloroethane	U		0.0353	0.100	1	08/06/2020 19:15	WG1521805
Trichloroethene	U		0.0160	0.0400	1	08/06/2020 19:15	WG1521805
Trichlorofluoromethane	U	UJ J0	0.0200	0.100	1	08/06/2020 19:15	WG1521805
1,2,3-Trichloropropane	U		0.204	0.500	1	08/06/2020 19:15	WG1521805
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	08/06/2020 19:15	WG1521805
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	08/06/2020 19:15	WG1521805
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	08/06/2020 19:15	WG1521805
Vinyl chloride	0.941		0.0273	0.100	1	08/06/2020 19:15	WG1521805
Xylenes, Total	U		0.191	0.260	1	08/06/2020 19:15	WG1521805
Ethyl Ether	0.569		0.0170	0.100	1	08/06/2020 19:15	WG1521805
Tetrahydrofuran	U	UJ J0	0.0900	0.500	1	08/06/2020 19:15	WG1521805
Iodomethane	U	UJ J0	0.242	0.500	1	08/06/2020 19:15	WG1521805
Allyl chloride	U		0.580	1.00	1	08/06/2020 19:15	WG1521805
Trans-1,4-Dichloro-2-butene	U	UJ J0	0.0560	0.200	1	08/06/2020 19:15	WG1521805
(S) Toluene-d8	*106*			*75.0-131*		*08/06/2020 19:15*	WG1521805
(S) 4-Bromofluorobenzene	*99.6*			*67.0-138*		*08/06/2020 19:15*	WG1521805
(S) 1,2-Dichloroethane-d4	*102*			*70.0-130*		*08/06/2020 19:15*	WG1521805

JC 8/24/2020

1	2	3	4	5	6	7	8	9
Cp	Tc	Ss	Cn	Sr	Qc	Gl	Al	Sc

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	227000		8450	20000	1	08/06/2020 00:12	WG1520680

Sample Narrative:

L1245254-04 WG1520680: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	8070		379	1000	1	07/31/2020 18:53	WG1518407
Nitrate	U		48.0	100	1	07/31/2020 18:53	WG1518407
Sulfate	U		594	5000	1	07/31/2020 18:53	WG1518407

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	4820		102	1000	1	08/01/2020 21:56	WG1518849

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	10200		48.9	100	1	08/03/2020 21:41	WG1519176
Manganese	934		1.32	5.00	1	08/03/2020 21:41	WG1519176

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	11400		2.87	6.78	10	08/07/2020 13:51	WG1522285
Ethane	U		0.296	1.29	1	08/04/2020 14:42	WG1519838
Ethene	U		0.422	1.27	1	08/04/2020 14:42	WG1519838

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U	UJ J0	0.548	1.00	1	08/06/2020 19:36	WG1521805
Acrylonitrile	U		0.0760	0.500	1	08/06/2020 19:36	WG1521805
Benzene	0.316		0.0160	0.0400	1	08/06/2020 19:36	WG1521805
Bromobenzene	U		0.0420	0.500	1	08/06/2020 19:36	WG1521805
Bromodichloromethane	U		0.0315	0.100	1	08/06/2020 19:36	WG1521805
Bromoform	U		0.239	1.00	1	08/06/2020 19:36	WG1521805
Bromomethane	U	UJ J0	0.148	0.500	1	08/06/2020 19:36	WG1521805
n-Butylbenzene	U		0.153	0.500	1	08/06/2020 19:36	WG1521805
sec-Butylbenzene	U		0.101	0.500	1	08/06/2020 19:36	WG1521805
tert-Butylbenzene	U		0.0620	0.200	1	08/06/2020 19:36	WG1521805
Carbon tetrachloride	U		0.0432	0.200	1	08/06/2020 19:36	WG1521805
Chlorobenzene	U		0.0229	0.100	1	08/06/2020 19:36	WG1521805
Chlorodibromomethane	U		0.0180	0.100	1	08/06/2020 19:36	WG1521805
Chloroethane	U		0.0432	0.200	1	08/06/2020 19:36	WG1521805
Chloroform	U		0.0166	0.100	1	08/06/2020 19:36	WG1521805
Chloromethane	U		0.0556	0.500	1	08/06/2020 19:36	WG1521805
2-Chlorotoluene	U		0.0368	0.100	1	08/06/2020 19:36	WG1521805
4-Chlorotoluene	U		0.0452	0.200	1	08/06/2020 19:36	WG1521805
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	08/06/2020 19:36	WG1521805
1,2-Dibromoethane	U		0.0210	0.100	1	08/06/2020 19:36	WG1521805

JC 8/24/2020

MW-342-073020

Collected date/time: 07/30/20 10:20

SAMPLE RESULTS - 04

L1245254

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Dibromomethane	U		0.0400	0.200	1	08/06/2020 19:36	WG1521805
1,2-Dichlorobenzene	U		0.0580	0.200	1	08/06/2020 19:36	WG1521805
1,3-Dichlorobenzene	U		0.0680	0.200	1	08/06/2020 19:36	WG1521805
1,4-Dichlorobenzene	U		0.0788	0.200	1	08/06/2020 19:36	WG1521805
Dichlorodifluoromethane	U		0.0327	0.100	1	08/06/2020 19:36	WG1521805
1,1-Dichloroethane	U		0.0230	0.100	1	08/06/2020 19:36	WG1521805
1,2-Dichloroethane	0.0380	J	0.0190	0.100	1	08/06/2020 19:36	WG1521805
1,1-Dichloroethene	U	UJ J0	0.0200	0.100	1	08/06/2020 19:36	WG1521805
cis-1,2-Dichloroethene	5.56	J J0	0.0276	0.100	1	08/06/2020 19:36	WG1521805
trans-1,2-Dichloroethene	U	UJ J0	0.0572	0.200	1	08/06/2020 19:36	WG1521805
1,2-Dichloropropane	U		0.0508	0.200	1	08/06/2020 19:36	WG1521805
1,1-Dichloropropene	U		0.0280	0.100	1	08/06/2020 19:36	WG1521805
1,3-Dichloropropane	U		0.0700	0.200	1	08/06/2020 19:36	WG1521805
cis-1,3-Dichloropropene	U		0.0271	0.100	1	08/06/2020 19:36	WG1521805
trans-1,3-Dichloropropene	U		0.0612	0.200	1	08/06/2020 19:36	WG1521805
2,2-Dichloropropane	U	UJ J0	0.0317	0.100	1	08/06/2020 19:36	WG1521805
Di-isopropyl ether	0.0172	J	0.0140	0.0400	1	08/06/2020 19:36	WG1521805
Ethylbenzene	0.116		0.0212	0.100	1	08/06/2020 19:36	WG1521805
Hexachloro-1,3-butadiene	U		0.508	1.00	1	08/06/2020 19:36	WG1521805
Isopropylbenzene	U		0.0345	0.100	1	08/06/2020 19:36	WG1521805
p-Isopropyltoluene	U		0.0932	0.200	1	08/06/2020 19:36	WG1521805
2-Butanone (MEK)	U		0.500	1.00	1	08/06/2020 19:36	WG1521805
Methylene Chloride	U		0.265	1.00	1	08/06/2020 19:36	WG1521805
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	08/06/2020 19:36	WG1521805
Methyl tert-butyl ether	U		0.0118	0.0400	1	08/06/2020 19:36	WG1521805
Naphthalene	U		0.124	0.500	1	08/06/2020 19:36	WG1521805
n-Propylbenzene	U		0.0472	0.200	1	08/06/2020 19:36	WG1521805
Styrene	U		0.109	0.500	1	08/06/2020 19:36	WG1521805
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	08/06/2020 19:36	WG1521805
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	08/06/2020 19:36	WG1521805
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	08/06/2020 19:36	WG1521805
Tetrachloroethene	U		0.0280	0.100	1	08/06/2020 19:36	WG1521805
Toluene	1.24		0.0500	0.200	1	08/06/2020 19:36	WG1521805
1,2,3-Trichlorobenzene	U		0.0250	0.500	1	08/06/2020 19:36	WG1521805
1,2,4-Trichlorobenzene	U		0.193	0.500	1	08/06/2020 19:36	WG1521805
1,1,1-Trichloroethane	U		0.0110	0.100	1	08/06/2020 19:36	WG1521805
1,1,2-Trichloroethane	U		0.0353	0.100	1	08/06/2020 19:36	WG1521805
Trichloroethene	U		0.0160	0.0400	1	08/06/2020 19:36	WG1521805
Trichlorofluoromethane	U	UJ J0	0.0200	0.100	1	08/06/2020 19:36	WG1521805
1,2,3-Trichloropropane	U		0.204	0.500	1	08/06/2020 19:36	WG1521805
1,2,4-Trimethylbenzene	0.0959	J	0.0464	0.200	1	08/06/2020 19:36	WG1521805
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	08/06/2020 19:36	WG1521805
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	08/06/2020 19:36	WG1521805
Vinyl chloride	3.12		0.0273	0.100	1	08/06/2020 19:36	WG1521805
Xylenes, Total	0.723		0.191	0.260	1	08/06/2020 19:36	WG1521805
Ethyl Ether	U		0.0170	0.100	1	08/06/2020 19:36	WG1521805
Tetrahydrofuran	U	UJ J0	0.0900	0.500	1	08/06/2020 19:36	WG1521805
Iodomethane	U	UJ J0	0.242	0.500	1	08/06/2020 19:36	WG1521805
Allyl chloride	U		0.580	1.00	1	08/06/2020 19:36	WG1521805
Trans-1,4-Dichloro-2-butene	U	UJ J0	0.0560	0.200	1	08/06/2020 19:36	WG1521805
(S) Toluene-d8	*107*			*75.0-131*		*08/06/2020 19:36*	WG1521805
(S) 4-Bromofluorobenzene	*98.5*			*67.0-138*		*08/06/2020 19:36*	WG1521805
(S) 1,2-Dichloroethane-d4	*105*			*70.0-130*		*08/06/2020 19:36*	WG1521805

JC 8/24/2020

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	133000		8450	20000	1	08/06/2020 00:18	WG1520680

Sample Narrative:

L1245254-05 WG1520680: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	7130		379	1000	1	07/31/2020 19:30	WG1518407
Nitrate	U		48.0	100	1	07/31/2020 19:30	WG1518407
Sulfate	3420	J	594	5000	1	07/31/2020 19:30	WG1518407

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	2810		102	1000	1	08/01/2020 22:10	WG1518849

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	365		48.9	100	1	08/03/2020 21:45	WG1519176
Manganese	1060		1.32	5.00	1	08/03/2020 21:45	WG1519176

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	2310		0.287	0.678	1	08/04/2020 14:47	WG1519838
Ethane	U		0.296	1.29	1	08/04/2020 14:47	WG1519838
Ethene	U		0.422	1.27	1	08/04/2020 14:47	WG1519838

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U	UJ J0	0.548	1.00	1	08/06/2020 19:56	WG1521805
Acrylonitrile	U		0.0760	0.500	1	08/06/2020 19:56	WG1521805
Benzene	0.0459		0.0160	0.0400	1	08/06/2020 19:56	WG1521805
Bromobenzene	U		0.0420	0.500	1	08/06/2020 19:56	WG1521805
Bromodichloromethane	U		0.0315	0.100	1	08/06/2020 19:56	WG1521805
Bromoform	U		0.239	1.00	1	08/06/2020 19:56	WG1521805
Bromomethane	U	UJ J0	0.148	0.500	1	08/06/2020 19:56	WG1521805
n-Butylbenzene	U		0.153	0.500	1	08/06/2020 19:56	WG1521805
sec-Butylbenzene	U		0.101	0.500	1	08/06/2020 19:56	WG1521805
tert-Butylbenzene	U		0.0620	0.200	1	08/06/2020 19:56	WG1521805
Carbon tetrachloride	U		0.0432	0.200	1	08/06/2020 19:56	WG1521805
Chlorobenzene	U		0.0229	0.100	1	08/06/2020 19:56	WG1521805
Chlorodibromomethane	U		0.0180	0.100	1	08/06/2020 19:56	WG1521805
Chloroethane	U		0.0432	0.200	1	08/06/2020 19:56	WG1521805
Chloroform	U		0.0166	0.100	1	08/06/2020 19:56	WG1521805
Chloromethane	U		0.0556	0.500	1	08/06/2020 19:56	WG1521805
2-Chlorotoluene	U		0.0368	0.100	1	08/06/2020 19:56	WG1521805
4-Chlorotoluene	U		0.0452	0.200	1	08/06/2020 19:56	WG1521805
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	08/06/2020 19:56	WG1521805
1,2-Dibromoethane	U		0.0210	0.100	1	08/06/2020 19:56	WG1521805

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Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Dibromomethane	U		0.0400	0.200	1	08/06/2020 19:56	WG1521805
1,2-Dichlorobenzene	U		0.0580	0.200	1	08/06/2020 19:56	WG1521805
1,3-Dichlorobenzene	U		0.0680	0.200	1	08/06/2020 19:56	WG1521805
1,4-Dichlorobenzene	U		0.0788	0.200	1	08/06/2020 19:56	WG1521805
Dichlorodifluoromethane	U		0.0327	0.100	1	08/06/2020 19:56	WG1521805
1,1-Dichloroethane	U		0.0230	0.100	1	08/06/2020 19:56	WG1521805
1,2-Dichloroethane	U		0.0190	0.100	1	08/06/2020 19:56	WG1521805
1,1-Dichloroethene	U	UJ J0	0.0200	0.100	1	08/06/2020 19:56	WG1521805
cis-1,2-Dichloroethene	6.73	J J0	0.0276	0.100	1	08/06/2020 19:56	WG1521805
trans-1,2-Dichloroethene	U	UJ J0	0.0572	0.200	1	08/06/2020 19:56	WG1521805
1,2-Dichloropropane	U		0.0508	0.200	1	08/06/2020 19:56	WG1521805
1,1-Dichloropropene	U		0.0280	0.100	1	08/06/2020 19:56	WG1521805
1,3-Dichloropropane	U		0.0700	0.200	1	08/06/2020 19:56	WG1521805
cis-1,3-Dichloropropene	U		0.0271	0.100	1	08/06/2020 19:56	WG1521805
trans-1,3-Dichloropropene	U		0.0612	0.200	1	08/06/2020 19:56	WG1521805
2,2-Dichloropropane	U	UJ J0	0.0317	0.100	1	08/06/2020 19:56	WG1521805
Di-isopropyl ether	U		0.0140	0.0400	1	08/06/2020 19:56	WG1521805
Ethylbenzene	U		0.0212	0.100	1	08/06/2020 19:56	WG1521805
Hexachloro-1,3-butadiene	U		0.508	1.00	1	08/06/2020 19:56	WG1521805
Isopropylbenzene	U		0.0345	0.100	1	08/06/2020 19:56	WG1521805
p-Isopropyltoluene	U		0.0932	0.200	1	08/06/2020 19:56	WG1521805
2-Butanone (MEK)	U		0.500	1.00	1	08/06/2020 19:56	WG1521805
Methylene Chloride	U		0.265	1.00	1	08/06/2020 19:56	WG1521805
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	08/06/2020 19:56	WG1521805
Methyl tert-butyl ether	U		0.0118	0.0400	1	08/06/2020 19:56	WG1521805
Naphthalene	U		0.124	0.500	1	08/06/2020 19:56	WG1521805
n-Propylbenzene	U		0.0472	0.200	1	08/06/2020 19:56	WG1521805
Styrene	U		0.109	0.500	1	08/06/2020 19:56	WG1521805
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	08/06/2020 19:56	WG1521805
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	08/06/2020 19:56	WG1521805
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	08/06/2020 19:56	WG1521805
Tetrachloroethene	U		0.0280	0.100	1	08/06/2020 19:56	WG1521805
Toluene	0.0500	J	0.0500	0.200	1	08/06/2020 19:56	WG1521805
1,2,3-Trichlorobenzene	U		0.0250	0.500	1	08/06/2020 19:56	WG1521805
1,2,4-Trichlorobenzene	U		0.193	0.500	1	08/06/2020 19:56	WG1521805
1,1,1-Trichloroethane	U		0.0110	0.100	1	08/06/2020 19:56	WG1521805
1,1,2-Trichloroethane	U		0.0353	0.100	1	08/06/2020 19:56	WG1521805
Trichloroethene	U		0.0160	0.0400	1	08/06/2020 19:56	WG1521805
Trichlorofluoromethane	U	UJ J0	0.0200	0.100	1	08/06/2020 19:56	WG1521805
1,2,3-Trichloropropane	U		0.204	0.500	1	08/06/2020 19:56	WG1521805
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	08/06/2020 19:56	WG1521805
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	08/06/2020 19:56	WG1521805
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	08/06/2020 19:56	WG1521805
Vinyl chloride	0.147		0.0273	0.100	1	08/06/2020 19:56	WG1521805
Xylenes, Total	U		0.191	0.260	1	08/06/2020 19:56	WG1521805
Ethyl Ether	U		0.0170	0.100	1	08/06/2020 19:56	WG1521805
Tetrahydrofuran	U	UJ J0	0.0900	0.500	1	08/06/2020 19:56	WG1521805
Iodomethane	U	UJ J0	0.242	0.500	1	08/06/2020 19:56	WG1521805
Allyl chloride	U		0.580	1.00	1	08/06/2020 19:56	WG1521805
Trans-1,4-Dichloro-2-butene	U	UJ J0	0.0560	0.200	1	08/06/2020 19:56	WG1521805
(S) Toluene-d8	*105*			*75.0-131*		*08/06/2020 19:56*	WG1521805
(S) 4-Bromofluorobenzene	*95.4*			*67.0-138*		*08/06/2020 19:56*	WG1521805
(S) 1,2-Dichloroethane-d4	*104*			*70.0-130*		*08/06/2020 19:56*	WG1521805

JC 8/24/2020

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	843000		8450	20000	1	08/06/2020 00:33	WG1520680

Sample Narrative:

L1245254-06 WG1520680: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	20000		379	1000	1	07/31/2020 20:07	WG1518407
Nitrate	U		48.0	100	1	07/31/2020 20:07	WG1518407
Sulfate	28400		594	5000	1	07/31/2020 20:07	WG1518407

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	18500		102	1000	1	08/01/2020 22:26	WG1518849

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	4830		48.9	100	1	08/03/2020 21:49	WG1519176
Manganese	3040		1.32	5.00	1	08/03/2020 21:49	WG1519176

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	278		0.287	0.678	1	08/04/2020 14:50	WG1519838
Ethane	29.8		0.296	1.29	1	08/04/2020 14:50	WG1519838
Ethene	U		0.422	1.27	1	08/04/2020 14:50	WG1519838

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U	UJ J0	0.548	1.00	1	08/06/2020 20:17	WG1521805
Acrylonitrile	U		0.0760	0.500	1	08/06/2020 20:17	WG1521805
Benzene	0.451		0.0160	0.0400	1	08/06/2020 20:17	WG1521805
Bromobenzene	U		0.0420	0.500	1	08/06/2020 20:17	WG1521805
Bromodichloromethane	U		0.0315	0.100	1	08/06/2020 20:17	WG1521805
Bromoform	U		0.239	1.00	1	08/06/2020 20:17	WG1521805
Bromomethane	U	UJ J0	0.148	0.500	1	08/06/2020 20:17	WG1521805
n-Butylbenzene	U		0.153	0.500	1	08/06/2020 20:17	WG1521805
sec-Butylbenzene	U		0.101	0.500	1	08/06/2020 20:17	WG1521805
tert-Butylbenzene	U		0.0620	0.200	1	08/06/2020 20:17	WG1521805
Carbon tetrachloride	U		0.0432	0.200	1	08/06/2020 20:17	WG1521805
Chlorobenzene	U		0.0229	0.100	1	08/06/2020 20:17	WG1521805
Chlorodibromomethane	U		0.0180	0.100	1	08/06/2020 20:17	WG1521805
Chloroethane	U		0.0432	0.200	1	08/06/2020 20:17	WG1521805
Chloroform	U		0.0166	0.100	1	08/06/2020 20:17	WG1521805
Chloromethane	U		0.0556	0.500	1	08/06/2020 20:17	WG1521805
2-Chlorotoluene	U		0.0368	0.100	1	08/06/2020 20:17	WG1521805
4-Chlorotoluene	U		0.0452	0.200	1	08/06/2020 20:17	WG1521805
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	08/06/2020 20:17	WG1521805
1,2-Dibromoethane	U		0.0210	0.100	1	08/06/2020 20:17	WG1521805

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Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Dibromomethane	U		0.0400	0.200	1	08/06/2020 20:17	WG1521805
1,2-Dichlorobenzene	U		0.0580	0.200	1	08/06/2020 20:17	WG1521805
1,3-Dichlorobenzene	U		0.0680	0.200	1	08/06/2020 20:17	WG1521805
1,4-Dichlorobenzene	U		0.0788	0.200	1	08/06/2020 20:17	WG1521805
Dichlorodifluoromethane	U		0.0327	0.100	1	08/06/2020 20:17	WG1521805
1,1-Dichloroethane	U		0.0230	0.100	1	08/06/2020 20:17	WG1521805
1,2-Dichloroethane	0.0395	J	0.0190	0.100	1	08/06/2020 20:17	WG1521805
1,1-Dichloroethene	0.626	J J0	0.0200	0.100	1	08/06/2020 20:17	WG1521805
cis-1,2-Dichloroethene	91.2	J J0	0.0276	0.100	1	08/06/2020 20:17	WG1521805
trans-1,2-Dichloroethene	0.472	J J0	0.0572	0.200	1	08/06/2020 20:17	WG1521805
1,2-Dichloropropane	U		0.0508	0.200	1	08/06/2020 20:17	WG1521805
1,1-Dichloropropene	U		0.0280	0.100	1	08/06/2020 20:17	WG1521805
1,3-Dichloropropane	U		0.0700	0.200	1	08/06/2020 20:17	WG1521805
cis-1,3-Dichloropropene	U		0.0271	0.100	1	08/06/2020 20:17	WG1521805
trans-1,3-Dichloropropene	U		0.0612	0.200	1	08/06/2020 20:17	WG1521805
2,2-Dichloropropane	U	UJ J0	0.0317	0.100	1	08/06/2020 20:17	WG1521805
Di-isopropyl ether	0.0322	J	0.0140	0.0400	1	08/06/2020 20:17	WG1521805
Ethylbenzene	U		0.0212	0.100	1	08/06/2020 20:17	WG1521805
Hexachloro-1,3-butadiene	U		0.508	1.00	1	08/06/2020 20:17	WG1521805
Isopropylbenzene	U		0.0345	0.100	1	08/06/2020 20:17	WG1521805
p-Isopropyltoluene	U		0.0932	0.200	1	08/06/2020 20:17	WG1521805
2-Butanone (MEK)	U		0.500	1.00	1	08/06/2020 20:17	WG1521805
Methylene Chloride	U		0.265	1.00	1	08/06/2020 20:17	WG1521805
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	08/06/2020 20:17	WG1521805
Methyl tert-butyl ether	U		0.0118	0.0400	1	08/06/2020 20:17	WG1521805
Naphthalene	U		0.124	0.500	1	08/06/2020 20:17	WG1521805
n-Propylbenzene	U		0.0472	0.200	1	08/06/2020 20:17	WG1521805
Styrene	U		0.109	0.500	1	08/06/2020 20:17	WG1521805
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	08/06/2020 20:17	WG1521805
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	08/06/2020 20:17	WG1521805
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	08/06/2020 20:17	WG1521805
Tetrachloroethene	3.34		0.0280	0.100	1	08/06/2020 20:17	WG1521805
Toluene	0.0790	J	0.0500	0.200	1	08/06/2020 20:17	WG1521805
1,2,3-Trichlorobenzene	U		0.0250	0.500	1	08/06/2020 20:17	WG1521805
1,2,4-Trichlorobenzene	U		0.193	0.500	1	08/06/2020 20:17	WG1521805
1,1,1-Trichloroethane	U		0.0110	0.100	1	08/06/2020 20:17	WG1521805
1,1,2-Trichloroethane	U		0.0353	0.100	1	08/06/2020 20:17	WG1521805
Trichloroethene	9.74		0.0160	0.0400	1	08/06/2020 20:17	WG1521805
Trichlorofluoromethane	U	UJ J0	0.0200	0.100	1	08/06/2020 20:17	WG1521805
1,2,3-Trichloropropane	U		0.204	0.500	1	08/06/2020 20:17	WG1521805
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	08/06/2020 20:17	WG1521805
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	08/06/2020 20:17	WG1521805
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	08/06/2020 20:17	WG1521805
Vinyl chloride	6.05		0.0273	0.100	1	08/06/2020 20:17	WG1521805
Xylenes, Total	U		0.191	0.260	1	08/06/2020 20:17	WG1521805
Ethyl Ether	0.267		0.0170	0.100	1	08/06/2020 20:17	WG1521805
Tetrahydrofuran	U	UJ J0	0.0900	0.500	1	08/06/2020 20:17	WG1521805
Iodomethane	U	UJ J0	0.242	0.500	1	08/06/2020 20:17	WG1521805
Allyl chloride	U		0.580	1.00	1	08/06/2020 20:17	WG1521805
Trans-1,4-Dichloro-2-butene	U	UJ J0	0.0560	0.200	1	08/06/2020 20:17	WG1521805
(S) Toluene-d8	*108*			*75.0-131*		*08/06/2020 20:17*	WG1521805
(S) 4-Bromofluorobenzene	*97.9*			*67.0-138*		*08/06/2020 20:17*	WG1521805
(S) 1,2-Dichloroethane-d4	*103*			*70.0-130*		*08/06/2020 20:17*	WG1521805

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Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	332000		8450	20000	1	08/06/2020 00:40	WG1520680

Sample Narrative:

L1245254-07 WG1520680: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	22300		379	1000	1	07/31/2020 20:44	WG1518407
Nitrate	U		48.0	100	1	07/31/2020 20:44	WG1518407
Sulfate	1340	J	594	5000	1	07/31/2020 20:44	WG1518407

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	14000		102	1000	1	08/01/2020 23:55	WG1518849

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	12000		48.9	100	1	08/03/2020 21:52	WG1519176
Manganese	2930		1.32	5.00	1	08/03/2020 21:52	WG1519176

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	4020		0.287	0.678	1	08/04/2020 14:56	WG1519838
Ethane	U		0.296	1.29	1	08/04/2020 14:56	WG1519838
Ethene	U		0.422	1.27	1	08/04/2020 14:56	WG1519838

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U	UJ J0	0.548	1.00	1	08/06/2020 20:37	WG1521805
Acrylonitrile	U		0.0760	0.500	1	08/06/2020 20:37	WG1521805
Benzene	0.0457		0.0160	0.0400	1	08/06/2020 20:37	WG1521805
Bromobenzene	U		0.0420	0.500	1	08/06/2020 20:37	WG1521805
Bromodichloromethane	U		0.0315	0.100	1	08/06/2020 20:37	WG1521805
Bromoform	U		0.239	1.00	1	08/06/2020 20:37	WG1521805
Bromomethane	U	UJ J0	0.148	0.500	1	08/06/2020 20:37	WG1521805
n-Butylbenzene	U		0.153	0.500	1	08/06/2020 20:37	WG1521805
sec-Butylbenzene	U		0.101	0.500	1	08/06/2020 20:37	WG1521805
tert-Butylbenzene	U		0.0620	0.200	1	08/06/2020 20:37	WG1521805
Carbon tetrachloride	U		0.0432	0.200	1	08/06/2020 20:37	WG1521805
Chlorobenzene	U		0.0229	0.100	1	08/06/2020 20:37	WG1521805
Chlorodibromomethane	U		0.0180	0.100	1	08/06/2020 20:37	WG1521805
Chloroethane	U		0.0432	0.200	1	08/06/2020 20:37	WG1521805
Chloroform	U		0.0166	0.100	1	08/06/2020 20:37	WG1521805
Chloromethane	U		0.0556	0.500	1	08/06/2020 20:37	WG1521805
2-Chlorotoluene	U		0.0368	0.100	1	08/06/2020 20:37	WG1521805
4-Chlorotoluene	U		0.0452	0.200	1	08/06/2020 20:37	WG1521805
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	08/06/2020 20:37	WG1521805
1,2-Dibromoethane	U		0.0210	0.100	1	08/06/2020 20:37	WG1521805

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MW-317-073020

Collected date/time: 07/30/20 12:17

SAMPLE RESULTS - 07

L1245254

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Dibromomethane	U		0.0400	0.200	1	08/06/2020 20:37	WG1521805
1,2-Dichlorobenzene	U		0.0580	0.200	1	08/06/2020 20:37	WG1521805
1,3-Dichlorobenzene	U		0.0680	0.200	1	08/06/2020 20:37	WG1521805
1,4-Dichlorobenzene	U		0.0788	0.200	1	08/06/2020 20:37	WG1521805
Dichlorodifluoromethane	U		0.0327	0.100	1	08/06/2020 20:37	WG1521805
1,1-Dichloroethane	U		0.0230	0.100	1	08/06/2020 20:37	WG1521805
1,2-Dichloroethane	U		0.0190	0.100	1	08/06/2020 20:37	WG1521805
1,1-Dichloroethene	U	UJ J0	0.0200	0.100	1	08/06/2020 20:37	WG1521805
cis-1,2-Dichloroethene	0.0545	J J J0	0.0276	0.100	1	08/06/2020 20:37	WG1521805
trans-1,2-Dichloroethene	U	UJ J0	0.0572	0.200	1	08/06/2020 20:37	WG1521805
1,2-Dichloropropane	U		0.0508	0.200	1	08/06/2020 20:37	WG1521805
1,1-Dichloropropene	U		0.0280	0.100	1	08/06/2020 20:37	WG1521805
1,3-Dichloropropane	U		0.0700	0.200	1	08/06/2020 20:37	WG1521805
cis-1,3-Dichloropropene	U		0.0271	0.100	1	08/06/2020 20:37	WG1521805
trans-1,3-Dichloropropene	U		0.0612	0.200	1	08/06/2020 20:37	WG1521805
2,2-Dichloropropane	U	UJ J0	0.0317	0.100	1	08/06/2020 20:37	WG1521805
Di-isopropyl ether	0.0431		0.0140	0.0400	1	08/06/2020 20:37	WG1521805
Ethylbenzene	0.205		0.0212	0.100	1	08/06/2020 20:37	WG1521805
Hexachloro-1,3-butadiene	U		0.508	1.00	1	08/06/2020 20:37	WG1521805
Isopropylbenzene	U		0.0345	0.100	1	08/06/2020 20:37	WG1521805
p-Isopropyltoluene	U		0.0932	0.200	1	08/06/2020 20:37	WG1521805
2-Butanone (MEK)	U		0.500	1.00	1	08/06/2020 20:37	WG1521805
Methylene Chloride	U		0.265	1.00	1	08/06/2020 20:37	WG1521805
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	08/06/2020 20:37	WG1521805
Methyl tert-butyl ether	U		0.0118	0.0400	1	08/06/2020 20:37	WG1521805
Naphthalene	U		0.124	0.500	1	08/06/2020 20:37	WG1521805
n-Propylbenzene	U		0.0472	0.200	1	08/06/2020 20:37	WG1521805
Styrene	U		0.109	0.500	1	08/06/2020 20:37	WG1521805
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	08/06/2020 20:37	WG1521805
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	08/06/2020 20:37	WG1521805
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	08/06/2020 20:37	WG1521805
Tetrachloroethene	U		0.0280	0.100	1	08/06/2020 20:37	WG1521805
Toluene	1.98		0.0500	0.200	1	08/06/2020 20:37	WG1521805
1,2,3-Trichlorobenzene	U		0.0250	0.500	1	08/06/2020 20:37	WG1521805
1,2,4-Trichlorobenzene	U		0.193	0.500	1	08/06/2020 20:37	WG1521805
1,1,1-Trichloroethane	U		0.0110	0.100	1	08/06/2020 20:37	WG1521805
1,1,2-Trichloroethane	U		0.0353	0.100	1	08/06/2020 20:37	WG1521805
Trichloroethene	U		0.0160	0.0400	1	08/06/2020 20:37	WG1521805
Trichlorofluoromethane	U	UJ J0	0.0200	0.100	1	08/06/2020 20:37	WG1521805
1,2,3-Trichloropropane	U		0.204	0.500	1	08/06/2020 20:37	WG1521805
1,2,4-Trimethylbenzene	0.170	J	0.0464	0.200	1	08/06/2020 20:37	WG1521805
1,2,3-Trimethylbenzene	0.0651	J	0.0460	0.200	1	08/06/2020 20:37	WG1521805
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	08/06/2020 20:37	WG1521805
Vinyl chloride	U		0.0273	0.100	1	08/06/2020 20:37	WG1521805
Xylenes, Total	1.36		0.191	0.260	1	08/06/2020 20:37	WG1521805
Ethyl Ether	U		0.0170	0.100	1	08/06/2020 20:37	WG1521805
Tetrahydrofuran	U	UJ J0	0.0900	0.500	1	08/06/2020 20:37	WG1521805
Iodomethane	U	UJ J0	0.242	0.500	1	08/06/2020 20:37	WG1521805
Allyl chloride	U		0.580	1.00	1	08/06/2020 20:37	WG1521805
Trans-1,4-Dichloro-2-butene	U	UJ J0	0.0560	0.200	1	08/06/2020 20:37	WG1521805
(S) Toluene-d8	*106*			*75.0-131*		*08/06/2020 20:37*	WG1521805
(S) 4-Bromofluorobenzene	*98.9*			*67.0-138*		*08/06/2020 20:37*	WG1521805
(S) 1,2-Dichloroethane-d4	*105*			*70.0-130*		*08/06/2020 20:37*	WG1521805

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Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	474000		8450	20000	1	08/06/2020 00:47	WG1520680

Sample Narrative:

L1245254-08 WG1520680: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	18000		379	1000	1	07/31/2020 21:02	WG1518407
Nitrate	U		48.0	100	1	07/31/2020 21:02	WG1518407
Sulfate	U		594	5000	1	07/31/2020 21:02	WG1518407

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	3830		102	1000	1	08/02/2020 00:12	WG1518849

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	12100		48.9	100	1	08/03/2020 21:56	WG1519176
Manganese	542		1.32	5.00	1	08/03/2020 21:56	WG1519176

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	12300		2.87	6.78	10	08/07/2020 13:56	WG1522285
Ethane	10.8		0.296	1.29	1	08/04/2020 15:00	WG1519838
Ethene	65.7		0.422	1.27	1	08/04/2020 15:00	WG1519838

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U UJ	J0	0.548	1.00	1	08/06/2020 20:57	WG1521805
Acrylonitrile	U		0.0760	0.500	1	08/06/2020 20:57	WG1521805
Benzene	1.76		0.0160	0.0400	1	08/06/2020 20:57	WG1521805
Bromobenzene	U		0.0420	0.500	1	08/06/2020 20:57	WG1521805
Bromodichloromethane	U		0.0315	0.100	1	08/06/2020 20:57	WG1521805
Bromoform	U		0.239	1.00	1	08/06/2020 20:57	WG1521805
Bromomethane	U UJ	J0	0.148	0.500	1	08/06/2020 20:57	WG1521805
n-Butylbenzene	U		0.153	0.500	1	08/06/2020 20:57	WG1521805
sec-Butylbenzene	U		0.101	0.500	1	08/06/2020 20:57	WG1521805
tert-Butylbenzene	U		0.0620	0.200	1	08/06/2020 20:57	WG1521805
Carbon tetrachloride	U		0.0432	0.200	1	08/06/2020 20:57	WG1521805
Chlorobenzene	U		0.0229	0.100	1	08/06/2020 20:57	WG1521805
Chlorodibromomethane	U		0.0180	0.100	1	08/06/2020 20:57	WG1521805
Chloroethane	U		0.0432	0.200	1	08/06/2020 20:57	WG1521805
Chloroform	U		0.0166	0.100	1	08/06/2020 20:57	WG1521805
Chloromethane	U		0.0556	0.500	1	08/06/2020 20:57	WG1521805
2-Chlorotoluene	U		0.0368	0.100	1	08/06/2020 20:57	WG1521805
4-Chlorotoluene	U		0.0452	0.200	1	08/06/2020 20:57	WG1521805
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	08/06/2020 20:57	WG1521805
1,2-Dibromoethane	U		0.0210	0.100	1	08/06/2020 20:57	WG1521805

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1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Dibromomethane	U		0.0400	0.200	1	08/06/2020 20:57	WG1521805
1,2-Dichlorobenzene	U		0.0580	0.200	1	08/06/2020 20:57	WG1521805
1,3-Dichlorobenzene	U		0.0680	0.200	1	08/06/2020 20:57	WG1521805
1,4-Dichlorobenzene	U		0.0788	0.200	1	08/06/2020 20:57	WG1521805
Dichlorodifluoromethane	U		0.0327	0.100	1	08/06/2020 20:57	WG1521805
1,1-Dichloroethane	U		0.0230	0.100	1	08/06/2020 20:57	WG1521805
1,2-Dichloroethane	U		0.0190	0.100	1	08/06/2020 20:57	WG1521805
1,1-Dichloroethene	U	UJ J0	0.0200	0.100	1	08/06/2020 20:57	WG1521805
cis-1,2-Dichloroethene	1.38	J J0	0.0276	0.100	1	08/06/2020 20:57	WG1521805
trans-1,2-Dichloroethene	U	UJ J0	0.0572	0.200	1	08/06/2020 20:57	WG1521805
1,2-Dichloropropane	U		0.0508	0.200	1	08/06/2020 20:57	WG1521805
1,1-Dichloropropene	U		0.0280	0.100	1	08/06/2020 20:57	WG1521805
1,3-Dichloropropane	U		0.0700	0.200	1	08/06/2020 20:57	WG1521805
cis-1,3-Dichloropropene	U		0.0271	0.100	1	08/06/2020 20:57	WG1521805
trans-1,3-Dichloropropene	U		0.0612	0.200	1	08/06/2020 20:57	WG1521805
2,2-Dichloropropane	U	UJ J0	0.0317	0.100	1	08/06/2020 20:57	WG1521805
Di-isopropyl ether	0.0492		0.0140	0.0400	1	08/06/2020 20:57	WG1521805
Ethylbenzene	U		0.0212	0.100	1	08/06/2020 20:57	WG1521805
Hexachloro-1,3-butadiene	U		0.508	1.00	1	08/06/2020 20:57	WG1521805
Isopropylbenzene	U		0.0345	0.100	1	08/06/2020 20:57	WG1521805
p-Isopropyltoluene	U		0.0932	0.200	1	08/06/2020 20:57	WG1521805
2-Butanone (MEK)	U		0.500	1.00	1	08/06/2020 20:57	WG1521805
Methylene Chloride	U		0.265	1.00	1	08/06/2020 20:57	WG1521805
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	08/06/2020 20:57	WG1521805
Methyl tert-butyl ether	U		0.0118	0.0400	1	08/06/2020 20:57	WG1521805
Naphthalene	U		0.124	0.500	1	08/06/2020 20:57	WG1521805
n-Propylbenzene	U		0.0472	0.200	1	08/06/2020 20:57	WG1521805
Styrene	U		0.109	0.500	1	08/06/2020 20:57	WG1521805
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	08/06/2020 20:57	WG1521805
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	08/06/2020 20:57	WG1521805
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	08/06/2020 20:57	WG1521805
Tetrachloroethene	U		0.0280	0.100	1	08/06/2020 20:57	WG1521805
Toluene	0.0707	J	0.0500	0.200	1	08/06/2020 20:57	WG1521805
1,2,3-Trichlorobenzene	U		0.0250	0.500	1	08/06/2020 20:57	WG1521805
1,2,4-Trichlorobenzene	U		0.193	0.500	1	08/06/2020 20:57	WG1521805
1,1,1-Trichloroethane	U		0.0110	0.100	1	08/06/2020 20:57	WG1521805
1,1,2-Trichloroethane	U		0.0353	0.100	1	08/06/2020 20:57	WG1521805
Trichloroethene	U		0.0160	0.0400	1	08/06/2020 20:57	WG1521805
Trichlorofluoromethane	U	UJ J0	0.0200	0.100	1	08/06/2020 20:57	WG1521805
1,2,3-Trichloropropane	U		0.204	0.500	1	08/06/2020 20:57	WG1521805
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	08/06/2020 20:57	WG1521805
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	08/06/2020 20:57	WG1521805
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	08/06/2020 20:57	WG1521805
Vinyl chloride	44.9		0.0273	0.100	1	08/06/2020 20:57	WG1521805
Xylenes, Total	U		0.191	0.260	1	08/06/2020 20:57	WG1521805
Ethyl Ether	U		0.0170	0.100	1	08/06/2020 20:57	WG1521805
Tetrahydrofuran	U	UJ J0	0.0900	0.500	1	08/06/2020 20:57	WG1521805
Iodomethane	U	UJ J0	0.242	0.500	1	08/06/2020 20:57	WG1521805
Allyl chloride	U		0.580	1.00	1	08/06/2020 20:57	WG1521805
Trans-1,4-Dichloro-2-butene	U	UJ J0	0.0560	0.200	1	08/06/2020 20:57	WG1521805
(S) Toluene-d8	*106*			*75.0-131*		*08/06/2020 20:57*	WG1521805
(S) 4-Bromofluorobenzene	*97.8*			*67.0-138*		*08/06/2020 20:57*	WG1521805
(S) 1,2-Dichloroethane-d4	*103*			*70.0-130*		*08/06/2020 20:57*	WG1521805

JC 8/24/2020

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	424000		8450	20000	1	08/06/2020 00:53	WG1520680

Sample Narrative:

L1245254-09 WG1520680: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	22700		379	1000	1	07/31/2020 22:16	WG1518407
Nitrate	U		48.0	100	1	07/31/2020 22:16	WG1518407
Sulfate	7320		594	5000	1	07/31/2020 22:16	WG1518407

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	5430		102	1000	1	08/02/2020 00:59	WG1518849

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	3950		48.9	100	1	08/03/2020 22:00	WG1519176
Manganese	1710		1.32	5.00	1	08/03/2020 22:00	WG1519176

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	12200		2.87	6.78	10	08/07/2020 13:58	WG1522285
Ethane	U		0.296	1.29	1	08/04/2020 15:26	WG1519838
Ethene	U		0.422	1.27	1	08/04/2020 15:26	WG1519838

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U	UJ J0	0.548	1.00	1	08/06/2020 21:18	WG1521805
Acrylonitrile	U		0.0760	0.500	1	08/06/2020 21:18	WG1521805
Benzene	0.0388	J	0.0160	0.0400	1	08/06/2020 21:18	WG1521805
Bromobenzene	U		0.0420	0.500	1	08/06/2020 21:18	WG1521805
Bromodichloromethane	U		0.0315	0.100	1	08/06/2020 21:18	WG1521805
Bromoform	U		0.239	1.00	1	08/06/2020 21:18	WG1521805
Bromomethane	U	UJ J0	0.148	0.500	1	08/06/2020 21:18	WG1521805
n-Butylbenzene	U		0.153	0.500	1	08/06/2020 21:18	WG1521805
sec-Butylbenzene	U		0.101	0.500	1	08/06/2020 21:18	WG1521805
tert-Butylbenzene	U		0.0620	0.200	1	08/06/2020 21:18	WG1521805
Carbon tetrachloride	U		0.0432	0.200	1	08/06/2020 21:18	WG1521805
Chlorobenzene	U		0.0229	0.100	1	08/06/2020 21:18	WG1521805
Chlorodibromomethane	U		0.0180	0.100	1	08/06/2020 21:18	WG1521805
Chloroethane	U		0.0432	0.200	1	08/06/2020 21:18	WG1521805
Chloroform	U		0.0166	0.100	1	08/06/2020 21:18	WG1521805
Chloromethane	U		0.0556	0.500	1	08/06/2020 21:18	WG1521805
2-Chlorotoluene	U		0.0368	0.100	1	08/06/2020 21:18	WG1521805
4-Chlorotoluene	U		0.0452	0.200	1	08/06/2020 21:18	WG1521805
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	08/06/2020 21:18	WG1521805
1,2-Dibromoethane	U		0.0210	0.100	1	08/06/2020 21:18	WG1521805

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Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Dibromomethane	U		0.0400	0.200	1	08/06/2020 21:18	WG1521805
1,2-Dichlorobenzene	U		0.0580	0.200	1	08/06/2020 21:18	WG1521805
1,3-Dichlorobenzene	U		0.0680	0.200	1	08/06/2020 21:18	WG1521805
1,4-Dichlorobenzene	U		0.0788	0.200	1	08/06/2020 21:18	WG1521805
Dichlorodifluoromethane	U		0.0327	0.100	1	08/06/2020 21:18	WG1521805
1,1-Dichloroethane	0.102		0.0230	0.100	1	08/06/2020 21:18	WG1521805
1,2-Dichloroethane	U		0.0190	0.100	1	08/06/2020 21:18	WG1521805
1,1-Dichloroethene	U UJ	J0	0.0200	0.100	1	08/06/2020 21:18	WG1521805
cis-1,2-Dichloroethene	U UJ	J0	0.0276	0.100	1	08/06/2020 21:18	WG1521805
trans-1,2-Dichloroethene	U UJ	J0	0.0572	0.200	1	08/06/2020 21:18	WG1521805
1,2-Dichloropropane	U		0.0508	0.200	1	08/06/2020 21:18	WG1521805
1,1-Dichloropropene	U		0.0280	0.100	1	08/06/2020 21:18	WG1521805
1,3-Dichloropropane	U		0.0700	0.200	1	08/06/2020 21:18	WG1521805
cis-1,3-Dichloropropene	U		0.0271	0.100	1	08/06/2020 21:18	WG1521805
trans-1,3-Dichloropropene	U		0.0612	0.200	1	08/06/2020 21:18	WG1521805
2,2-Dichloropropane	U UJ	J0	0.0317	0.100	1	08/06/2020 21:18	WG1521805
Di-isopropyl ether	0.0318	J	0.0140	0.0400	1	08/06/2020 21:18	WG1521805
Ethylbenzene	0.141		0.0212	0.100	1	08/06/2020 21:18	WG1521805
Hexachloro-1,3-butadiene	U		0.508	1.00	1	08/06/2020 21:18	WG1521805
Isopropylbenzene	U		0.0345	0.100	1	08/06/2020 21:18	WG1521805
p-Isopropyltoluene	U		0.0932	0.200	1	08/06/2020 21:18	WG1521805
2-Butanone (MEK)	U		0.500	1.00	1	08/06/2020 21:18	WG1521805
Methylene Chloride	U		0.265	1.00	1	08/06/2020 21:18	WG1521805
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	08/06/2020 21:18	WG1521805
Methyl tert-butyl ether	U		0.0118	0.0400	1	08/06/2020 21:18	WG1521805
Naphthalene	U		0.124	0.500	1	08/06/2020 21:18	WG1521805
n-Propylbenzene	U		0.0472	0.200	1	08/06/2020 21:18	WG1521805
Styrene	U		0.109	0.500	1	08/06/2020 21:18	WG1521805
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	08/06/2020 21:18	WG1521805
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	08/06/2020 21:18	WG1521805
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	08/06/2020 21:18	WG1521805
Tetrachloroethene	U		0.0280	0.100	1	08/06/2020 21:18	WG1521805
Toluene	1.62		0.0500	0.200	1	08/06/2020 21:18	WG1521805
1,2,3-Trichlorobenzene	U		0.0250	0.500	1	08/06/2020 21:18	WG1521805
1,2,4-Trichlorobenzene	U		0.193	0.500	1	08/06/2020 21:18	WG1521805
1,1,1-Trichloroethane	U		0.0110	0.100	1	08/06/2020 21:18	WG1521805
1,1,2-Trichloroethane	U		0.0353	0.100	1	08/06/2020 21:18	WG1521805
Trichloroethene	U		0.0160	0.0400	1	08/06/2020 21:18	WG1521805
Trichlorofluoromethane	U UJ	J0	0.0200	0.100	1	08/06/2020 21:18	WG1521805
1,2,3-Trichloropropane	U		0.204	0.500	1	08/06/2020 21:18	WG1521805
1,2,4-Trimethylbenzene	0.127	J	0.0464	0.200	1	08/06/2020 21:18	WG1521805
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	08/06/2020 21:18	WG1521805
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	08/06/2020 21:18	WG1521805
Vinyl chloride	U		0.0273	0.100	1	08/06/2020 21:18	WG1521805
Xylenes, Total	0.948		0.191	0.260	1	08/06/2020 21:18	WG1521805
Ethyl Ether	0.213		0.0170	0.100	1	08/06/2020 21:18	WG1521805
Tetrahydrofuran	U UJ	J0	0.0900	0.500	1	08/06/2020 21:18	WG1521805
Iodomethane	U UJ	J0	0.242	0.500	1	08/06/2020 21:18	WG1521805
Allyl chloride	U		0.580	1.00	1	08/06/2020 21:18	WG1521805
Trans-1,4-Dichloro-2-butene	U UJ	J0	0.0560	0.200	1	08/06/2020 21:18	WG1521805
(S) Toluene-d8	*106*			*75.0-131*		*08/06/2020 21:18*	WG1521805
(S) 4-Bromofluorobenzene	*97.5*			*67.0-138*		*08/06/2020 21:18*	WG1521805
(S) 1,2-Dichloroethane-d4	*105*			*70.0-130*		*08/06/2020 21:18*	WG1521805

JC 8/24/2020

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

MW-332-073020

Collected date/time: 07/30/20 14:00

SAMPLE RESULTS - 10

L1245254

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	255000		8450	20000	1	08/06/2020 01:00	WG1520680

Sample Narrative:

L1245254-10 WG1520680: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	38800		379	1000	1	07/31/2020 22:34	WG1518407
Nitrate	175		48.0	100	1	07/31/2020 22:34	WG1518407
Sulfate	140000		2970	25000	5	08/10/2020 09:47	WG1523006

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	2880		102	1000	1	08/02/2020 01:14	WG1518849

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	3270		48.9	100	1	08/03/2020 22:03	WG1519176
Manganese	2180		1.32	5.00	1	08/03/2020 22:03	WG1519176

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	843		0.287	0.678	1	08/04/2020 15:29	WG1519838
Ethane	U		0.296	1.29	1	08/04/2020 15:29	WG1519838
Ethene	U		0.422	1.27	1	08/04/2020 15:29	WG1519838

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U	UJ J0	0.548	1.00	1	08/06/2020 21:38	WG1521805
Acrylonitrile	U		0.0760	0.500	1	08/06/2020 21:38	WG1521805
Benzene	U		0.0160	0.0400	1	08/06/2020 21:38	WG1521805
Bromobenzene	U		0.0420	0.500	1	08/06/2020 21:38	WG1521805
Bromodichloromethane	U		0.0315	0.100	1	08/06/2020 21:38	WG1521805
Bromoform	U		0.239	1.00	1	08/06/2020 21:38	WG1521805
Bromomethane	U	UJ J0	0.148	0.500	1	08/06/2020 21:38	WG1521805
n-Butylbenzene	U		0.153	0.500	1	08/06/2020 21:38	WG1521805
sec-Butylbenzene	U		0.101	0.500	1	08/06/2020 21:38	WG1521805
tert-Butylbenzene	U		0.0620	0.200	1	08/06/2020 21:38	WG1521805
Carbon tetrachloride	U		0.0432	0.200	1	08/06/2020 21:38	WG1521805
Chlorobenzene	U		0.0229	0.100	1	08/06/2020 21:38	WG1521805
Chlorodibromomethane	U		0.0180	0.100	1	08/06/2020 21:38	WG1521805
Chloroethane	U		0.0432	0.200	1	08/06/2020 21:38	WG1521805
Chloroform	U		0.0166	0.100	1	08/06/2020 21:38	WG1521805
Chloromethane	U		0.0556	0.500	1	08/06/2020 21:38	WG1521805
2-Chlorotoluene	U		0.0368	0.100	1	08/06/2020 21:38	WG1521805
4-Chlorotoluene	U		0.0452	0.200	1	08/06/2020 21:38	WG1521805
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	08/06/2020 21:38	WG1521805
1,2-Dibromoethane	U		0.0210	0.100	1	08/06/2020 21:38	WG1521805

JC 8/24/2020

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Dibromomethane	U		0.0400	0.200	1	08/06/2020 21:38	WG1521805
1,2-Dichlorobenzene	U		0.0580	0.200	1	08/06/2020 21:38	WG1521805
1,3-Dichlorobenzene	U		0.0680	0.200	1	08/06/2020 21:38	WG1521805
1,4-Dichlorobenzene	U		0.0788	0.200	1	08/06/2020 21:38	WG1521805
Dichlorodifluoromethane	U		0.0327	0.100	1	08/06/2020 21:38	WG1521805
1,1-Dichloroethane	U		0.0230	0.100	1	08/06/2020 21:38	WG1521805
1,2-Dichloroethane	U		0.0190	0.100	1	08/06/2020 21:38	WG1521805
1,1-Dichloroethene	U	UJ J0	0.0200	0.100	1	08/06/2020 21:38	WG1521805
cis-1,2-Dichloroethene	0.110	J J0	0.0276	0.100	1	08/06/2020 21:38	WG1521805
trans-1,2-Dichloroethene	U	UJ J0	0.0572	0.200	1	08/06/2020 21:38	WG1521805
1,2-Dichloropropane	U		0.0508	0.200	1	08/06/2020 21:38	WG1521805
1,1-Dichloropropene	U		0.0280	0.100	1	08/06/2020 21:38	WG1521805
1,3-Dichloropropane	U		0.0700	0.200	1	08/06/2020 21:38	WG1521805
cis-1,3-Dichloropropene	U		0.0271	0.100	1	08/06/2020 21:38	WG1521805
trans-1,3-Dichloropropene	U		0.0612	0.200	1	08/06/2020 21:38	WG1521805
2,2-Dichloropropane	U	UJ J0	0.0317	0.100	1	08/06/2020 21:38	WG1521805
Di-isopropyl ether	U		0.0140	0.0400	1	08/06/2020 21:38	WG1521805
Ethylbenzene	U		0.0212	0.100	1	08/06/2020 21:38	WG1521805
Hexachloro-1,3-butadiene	U		0.508	1.00	1	08/06/2020 21:38	WG1521805
Isopropylbenzene	U		0.0345	0.100	1	08/06/2020 21:38	WG1521805
p-Isopropyltoluene	U		0.0932	0.200	1	08/06/2020 21:38	WG1521805
2-Butanone (MEK)	U		0.500	1.00	1	08/06/2020 21:38	WG1521805
Methylene Chloride	U		0.265	1.00	1	08/06/2020 21:38	WG1521805
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	08/06/2020 21:38	WG1521805
Methyl tert-butyl ether	U		0.0118	0.0400	1	08/06/2020 21:38	WG1521805
Naphthalene	U		0.124	0.500	1	08/06/2020 21:38	WG1521805
n-Propylbenzene	U		0.0472	0.200	1	08/06/2020 21:38	WG1521805
Styrene	U		0.109	0.500	1	08/06/2020 21:38	WG1521805
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	08/06/2020 21:38	WG1521805
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	08/06/2020 21:38	WG1521805
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	08/06/2020 21:38	WG1521805
Tetrachloroethene	U		0.0280	0.100	1	08/06/2020 21:38	WG1521805
Toluene	U		0.0500	0.200	1	08/06/2020 21:38	WG1521805
1,2,3-Trichlorobenzene	U		0.0250	0.500	1	08/06/2020 21:38	WG1521805
1,2,4-Trichlorobenzene	U		0.193	0.500	1	08/06/2020 21:38	WG1521805
1,1,1-Trichloroethane	U		0.0110	0.100	1	08/06/2020 21:38	WG1521805
1,1,2-Trichloroethane	U		0.0353	0.100	1	08/06/2020 21:38	WG1521805
Trichloroethene	U		0.0160	0.0400	1	08/06/2020 21:38	WG1521805
Trichlorofluoromethane	U	UJ J0	0.0200	0.100	1	08/06/2020 21:38	WG1521805
1,2,3-Trichloropropane	U		0.204	0.500	1	08/06/2020 21:38	WG1521805
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	08/06/2020 21:38	WG1521805
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	08/06/2020 21:38	WG1521805
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	08/06/2020 21:38	WG1521805
Vinyl chloride	0.145		0.0273	0.100	1	08/06/2020 21:38	WG1521805
Xylenes, Total	U		0.191	0.260	1	08/06/2020 21:38	WG1521805
Ethyl Ether	U		0.0170	0.100	1	08/06/2020 21:38	WG1521805
Tetrahydrofuran	U	UJ J0	0.0900	0.500	1	08/06/2020 21:38	WG1521805
Iodomethane	U	UJ J0	0.242	0.500	1	08/06/2020 21:38	WG1521805
Allyl chloride	U		0.580	1.00	1	08/06/2020 21:38	WG1521805
Trans-1,4-Dichloro-2-butene	U	UJ J0	0.0560	0.200	1	08/06/2020 21:38	WG1521805
(S) Toluene-d8	*105*			*75.0-131*		*08/06/2020 21:38*	WG1521805
(S) 4-Bromofluorobenzene	*94.1*			*67.0-138*		*08/06/2020 21:38*	WG1521805
(S) 1,2-Dichloroethane-d4	*105*			*70.0-130*		*08/06/2020 21:38*	WG1521805

JC 8/24/2020

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Wet Chemistry by Method 2320 B-2011

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Alkalinity	721000		8450	20000	1	08/07/2020 11:32	WG1521057

Sample Narrative:

L1245641-01 WG1521057: Endpoint pH 4.5

Wet Chemistry by Method 9056A

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Chloride	63400		379	1000	1	08/01/2020 15:06	WG1518747
Nitrate	U		48.0	100	1	08/01/2020 15:06	WG1518747
Sulfate	3810	J	594	5000	1	08/01/2020 15:06	WG1518747

Wet Chemistry by Method 9060A

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
TOC (Total Organic Carbon)	5550		102	1000	1	08/04/2020 19:04	WG1520074

Metals (ICPMS) by Method 6020B

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Iron	20200		48.9	100	1	08/04/2020 17:34	WG1519255
Manganese	2670		1.32	5.00	1	08/04/2020 17:34	WG1519255

Volatile Organic Compounds (GC) by Method RSK175

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Methane	29.2		0.287	0.678	1	08/05/2020 14:13	WG1520607
Ethane	U		0.296	1.29	1	08/05/2020 14:13	WG1520607
Ethene	U		0.422	1.27	1	08/05/2020 14:13	WG1520607

Volatile Organic Compounds (GC/MS) by Method 8260D

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Acetone	U UJ	J0	0.548	1.00	1	08/06/2020 21:58	WG1521805
Acrylonitrile	U		0.0760	0.500	1	08/06/2020 21:58	WG1521805
Benzene	U		0.0160	0.0400	1	08/06/2020 21:58	WG1521805
Bromobenzene	U		0.0420	0.500	1	08/06/2020 21:58	WG1521805
Bromodichloromethane	U		0.0315	0.100	1	08/06/2020 21:58	WG1521805
Bromoform	U		0.239	1.00	1	08/06/2020 21:58	WG1521805
Bromomethane	U	UJ J0	0.148	0.500	1	08/06/2020 21:58	WG1521805
n-Butylbenzene	U		0.153	0.500	1	08/06/2020 21:58	WG1521805
sec-Butylbenzene	U		0.101	0.500	1	08/06/2020 21:58	WG1521805
tert-Butylbenzene	U		0.0620	0.200	1	08/06/2020 21:58	WG1521805
Carbon tetrachloride	U		0.0432	0.200	1	08/06/2020 21:58	WG1521805
Chlorobenzene	U		0.0229	0.100	1	08/06/2020 21:58	WG1521805
Chlorodibromomethane	U		0.0180	0.100	1	08/06/2020 21:58	WG1521805
Chloroethane	U		0.0432	0.200	1	08/06/2020 21:58	WG1521805
Chloroform	U		0.0166	0.100	1	08/06/2020 21:58	WG1521805
Chloromethane	U		0.0556	0.500	1	08/06/2020 21:58	WG1521805
2-Chlorotoluene	U		0.0368	0.100	1	08/06/2020 21:58	WG1521805
4-Chlorotoluene	U		0.0452	0.200	1	08/06/2020 21:58	WG1521805
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	08/06/2020 21:58	WG1521805
1,2-Dibromoethane	U		0.0210	0.100	1	08/06/2020 21:58	WG1521805

JC 8/24/2020

FMW-137-073120 SAMPLE RESULTS - 01

Collected date/time: 07/31/20 06:55

L1245641

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l		Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Dibromomethane	U			0.0400	0.200	1	08/06/2020 21:58	WG1521805
1,2-Dichlorobenzene	U			0.0580	0.200	1	08/06/2020 21:58	WG1521805
1,3-Dichlorobenzene	U			0.0680	0.200	1	08/06/2020 21:58	WG1521805
1,4-Dichlorobenzene	U			0.0788	0.200	1	08/06/2020 21:58	WG1521805
Dichlorodifluoromethane	U			0.0327	0.100	1	08/06/2020 21:58	WG1521805
1,1-Dichloroethane	U			0.0230	0.100	1	08/06/2020 21:58	WG1521805
1,2-Dichloroethane	U			0.0190	0.100	1	08/06/2020 21:58	WG1521805
1,1-Dichloroethene	U	UJ	J0	0.0200	0.100	1	08/06/2020 21:58	WG1521805
cis-1,2-Dichloroethene	0.0343	J	J J0	0.0276	0.100	1	08/06/2020 21:58	WG1521805
trans-1,2-Dichloroethene	U	UJ	J0	0.0572	0.200	1	08/06/2020 21:58	WG1521805
1,2-Dichloropropane	U			0.0508	0.200	1	08/06/2020 21:58	WG1521805
1,1-Dichloropropene	U			0.0280	0.100	1	08/06/2020 21:58	WG1521805
1,3-Dichloropropane	U			0.0700	0.200	1	08/06/2020 21:58	WG1521805
cis-1,3-Dichloropropene	U			0.0271	0.100	1	08/06/2020 21:58	WG1521805
trans-1,3-Dichloropropene	U			0.0612	0.200	1	08/06/2020 21:58	WG1521805
2,2-Dichloropropane	U	UJ	J0	0.0317	0.100	1	08/06/2020 21:58	WG1521805
Di-isopropyl ether	U			0.0140	0.0400	1	08/06/2020 21:58	WG1521805
Ethylbenzene	0.137			0.0212	0.100	1	08/06/2020 21:58	WG1521805
Hexachloro-1,3-butadiene	U			0.508	1.00	1	08/06/2020 21:58	WG1521805
Isopropylbenzene	U			0.0345	0.100	1	08/06/2020 21:58	WG1521805
p-Isopropyltoluene	U			0.0932	0.200	1	08/06/2020 21:58	WG1521805
2-Butanone (MEK)	U			0.500	1.00	1	08/06/2020 21:58	WG1521805
Methylene Chloride	U			0.265	1.00	1	08/06/2020 21:58	WG1521805
4-Methyl-2-pentanone (MIBK)	U			0.400	1.00	1	08/06/2020 21:58	WG1521805
Methyl tert-butyl ether	U			0.0118	0.0400	1	08/06/2020 21:58	WG1521805
Naphthalene	U			0.124	0.500	1	08/06/2020 21:58	WG1521805
n-Propylbenzene	U			0.0472	0.200	1	08/06/2020 21:58	WG1521805
Styrene	U			0.109	0.500	1	08/06/2020 21:58	WG1521805
1,1,1,2-Tetrachloroethane	U			0.0200	0.100	1	08/06/2020 21:58	WG1521805
1,1,2,2-Tetrachloroethane	U			0.0156	0.100	1	08/06/2020 21:58	WG1521805
1,1,2-Trichlorotrifluoroethane	U			0.0270	0.100	1	08/06/2020 21:58	WG1521805
Tetrachloroethene	U			0.0280	0.100	1	08/06/2020 21:58	WG1521805
Toluene	0.884			0.0500	0.200	1	08/06/2020 21:58	WG1521805
1,2,3-Trichlorobenzene	U			0.0250	0.500	1	08/06/2020 21:58	WG1521805
1,2,4-Trichlorobenzene	U			0.193	0.500	1	08/06/2020 21:58	WG1521805
1,1,1-Trichloroethane	U			0.0110	0.100	1	08/06/2020 21:58	WG1521805
1,1,2-Trichloroethane	U			0.0353	0.100	1	08/06/2020 21:58	WG1521805
Trichloroethene	U			0.0160	0.0400	1	08/06/2020 21:58	WG1521805
Trichlorofluoromethane	U	UJ	J0	0.0200	0.100	1	08/06/2020 21:58	WG1521805
1,2,3-Trichloropropane	U			0.204	0.500	1	08/06/2020 21:58	WG1521805
1,2,4-Trimethylbenzene	0.0987		J	0.0464	0.200	1	08/06/2020 21:58	WG1521805
1,2,3-Trimethylbenzene	U			0.0460	0.200	1	08/06/2020 21:58	WG1521805
1,3,5-Trimethylbenzene	U			0.0432	0.200	1	08/06/2020 21:58	WG1521805
Vinyl chloride	U			0.0273	0.100	1	08/06/2020 21:58	WG1521805
Xylenes, Total	0.637			0.191	0.260	1	08/06/2020 21:58	WG1521805
Ethyl Ether	U			0.0170	0.100	1	08/06/2020 21:58	WG1521805
Tetrahydrofuran	U	UJ	J0	0.0900	0.500	1	08/06/2020 21:58	WG1521805
Iodomethane	U	UJ	J0	0.242	0.500	1	08/06/2020 21:58	WG1521805
Allyl chloride	U			0.580	1.00	1	08/06/2020 21:58	WG1521805
Trans-1,4-Dichloro-2-butene	U	UJ	J0	0.0560	0.200	1	08/06/2020 21:58	WG1521805
(S) Toluene-d8	*107*				*75.0-131*		*08/06/2020 21:58*	WG1521805
(S) 4-Bromofluorobenzene	*97.2*				*67.0-138*		*08/06/2020 21:58*	WG1521805
(S) 1,2-Dichloroethane-d4	*106*				*70.0-130*		*08/06/2020 21:58*	WG1521805

JC 8/24/2020

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	224000		8450	20000	1	08/06/2020 23:09	WG1521057

Sample Narrative:

L1245641-02 WG1521057: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	15100		379	1000	1	08/01/2020 15:28	WG1518747
Nitrate	101		48.0	100	1	08/01/2020 15:28	WG1518747
Sulfate	7860		594	5000	1	08/01/2020 15:28	WG1518747

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	2700	~~B~~	102	1000	1	08/04/2020 19:18	WG1520074

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	300	J+	48.9	100	1	08/07/2020 20:21	WG1519256
Manganese	814		1.32	5.00	1	08/07/2020 20:21	WG1519256

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	193		0.287	0.678	1	08/05/2020 14:15	WG1520607
Ethane	U		0.296	1.29	1	08/05/2020 14:15	WG1520607
Ethene	U		0.422	1.27	1	08/05/2020 14:15	WG1520607

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U	UJ J0	0.548	1.00	1	08/06/2020 22:18	WG1521805
Acrylonitrile	U		0.0760	0.500	1	08/06/2020 22:18	WG1521805
Benzene	U		0.0160	0.0400	1	08/06/2020 22:18	WG1521805
Bromobenzene	U		0.0420	0.500	1	08/06/2020 22:18	WG1521805
Bromodichloromethane	U		0.0315	0.100	1	08/06/2020 22:18	WG1521805
Bromoform	U		0.239	1.00	1	08/06/2020 22:18	WG1521805
Bromomethane	U	UJ J0	0.148	0.500	1	08/06/2020 22:18	WG1521805
n-Butylbenzene	U		0.153	0.500	1	08/06/2020 22:18	WG1521805
sec-Butylbenzene	U		0.101	0.500	1	08/06/2020 22:18	WG1521805
tert-Butylbenzene	U		0.0620	0.200	1	08/06/2020 22:18	WG1521805
Carbon tetrachloride	U		0.0432	0.200	1	08/06/2020 22:18	WG1521805
Chlorobenzene	U		0.0229	0.100	1	08/06/2020 22:18	WG1521805
Chlorodibromomethane	U		0.0180	0.100	1	08/06/2020 22:18	WG1521805
Chloroethane	0.881		0.0432	0.200	1	08/06/2020 22:18	WG1521805
Chloroform	U		0.0166	0.100	1	08/06/2020 22:18	WG1521805
Chloromethane	U		0.0556	0.500	1	08/06/2020 22:18	WG1521805
2-Chlorotoluene	U		0.0368	0.100	1	08/06/2020 22:18	WG1521805
4-Chlorotoluene	U		0.0452	0.200	1	08/06/2020 22:18	WG1521805
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	08/06/2020 22:18	WG1521805
1,2-Dibromoethane	U		0.0210	0.100	1	08/06/2020 22:18	WG1521805

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Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Dibromomethane	U		0.0400	0.200	1	08/06/2020 22:18	WG1521805
1,2-Dichlorobenzene	U		0.0580	0.200	1	08/06/2020 22:18	WG1521805
1,3-Dichlorobenzene	U		0.0680	0.200	1	08/06/2020 22:18	WG1521805
1,4-Dichlorobenzene	U		0.0788	0.200	1	08/06/2020 22:18	WG1521805
Dichlorodifluoromethane	U		0.0327	0.100	1	08/06/2020 22:18	WG1521805
1,1-Dichloroethane	U		0.0230	0.100	1	08/06/2020 22:18	WG1521805
1,2-Dichloroethane	U		0.0190	0.100	1	08/06/2020 22:18	WG1521805
1,1-Dichloroethene	2.97	J J0	0.0200	0.100	1	08/06/2020 22:18	WG1521805
cis-1,2-Dichloroethene	59.2	J J0	0.0276	0.100	1	08/06/2020 22:18	WG1521805
trans-1,2-Dichloroethene	1.17	J J0	0.0572	0.200	1	08/06/2020 22:18	WG1521805
1,2-Dichloropropane	U		0.0508	0.200	1	08/06/2020 22:18	WG1521805
1,1-Dichloropropene	U		0.0280	0.100	1	08/06/2020 22:18	WG1521805
1,3-Dichloropropane	U		0.0700	0.200	1	08/06/2020 22:18	WG1521805
cis-1,3-Dichloropropene	U		0.0271	0.100	1	08/06/2020 22:18	WG1521805
trans-1,3-Dichloropropene	U		0.0612	0.200	1	08/06/2020 22:18	WG1521805
2,2-Dichloropropane	U	UJ J0	0.0317	0.100	1	08/06/2020 22:18	WG1521805
Di-isopropyl ether	U		0.0140	0.0400	1	08/06/2020 22:18	WG1521805
Ethylbenzene	U		0.0212	0.100	1	08/06/2020 22:18	WG1521805
Hexachloro-1,3-butadiene	U		0.508	1.00	1	08/06/2020 22:18	WG1521805
Isopropylbenzene	U		0.0345	0.100	1	08/06/2020 22:18	WG1521805
p-Isopropyltoluene	U		0.0932	0.200	1	08/06/2020 22:18	WG1521805
2-Butanone (MEK)	U		0.500	1.00	1	08/06/2020 22:18	WG1521805
Methylene Chloride	U		0.265	1.00	1	08/06/2020 22:18	WG1521805
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	08/06/2020 22:18	WG1521805
Methyl tert-butyl ether	U		0.0118	0.0400	1	08/06/2020 22:18	WG1521805
Naphthalene	U		0.124	0.500	1	08/06/2020 22:18	WG1521805
n-Propylbenzene	U		0.0472	0.200	1	08/06/2020 22:18	WG1521805
Styrene	U		0.109	0.500	1	08/06/2020 22:18	WG1521805
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	08/06/2020 22:18	WG1521805
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	08/06/2020 22:18	WG1521805
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	08/06/2020 22:18	WG1521805
Tetrachloroethene	40.6		0.0280	0.100	1	08/06/2020 22:18	WG1521805
Toluene	0.0536	J	0.0500	0.200	1	08/06/2020 22:18	WG1521805
1,2,3-Trichlorobenzene	U		0.0250	0.500	1	08/06/2020 22:18	WG1521805
1,2,4-Trichlorobenzene	U		0.193	0.500	1	08/06/2020 22:18	WG1521805
1,1,1-Trichloroethane	U		0.0110	0.100	1	08/06/2020 22:18	WG1521805
1,1,2-Trichloroethane	U		0.0353	0.100	1	08/06/2020 22:18	WG1521805
Trichloroethene	42.5		0.0160	0.0400	1	08/06/2020 22:18	WG1521805
Trichlorofluoromethane	U	UJ J0	0.0200	0.100	1	08/06/2020 22:18	WG1521805
1,2,3-Trichloropropane	U		0.204	0.500	1	08/06/2020 22:18	WG1521805
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	08/06/2020 22:18	WG1521805
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	08/06/2020 22:18	WG1521805
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	08/06/2020 22:18	WG1521805
Vinyl chloride	4.27		0.0273	0.100	1	08/06/2020 22:18	WG1521805
Xylenes, Total	U		0.191	0.260	1	08/06/2020 22:18	WG1521805
Ethyl Ether	U		0.0170	0.100	1	08/06/2020 22:18	WG1521805
Tetrahydrofuran	U	UJ J0	0.0900	0.500	1	08/06/2020 22:18	WG1521805
Iodomethane	U	UJ J0	0.242	0.500	1	08/06/2020 22:18	WG1521805
Allyl chloride	U		0.580	1.00	1	08/06/2020 22:18	WG1521805
Trans-1,4-Dichloro-2-butene	U	UJ J0	0.0560	0.200	1	08/06/2020 22:18	WG1521805
(S) Toluene-d8	*106*			*75.0-131*		*08/06/2020 22:18*	WG1521805
(S) 4-Bromofluorobenzene	*95.4*			*67.0-138*		*08/06/2020 22:18*	WG1521805
(S) 1,2-Dichloroethane-d4	*105*			*70.0-130*		*08/06/2020 22:18*	WG1521805

JC 8/24/2020

Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	185000		8450	20000	1	08/06/2020 23:16	WG1521057

Sample Narrative:

L1245641-03 WG1521057: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	9010		379	1000	1	08/01/2020 15:50	WG1518747
Nitrate	U		48.0	100	1	08/01/2020 15:50	WG1518747
Sulfate	4600	J	594	5000	1	08/01/2020 15:50	WG1518747

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	1790	~~B~~	102	1000	1	08/04/2020 19:32	WG1520074

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	3530	J+	48.9	100	1	08/07/2020 20:37	WG1519256
Manganese	428		1.32	5.00	1	08/07/2020 20:37	WG1519256

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	43.9	J	0.287	0.678	1	08/05/2020 14:17	WG1520607
Ethane	U		0.296	1.29	1	08/05/2020 14:17	WG1520607
Ethene	U		0.422	1.27	1	08/05/2020 14:17	WG1520607

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U	UJ J0	0.548	1.00	1	08/07/2020 00:01	WG1521805
Acrylonitrile	U		0.0760	0.500	1	08/07/2020 00:01	WG1521805
Benzene	U		0.0160	0.0400	1	08/07/2020 00:01	WG1521805
Bromobenzene	U		0.0420	0.500	1	08/07/2020 00:01	WG1521805
Bromodichloromethane	U		0.0315	0.100	1	08/07/2020 00:01	WG1521805
Bromoform	U		0.239	1.00	1	08/07/2020 00:01	WG1521805
Bromomethane	U	UJ J0	0.148	0.500	1	08/07/2020 00:01	WG1521805
n-Butylbenzene	U		0.153	0.500	1	08/07/2020 00:01	WG1521805
sec-Butylbenzene	U		0.101	0.500	1	08/07/2020 00:01	WG1521805
tert-Butylbenzene	U		0.0620	0.200	1	08/07/2020 00:01	WG1521805
Carbon tetrachloride	U		0.0432	0.200	1	08/07/2020 00:01	WG1521805
Chlorobenzene	U		0.0229	0.100	1	08/07/2020 00:01	WG1521805
Chlorodibromomethane	U		0.0180	0.100	1	08/07/2020 00:01	WG1521805
Chloroethane	U		0.0432	0.200	1	08/07/2020 00:01	WG1521805
Chloroform	U		0.0166	0.100	1	08/07/2020 00:01	WG1521805
Chloromethane	U		0.0556	0.500	1	08/07/2020 00:01	WG1521805
2-Chlorotoluene	U		0.0368	0.100	1	08/07/2020 00:01	WG1521805
4-Chlorotoluene	U		0.0452	0.200	1	08/07/2020 00:01	WG1521805
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	08/07/2020 00:01	WG1521805
1,2-Dibromoethane	U		0.0210	0.100	1	08/07/2020 00:01	WG1521805

JC 8/24/2020

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Dibromomethane	U		0.0400	0.200	1	08/07/2020 00:01	WG1521805
1,2-Dichlorobenzene	U		0.0580	0.200	1	08/07/2020 00:01	WG1521805
1,3-Dichlorobenzene	U		0.0680	0.200	1	08/07/2020 00:01	WG1521805
1,4-Dichlorobenzene	U		0.0788	0.200	1	08/07/2020 00:01	WG1521805
Dichlorodifluoromethane	U		0.0327	0.100	1	08/07/2020 00:01	WG1521805
1,1-Dichloroethane	U		0.0230	0.100	1	08/07/2020 00:01	WG1521805
1,2-Dichloroethane	U		0.0190	0.100	1	08/07/2020 00:01	WG1521805
1,1-Dichloroethene	2.46	J J0	0.0200	0.100	1	08/07/2020 00:01	WG1521805
cis-1,2-Dichloroethene	12.6	J J0	0.0276	0.100	1	08/07/2020 00:01	WG1521805
trans-1,2-Dichloroethene	1.04	J J0	0.0572	0.200	1	08/07/2020 00:01	WG1521805
1,2-Dichloropropane	U		0.0508	0.200	1	08/07/2020 00:01	WG1521805
1,1-Dichloropropene	U		0.0280	0.100	1	08/07/2020 00:01	WG1521805
1,3-Dichloropropane	U		0.0700	0.200	1	08/07/2020 00:01	WG1521805
cis-1,3-Dichloropropene	U		0.0271	0.100	1	08/07/2020 00:01	WG1521805
trans-1,3-Dichloropropene	U		0.0612	0.200	1	08/07/2020 00:01	WG1521805
2,2-Dichloropropane	U	UJ J0	0.0317	0.100	1	08/07/2020 00:01	WG1521805
Di-isopropyl ether	U		0.0140	0.0400	1	08/07/2020 00:01	WG1521805
Ethylbenzene	U		0.0212	0.100	1	08/07/2020 00:01	WG1521805
Hexachloro-1,3-butadiene	U		0.508	1.00	1	08/07/2020 00:01	WG1521805
Isopropylbenzene	U		0.0345	0.100	1	08/07/2020 00:01	WG1521805
p-Isopropyltoluene	U		0.0932	0.200	1	08/07/2020 00:01	WG1521805
2-Butanone (MEK)	U		0.500	1.00	1	08/07/2020 00:01	WG1521805
Methylene Chloride	U		0.265	1.00	1	08/07/2020 00:01	WG1521805
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	08/07/2020 00:01	WG1521805
Methyl tert-butyl ether	U		0.0118	0.0400	1	08/07/2020 00:01	WG1521805
Naphthalene	U		0.124	0.500	1	08/07/2020 00:01	WG1521805
n-Propylbenzene	U		0.0472	0.200	1	08/07/2020 00:01	WG1521805
Styrene	U		0.109	0.500	1	08/07/2020 00:01	WG1521805
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	08/07/2020 00:01	WG1521805
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	08/07/2020 00:01	WG1521805
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	08/07/2020 00:01	WG1521805
Tetrachloroethene	19.2		0.0280	0.100	1	08/07/2020 00:01	WG1521805
Toluene	0.242		0.0500	0.200	1	08/07/2020 00:01	WG1521805
1,2,3-Trichlorobenzene	U		0.0250	0.500	1	08/07/2020 00:01	WG1521805
1,2,4-Trichlorobenzene	U		0.193	0.500	1	08/07/2020 00:01	WG1521805
1,1,1-Trichloroethane	U		0.0110	0.100	1	08/07/2020 00:01	WG1521805
1,1,2-Trichloroethane	U		0.0353	0.100	1	08/07/2020 00:01	WG1521805
Trichloroethene	55.0		0.0160	0.0400	1	08/07/2020 00:01	WG1521805
Trichlorofluoromethane	U	UJ J0	0.0200	0.100	1	08/07/2020 00:01	WG1521805
1,2,3-Trichloropropane	U		0.204	0.500	1	08/07/2020 00:01	WG1521805
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	08/07/2020 00:01	WG1521805
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	08/07/2020 00:01	WG1521805
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	08/07/2020 00:01	WG1521805
Vinyl chloride	2.65		0.0273	0.100	1	08/07/2020 00:01	WG1521805
Xylenes, Total	U		0.191	0.260	1	08/07/2020 00:01	WG1521805
Ethyl Ether	U		0.0170	0.100	1	08/07/2020 00:01	WG1521805
Tetrahydrofuran	1.17	J J0	0.0900	0.500	1	08/07/2020 00:01	WG1521805
Iodomethane	U	UJ J0	0.242	0.500	1	08/07/2020 00:01	WG1521805
Allyl chloride	U		0.580	1.00	1	08/07/2020 00:01	WG1521805
Trans-1,4-Dichloro-2-butene	U	UJ J0	0.0560	0.200	1	08/07/2020 00:01	WG1521805
(S) Toluene-d8	*107*			*75.0-131*		*08/07/2020 00:01*	WG1521805
(S) 4-Bromofluorobenzene	*98.4*			*67.0-138*		*08/07/2020 00:01*	WG1521805
(S) 1,2-Dichloroethane-d4	*106*			*70.0-130*		*08/07/2020 00:01*	WG1521805

JC 8/24/2020

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	1070000		8450	20000	1	08/06/2020 23:23	WG1521057

Sample Narrative:

L1245641-04 WG1521057: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	77400		379	1000	1	08/01/2020 16:22	WG1518747
Nitrate	U		48.0	100	1	08/01/2020 16:22	WG1518747
Sulfate	U		594	5000	1	08/01/2020 16:22	WG1518747

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	29300		102	1000	1	08/04/2020 20:45	WG1520074

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	15600		48.9	100	1	08/07/2020 20:40	WG1519256
Manganese	2850		1.32	5.00	1	08/07/2020 20:40	WG1519256

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	22600		2.87	6.78	10	08/07/2020 14:01	WG1522285
Ethane	76.9		0.296	1.29	1	08/05/2020 14:20	WG1520607
Ethene	U		0.422	1.27	1	08/05/2020 14:20	WG1520607

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	6.40 J	J0	0.548	1.00	1	08/09/2020 19:28	WG1523011
Acrylonitrile	U		0.0760	0.500	1	08/07/2020 00:21	WG1521805
Benzene	0.0502		0.0160	0.0400	1	08/07/2020 00:21	WG1521805
Bromobenzene	U		0.0420	0.500	1	08/07/2020 00:21	WG1521805
Bromodichloromethane	U		0.0315	0.100	1	08/07/2020 00:21	WG1521805
Bromoform	U		0.239	1.00	1	08/07/2020 00:21	WG1521805
Bromomethane	U UJ	J0	0.148	0.500	1	08/07/2020 00:21	WG1521805
n-Butylbenzene	U		0.153	0.500	1	08/07/2020 00:21	WG1521805
sec-Butylbenzene	U		0.101	0.500	1	08/07/2020 00:21	WG1521805
tert-Butylbenzene	U		0.0620	0.200	1	08/07/2020 00:21	WG1521805
Carbon tetrachloride	U		0.0432	0.200	1	08/07/2020 00:21	WG1521805
Chlorobenzene	U		0.0229	0.100	1	08/07/2020 00:21	WG1521805
Chlorodibromomethane	U		0.0180	0.100	1	08/07/2020 00:21	WG1521805
Chloroethane	U		0.0432	0.200	1	08/07/2020 00:21	WG1521805
Chloroform	U		0.0166	0.100	1	08/07/2020 00:21	WG1521805
Chloromethane	U		0.0556	0.500	1	08/07/2020 00:21	WG1521805
2-Chlorotoluene	U		0.0368	0.100	1	08/07/2020 00:21	WG1521805
4-Chlorotoluene	U		0.0452	0.200	1	08/07/2020 00:21	WG1521805
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	08/07/2020 00:21	WG1521805
1,2-Dibromoethane	U		0.0210	0.100	1	08/07/2020 00:21	WG1521805

JC 8/24/2020

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Dibromomethane	U		0.0400	0.200	1	08/07/2020 00:21	WG1521805
1,2-Dichlorobenzene	U		0.0580	0.200	1	08/07/2020 00:21	WG1521805
1,3-Dichlorobenzene	U		0.0680	0.200	1	08/07/2020 00:21	WG1521805
1,4-Dichlorobenzene	U		0.0788	0.200	1	08/07/2020 00:21	WG1521805
Dichlorodifluoromethane	U		0.0327	0.100	1	08/07/2020 00:21	WG1521805
1,1-Dichloroethane	U		0.0230	0.100	1	08/07/2020 00:21	WG1521805
1,2-Dichloroethane	U		0.0190	0.100	1	08/07/2020 00:21	WG1521805
1,1-Dichloroethene	U UJ	J0	0.0200	0.100	1	08/07/2020 00:21	WG1521805
cis-1,2-Dichloroethene	1.39 J	J0	0.0276	0.100	1	08/07/2020 00:21	WG1521805
trans-1,2-Dichloroethene	0.204 J	J0	0.0572	0.200	1	08/07/2020 00:21	WG1521805
1,2-Dichloropropane	U		0.0508	0.200	1	08/07/2020 00:21	WG1521805
1,1-Dichloropropene	U		0.0280	0.100	1	08/07/2020 00:21	WG1521805
1,3-Dichloropropane	U		0.0700	0.200	1	08/07/2020 00:21	WG1521805
cis-1,3-Dichloropropene	U		0.0271	0.100	1	08/07/2020 00:21	WG1521805
trans-1,3-Dichloropropene	U		0.0612	0.200	1	08/07/2020 00:21	WG1521805
2,2-Dichloropropane	U UJ	J0	0.0317	0.100	1	08/07/2020 00:21	WG1521805
Di-isopropyl ether	U		0.0140	0.0400	1	08/07/2020 00:21	WG1521805
Ethylbenzene	U		0.0212	0.100	1	08/07/2020 00:21	WG1521805
Hexachloro-1,3-butadiene	U		0.508	1.00	1	08/07/2020 00:21	WG1521805
Isopropylbenzene	U		0.0345	0.100	1	08/07/2020 00:21	WG1521805
p-Isopropyltoluene	U		0.0932	0.200	1	08/07/2020 00:21	WG1521805
2-Butanone (MEK)	U		0.500	1.00	1	08/07/2020 00:21	WG1521805
Methylene Chloride	U		0.265	1.00	1	08/07/2020 00:21	WG1521805
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	08/07/2020 00:21	WG1521805
Methyl tert-butyl ether	U		0.0118	0.0400	1	08/07/2020 00:21	WG1521805
Naphthalene	U		0.124	0.500	1	08/07/2020 00:21	WG1521805
n-Propylbenzene	U		0.0472	0.200	1	08/07/2020 00:21	WG1521805
Styrene	U		0.109	0.500	1	08/07/2020 00:21	WG1521805
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	08/07/2020 00:21	WG1521805
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	08/07/2020 00:21	WG1521805
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	08/07/2020 00:21	WG1521805
Tetrachloroethene	U		0.0280	0.100	1	08/07/2020 00:21	WG1521805
Toluene	0.387		0.0500	0.200	1	08/07/2020 00:21	WG1521805
1,2,3-Trichlorobenzene	U		0.0250	0.500	1	08/07/2020 00:21	WG1521805
1,2,4-Trichlorobenzene	U		0.193	0.500	1	08/07/2020 00:21	WG1521805
1,1,1-Trichloroethane	U		0.0110	0.100	1	08/07/2020 00:21	WG1521805
1,1,2-Trichloroethane	U		0.0353	0.100	1	08/07/2020 00:21	WG1521805
Trichloroethene	0.136		0.0160	0.0400	1	08/07/2020 00:21	WG1521805
Trichlorofluoromethane	U UJ	J0	0.0200	0.100	1	08/07/2020 00:21	WG1521805
1,2,3-Trichloropropane	U		0.204	0.500	1	08/07/2020 00:21	WG1521805
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	08/07/2020 00:21	WG1521805
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	08/07/2020 00:21	WG1521805
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	08/07/2020 00:21	WG1521805
Vinyl chloride	1.08		0.0273	0.100	1	08/07/2020 00:21	WG1521805
Xylenes, Total	U		0.191	0.260	1	08/07/2020 00:21	WG1521805
Ethyl Ether	U		0.0170	0.100	1	08/07/2020 00:21	WG1521805
Tetrahydrofuran	0.844 J	J0	0.0900	0.500	1	08/07/2020 00:21	WG1521805
Iodomethane	U UJ	J0	0.242	0.500	1	08/07/2020 00:21	WG1521805
Allyl chloride	U		0.580	1.00	1	08/07/2020 00:21	WG1521805
Trans-1,4-Dichloro-2-butene	U UJ	J0	0.0560	0.200	1	08/07/2020 00:21	WG1521805
(S) Toluene-d8	*107*			*75.0-131*		*08/07/2020 00:21*	WG1521805
(S) Toluene-d8	*92.6*			*75.0-131*		*08/09/2020 19:28*	WG1523011
(S) 4-Bromofluorobenzene	*96.6*			*67.0-138*		*08/07/2020 00:21*	WG1521805
(S) 4-Bromofluorobenzene	*108*			*67.0-138*		*08/09/2020 19:28*	WG1523011
(S) 1,2-Dichloroethane-d4	*106*			*70.0-130*		*08/07/2020 00:21*	WG1521805
(S) 1,2-Dichloroethane-d4	*118*			*70.0-130*		*08/09/2020 19:28*	WG1523011

JC 8/24/2020

MW107-073120

Collected date/time: 07/31/20 11:25

SAMPLE RESULTS - 05

L1245641

Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	297000		8450	20000	1	08/06/2020 23:30	WG1521057

Sample Narrative:

L1245641-05 WG1521057: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	24700		379	1000	1	08/01/2020 17:23	WG1518747
Nitrate	U		48.0	100	1	08/01/2020 17:23	WG1518747
Sulfate	67900		594	5000	1	08/01/2020 17:23	WG1518747

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	5120		102	1000	1	08/04/2020 21:14	WG1520074

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	3450 J+		48.9	100	1	08/07/2020 20:44	WG1519256
Manganese	324		1.32	5.00	1	08/07/2020 20:44	WG1519256

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	14200		2.87	6.78	10	08/07/2020 14:08	WG1522285
Ethane	53.3		0.296	1.29	1	08/05/2020 14:23	WG1520607
Ethene	156		0.422	1.27	1	08/05/2020 14:23	WG1520607

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U UJ	J0	13.7	25.0	25	08/06/2020 23:40	WG1521805
Acrylonitrile	U		1.90	12.5	25	08/06/2020 23:40	WG1521805
Benzene	U		0.400	1.00	25	08/06/2020 23:40	WG1521805
Bromobenzene	U		1.05	12.5	25	08/06/2020 23:40	WG1521805
Bromodichloromethane	U		0.788	2.50	25	08/06/2020 23:40	WG1521805
Bromoform	U		5.98	25.0	25	08/06/2020 23:40	WG1521805
Bromomethane	U UJ	J0	3.70	12.5	25	08/06/2020 23:40	WG1521805
n-Butylbenzene	U		3.83	12.5	25	08/06/2020 23:40	WG1521805
sec-Butylbenzene	U		2.53	12.5	25	08/06/2020 23:40	WG1521805
tert-Butylbenzene	U		1.55	5.00	25	08/06/2020 23:40	WG1521805
Carbon tetrachloride	U		1.08	5.00	25	08/06/2020 23:40	WG1521805
Chlorobenzene	U		0.573	2.50	25	08/06/2020 23:40	WG1521805
Chlorodibromomethane	U		0.450	2.50	25	08/06/2020 23:40	WG1521805
Chloroethane	U		1.08	5.00	25	08/06/2020 23:40	WG1521805
Chloroform	U		0.415	2.50	25	08/06/2020 23:40	WG1521805
Chloromethane	U		1.39	12.5	25	08/06/2020 23:40	WG1521805
2-Chlorotoluene	U		0.920	2.50	25	08/06/2020 23:40	WG1521805
4-Chlorotoluene	U		1.13	5.00	25	08/06/2020 23:40	WG1521805
1,2-Dibromo-3-Chloropropane	U		5.10	25.0	25	08/06/2020 23:40	WG1521805
1,2-Dibromoethane	U		0.525	2.50	25	08/06/2020 23:40	WG1521805

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Volatile Organic Compounds (GC/MS) by Method 8260D

	Result		Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l			ug/l	ug/l		date / time	
Dibromomethane	U			1.00	5.00	25	08/06/2020 23:40	WG1521805
1,2-Dichlorobenzene	U			1.45	5.00	25	08/06/2020 23:40	WG1521805
1,3-Dichlorobenzene	U			1.70	5.00	25	08/06/2020 23:40	WG1521805
1,4-Dichlorobenzene	U			1.97	5.00	25	08/06/2020 23:40	WG1521805
Dichlorodifluoromethane	U			0.818	2.50	25	08/06/2020 23:40	WG1521805
1,1-Dichloroethane	U			0.575	2.50	25	08/06/2020 23:40	WG1521805
1,2-Dichloroethane	U			0.475	2.50	25	08/06/2020 23:40	WG1521805
1,1-Dichloroethene	1.19	J	J J0	0.500	2.50	25	08/06/2020 23:40	WG1521805
cis-1,2-Dichloroethene	491	J	J0	0.690	2.50	25	08/06/2020 23:40	WG1521805
trans-1,2-Dichloroethene	5.36	J	J0	1.43	5.00	25	08/06/2020 23:40	WG1521805
1,2-Dichloropropane	U			1.27	5.00	25	08/06/2020 23:40	WG1521805
1,1-Dichloropropene	U			0.700	2.50	25	08/06/2020 23:40	WG1521805
1,3-Dichloropropane	U			1.75	5.00	25	08/06/2020 23:40	WG1521805
cis-1,3-Dichloropropene	U			0.678	2.50	25	08/06/2020 23:40	WG1521805
trans-1,3-Dichloropropene	U			1.53	5.00	25	08/06/2020 23:40	WG1521805
2,2-Dichloropropane	U	UJ	J0	0.793	2.50	25	08/06/2020 23:40	WG1521805
Di-isopropyl ether	U			0.350	1.00	25	08/06/2020 23:40	WG1521805
Ethylbenzene	U			0.530	2.50	25	08/06/2020 23:40	WG1521805
Hexachloro-1,3-butadiene	U			12.7	25.0	25	08/06/2020 23:40	WG1521805
Isopropylbenzene	U			0.863	2.50	25	08/06/2020 23:40	WG1521805
p-Isopropyltoluene	U			2.33	5.00	25	08/06/2020 23:40	WG1521805
2-Butanone (MEK)	U			12.5	25.0	25	08/06/2020 23:40	WG1521805
Methylene Chloride	U			6.63	25.0	25	08/06/2020 23:40	WG1521805
4-Methyl-2-pentanone (MIBK)	U			10.0	25.0	25	08/06/2020 23:40	WG1521805
Methyl tert-butyl ether	U			0.295	1.00	25	08/06/2020 23:40	WG1521805
Naphthalene	U			3.10	12.5	25	08/06/2020 23:40	WG1521805
n-Propylbenzene	U			1.18	5.00	25	08/06/2020 23:40	WG1521805
Styrene	U			2.73	12.5	25	08/06/2020 23:40	WG1521805
1,1,1,2-Tetrachloroethane	U			0.500	2.50	25	08/06/2020 23:40	WG1521805
1,1,2,2-Tetrachloroethane	U			0.390	2.50	25	08/06/2020 23:40	WG1521805
1,1,2-Trichlorotrifluoroethane	U			0.675	2.50	25	08/06/2020 23:40	WG1521805
Tetrachloroethene	U			0.700	2.50	25	08/06/2020 23:40	WG1521805
Toluene	U			1.25	5.00	25	08/06/2020 23:40	WG1521805
1,2,3-Trichlorobenzene	U			0.625	12.5	25	08/06/2020 23:40	WG1521805
1,2,4-Trichlorobenzene	U			4.83	12.5	25	08/06/2020 23:40	WG1521805
1,1,1-Trichloroethane	U			0.275	2.50	25	08/06/2020 23:40	WG1521805
1,1,2-Trichloroethane	U			0.883	2.50	25	08/06/2020 23:40	WG1521805
Trichloroethene	6.98			0.400	1.00	25	08/06/2020 23:40	WG1521805
Trichlorofluoromethane	U	UJ	J0	0.500	2.50	25	08/06/2020 23:40	WG1521805
1,2,3-Trichloropropane	U			5.10	12.5	25	08/06/2020 23:40	WG1521805
1,2,4-Trimethylbenzene	U			1.16	5.00	25	08/06/2020 23:40	WG1521805
1,2,3-Trimethylbenzene	U			1.15	5.00	25	08/06/2020 23:40	WG1521805
1,3,5-Trimethylbenzene	U			1.08	5.00	25	08/06/2020 23:40	WG1521805
Vinyl chloride	378			0.682	2.50	25	08/06/2020 23:40	WG1521805
Xylenes, Total	U			4.78	6.50	25	08/06/2020 23:40	WG1521805
Ethyl Ether	U			0.425	2.50	25	08/06/2020 23:40	WG1521805
Tetrahydrofuran	5.86	J	J J0	2.25	12.5	25	08/06/2020 23:40	WG1521805
Iodomethane	U	UJ	J0	6.05	12.5	25	08/06/2020 23:40	WG1521805
Allyl chloride	U			14.5	25.0	25	08/06/2020 23:40	WG1521805
Trans-1,4-Dichloro-2-butene	U	UJ	J0	1.40	5.00	25	08/06/2020 23:40	WG1521805
(S) Toluene-d8	*107*				*75.0-131*		*08/06/2020 23:40*	WG1521805
(S) 4-Bromofluorobenzene	*93.8*				*67.0-138*		*08/06/2020 23:40*	WG1521805
(S) 1,2-Dichloroethane-d4	*104*				*70.0-130*		*08/06/2020 23:40*	WG1521805

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1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Wet Chemistry by Method 2320 B-2011

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Alkalinity	232000		8450	20000	1	08/06/2020 23:37	WG1521057

Sample Narrative:

L1245641-06 WG1521057: Endpoint pH 4.5

Wet Chemistry by Method 9056A

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Chloride	29500		379	1000	1	08/01/2020 17:45	WG1518747
Nitrate	168		48.0	100	1	08/01/2020 17:45	WG1518747
Sulfate	71400		594	5000	1	08/01/2020 17:45	WG1518747

Wet Chemistry by Method 9060A

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
TOC (Total Organic Carbon)	2440	~~B~~	102	1000	1	08/04/2020 21:26	WG1520074

Metals (ICPMS) by Method 6020B

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Iron	498 J+		48.9	100	1	08/07/2020 21:01	WG1519256
Manganese	224		1.32	5.00	1	08/07/2020 21:01	WG1519256

Volatile Organic Compounds (GC) by Method RSK175

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Methane	232		0.287	0.678	1	08/05/2020 14:29	WG1520607
Ethane	U		0.296	1.29	1	08/05/2020 14:29	WG1520607
Ethene	U		0.422	1.27	1	08/05/2020 14:29	WG1520607

Volatile Organic Compounds (GC/MS) by Method 8260D

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Acetone	U	UJ J0	0.548	1.00	1	08/06/2020 22:39	WG1521805
Acrylonitrile	U		0.0760	0.500	1	08/06/2020 22:39	WG1521805
Benzene	U		0.0160	0.0400	1	08/06/2020 22:39	WG1521805
Bromobenzene	U		0.0420	0.500	1	08/06/2020 22:39	WG1521805
Bromodichloromethane	U		0.0315	0.100	1	08/06/2020 22:39	WG1521805
Bromoform	U		0.239	1.00	1	08/06/2020 22:39	WG1521805
Bromomethane	U	UJ J0	0.148	0.500	1	08/06/2020 22:39	WG1521805
n-Butylbenzene	U		0.153	0.500	1	08/06/2020 22:39	WG1521805
sec-Butylbenzene	U		0.101	0.500	1	08/06/2020 22:39	WG1521805
tert-Butylbenzene	U		0.0620	0.200	1	08/06/2020 22:39	WG1521805
Carbon tetrachloride	U		0.0432	0.200	1	08/06/2020 22:39	WG1521805
Chlorobenzene	U		0.0229	0.100	1	08/06/2020 22:39	WG1521805
Chlorodibromomethane	U		0.0180	0.100	1	08/06/2020 22:39	WG1521805
Chloroethane	U		0.0432	0.200	1	08/06/2020 22:39	WG1521805
Chloroform	U		0.0166	0.100	1	08/06/2020 22:39	WG1521805
Chloromethane	U		0.0556	0.500	1	08/06/2020 22:39	WG1521805
2-Chlorotoluene	U		0.0368	0.100	1	08/06/2020 22:39	WG1521805
4-Chlorotoluene	U		0.0452	0.200	1	08/06/2020 22:39	WG1521805
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	08/06/2020 22:39	WG1521805
1,2-Dibromoethane	U		0.0210	0.100	1	08/06/2020 22:39	WG1521805

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Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Dibromomethane	U		0.0400	0.200	1	08/06/2020 22:39	WG1521805
1,2-Dichlorobenzene	U		0.0580	0.200	1	08/06/2020 22:39	WG1521805
1,3-Dichlorobenzene	U		0.0680	0.200	1	08/06/2020 22:39	WG1521805
1,4-Dichlorobenzene	U		0.0788	0.200	1	08/06/2020 22:39	WG1521805
Dichlorodifluoromethane	U		0.0327	0.100	1	08/06/2020 22:39	WG1521805
1,1-Dichloroethane	U		0.0230	0.100	1	08/06/2020 22:39	WG1521805
1,2-Dichloroethane	U		0.0190	0.100	1	08/06/2020 22:39	WG1521805
1,1-Dichloroethene	U	UJ J0	0.0200	0.100	1	08/06/2020 22:39	WG1521805
cis-1,2-Dichloroethene	0.431	J J0	0.0276	0.100	1	08/06/2020 22:39	WG1521805
trans-1,2-Dichloroethene	U	UJ J0	0.0572	0.200	1	08/06/2020 22:39	WG1521805
1,2-Dichloropropane	U		0.0508	0.200	1	08/06/2020 22:39	WG1521805
1,1-Dichloropropene	U		0.0280	0.100	1	08/06/2020 22:39	WG1521805
1,3-Dichloropropane	U		0.0700	0.200	1	08/06/2020 22:39	WG1521805
cis-1,3-Dichloropropene	U		0.0271	0.100	1	08/06/2020 22:39	WG1521805
trans-1,3-Dichloropropene	U		0.0612	0.200	1	08/06/2020 22:39	WG1521805
2,2-Dichloropropane	U	UJ J0	0.0317	0.100	1	08/06/2020 22:39	WG1521805
Di-isopropyl ether	U		0.0140	0.0400	1	08/06/2020 22:39	WG1521805
Ethylbenzene	U		0.0212	0.100	1	08/06/2020 22:39	WG1521805
Hexachloro-1,3-butadiene	U		0.508	1.00	1	08/06/2020 22:39	WG1521805
Isopropylbenzene	U		0.0345	0.100	1	08/06/2020 22:39	WG1521805
p-Isopropyltoluene	U		0.0932	0.200	1	08/06/2020 22:39	WG1521805
2-Butanone (MEK)	U		0.500	1.00	1	08/06/2020 22:39	WG1521805
Methylene Chloride	U		0.265	1.00	1	08/06/2020 22:39	WG1521805
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	08/06/2020 22:39	WG1521805
Methyl tert-butyl ether	U		0.0118	0.0400	1	08/06/2020 22:39	WG1521805
Naphthalene	U		0.124	0.500	1	08/06/2020 22:39	WG1521805
n-Propylbenzene	U		0.0472	0.200	1	08/06/2020 22:39	WG1521805
Styrene	U		0.109	0.500	1	08/06/2020 22:39	WG1521805
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	08/06/2020 22:39	WG1521805
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	08/06/2020 22:39	WG1521805
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	08/06/2020 22:39	WG1521805
Tetrachloroethene	0.0742	J	0.0280	0.100	1	08/06/2020 22:39	WG1521805
Toluene	U		0.0500	0.200	1	08/06/2020 22:39	WG1521805
1,2,3-Trichlorobenzene	U		0.0250	0.500	1	08/06/2020 22:39	WG1521805
1,2,4-Trichlorobenzene	U		0.193	0.500	1	08/06/2020 22:39	WG1521805
1,1,1-Trichloroethane	U		0.0110	0.100	1	08/06/2020 22:39	WG1521805
1,1,2-Trichloroethane	U		0.0353	0.100	1	08/06/2020 22:39	WG1521805
Trichloroethene	0.299		0.0160	0.0400	1	08/06/2020 22:39	WG1521805
Trichlorofluoromethane	U	UJ J0	0.0200	0.100	1	08/06/2020 22:39	WG1521805
1,2,3-Trichloropropane	U		0.204	0.500	1	08/06/2020 22:39	WG1521805
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	08/06/2020 22:39	WG1521805
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	08/06/2020 22:39	WG1521805
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	08/06/2020 22:39	WG1521805
Vinyl chloride	2.98		0.0273	0.100	1	08/06/2020 22:39	WG1521805
Xylenes, Total	U		0.191	0.260	1	08/06/2020 22:39	WG1521805
Ethyl Ether	U		0.0170	0.100	1	08/06/2020 22:39	WG1521805
Tetrahydrofuran	4.22	J J0	0.0900	0.500	1	08/06/2020 22:39	WG1521805
Iodomethane	U	UJ J0	0.242	0.500	1	08/06/2020 22:39	WG1521805
Allyl chloride	U		0.580	1.00	1	08/06/2020 22:39	WG1521805
Trans-1,4-Dichloro-2-butene	U	UJ J0	0.0560	0.200	1	08/06/2020 22:39	WG1521805
(S) Toluene-d8	*106*			*75.0-131*		*08/06/2020 22:39*	WG1521805
(S) 4-Bromofluorobenzene	*95.2*			*67.0-138*		*08/06/2020 22:39*	WG1521805
(S) 1,2-Dichloroethane-d4	*105*			*70.0-130*		*08/06/2020 22:39*	WG1521805

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Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	185000		8450	20000	1	08/06/2020 23:44	WG1521057

Sample Narrative:

L1245641-07 WG1521057: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	9270		379	1000	1	08/01/2020 17:56	WG1518747
Nitrate	U		48.0	100	1	08/01/2020 17:56	WG1518747
Sulfate	4700	J	594	5000	1	08/01/2020 17:56	WG1518747

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	1920	~~B~~	102	1000	1	08/04/2020 22:12	WG1520074

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	4110 J+		48.9	100	1	08/07/2020 21:04	WG1519256
Manganese	434		1.32	5.00	1	08/07/2020 21:04	WG1519256

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	58.7 J		0.287	0.678	1	08/05/2020 14:34	WG1520607
Ethane	U		0.296	1.29	1	08/05/2020 14:34	WG1520607
Ethene	U		0.422	1.27	1	08/05/2020 14:34	WG1520607

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U UJ	J0	0.548	1.00	1	08/06/2020 22:59	WG1521805
Acrylonitrile	U		0.0760	0.500	1	08/06/2020 22:59	WG1521805
Benzene	U		0.0160	0.0400	1	08/06/2020 22:59	WG1521805
Bromobenzene	U		0.0420	0.500	1	08/06/2020 22:59	WG1521805
Bromodichloromethane	U		0.0315	0.100	1	08/06/2020 22:59	WG1521805
Bromoform	U		0.239	1.00	1	08/06/2020 22:59	WG1521805
Bromomethane	U UJ	J0	0.148	0.500	1	08/06/2020 22:59	WG1521805
n-Butylbenzene	U		0.153	0.500	1	08/06/2020 22:59	WG1521805
sec-Butylbenzene	U		0.101	0.500	1	08/06/2020 22:59	WG1521805
tert-Butylbenzene	U		0.0620	0.200	1	08/06/2020 22:59	WG1521805
Carbon tetrachloride	U		0.0432	0.200	1	08/06/2020 22:59	WG1521805
Chlorobenzene	U		0.0229	0.100	1	08/06/2020 22:59	WG1521805
Chlorodibromomethane	U		0.0180	0.100	1	08/06/2020 22:59	WG1521805
Chloroethane	U		0.0432	0.200	1	08/06/2020 22:59	WG1521805
Chloroform	U		0.0166	0.100	1	08/06/2020 22:59	WG1521805
Chloromethane	U		0.0556	0.500	1	08/06/2020 22:59	WG1521805
2-Chlorotoluene	U		0.0368	0.100	1	08/06/2020 22:59	WG1521805
4-Chlorotoluene	U		0.0452	0.200	1	08/06/2020 22:59	WG1521805
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	08/06/2020 22:59	WG1521805
1,2-Dibromoethane	U		0.0210	0.100	1	08/06/2020 22:59	WG1521805

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Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l		Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Dibromomethane	U			0.0400	0.200	1	08/06/2020 22:59	WG1521805
1,2-Dichlorobenzene	U			0.0580	0.200	1	08/06/2020 22:59	WG1521805
1,3-Dichlorobenzene	U			0.0680	0.200	1	08/06/2020 22:59	WG1521805
1,4-Dichlorobenzene	U			0.0788	0.200	1	08/06/2020 22:59	WG1521805
Dichlorodifluoromethane	U			0.0327	0.100	1	08/06/2020 22:59	WG1521805
1,1-Dichloroethane	U			0.0230	0.100	1	08/06/2020 22:59	WG1521805
1,2-Dichloroethane	U			0.0190	0.100	1	08/06/2020 22:59	WG1521805
1,1-Dichloroethene	2.45	J	J0	0.0200	0.100	1	08/06/2020 22:59	WG1521805
cis-1,2-Dichloroethene	12.8	J	J0	0.0276	0.100	1	08/06/2020 22:59	WG1521805
trans-1,2-Dichloroethene	1.01	J	J0	0.0572	0.200	1	08/06/2020 22:59	WG1521805
1,2-Dichloropropane	U			0.0508	0.200	1	08/06/2020 22:59	WG1521805
1,1-Dichloropropene	U			0.0280	0.100	1	08/06/2020 22:59	WG1521805
1,3-Dichloropropane	U			0.0700	0.200	1	08/06/2020 22:59	WG1521805
cis-1,3-Dichloropropene	U			0.0271	0.100	1	08/06/2020 22:59	WG1521805
trans-1,3-Dichloropropene	U			0.0612	0.200	1	08/06/2020 22:59	WG1521805
2,2-Dichloropropane	U	UJ	J0	0.0317	0.100	1	08/06/2020 22:59	WG1521805
Di-isopropyl ether	U			0.0140	0.0400	1	08/06/2020 22:59	WG1521805
Ethylbenzene	U			0.0212	0.100	1	08/06/2020 22:59	WG1521805
Hexachloro-1,3-butadiene	U			0.508	1.00	1	08/06/2020 22:59	WG1521805
Isopropylbenzene	U			0.0345	0.100	1	08/06/2020 22:59	WG1521805
p-Isopropyltoluene	U			0.0932	0.200	1	08/06/2020 22:59	WG1521805
2-Butanone (MEK)	U			0.500	1.00	1	08/06/2020 22:59	WG1521805
Methylene Chloride	U			0.265	1.00	1	08/06/2020 22:59	WG1521805
4-Methyl-2-pentanone (MIBK)	U			0.400	1.00	1	08/06/2020 22:59	WG1521805
Methyl tert-butyl ether	U			0.0118	0.0400	1	08/06/2020 22:59	WG1521805
Naphthalene	U			0.124	0.500	1	08/06/2020 22:59	WG1521805
n-Propylbenzene	U			0.0472	0.200	1	08/06/2020 22:59	WG1521805
Styrene	U			0.109	0.500	1	08/06/2020 22:59	WG1521805
1,1,1,2-Tetrachloroethane	U			0.0200	0.100	1	08/06/2020 22:59	WG1521805
1,1,2,2-Tetrachloroethane	U			0.0156	0.100	1	08/06/2020 22:59	WG1521805
1,1,2-Trichlorotrifluoroethane	U			0.0270	0.100	1	08/06/2020 22:59	WG1521805
Tetrachloroethene	18.8			0.0280	0.100	1	08/06/2020 22:59	WG1521805
Toluene	0.251			0.0500	0.200	1	08/06/2020 22:59	WG1521805
1,2,3-Trichlorobenzene	U			0.0250	0.500	1	08/06/2020 22:59	WG1521805
1,2,4-Trichlorobenzene	U			0.193	0.500	1	08/06/2020 22:59	WG1521805
1,1,1-Trichloroethane	U			0.0110	0.100	1	08/06/2020 22:59	WG1521805
1,1,2-Trichloroethane	U			0.0353	0.100	1	08/06/2020 22:59	WG1521805
Trichloroethene	55.0			0.0160	0.0400	1	08/06/2020 22:59	WG1521805
Trichlorofluoromethane	U	UJ	J0	0.0200	0.100	1	08/06/2020 22:59	WG1521805
1,2,3-Trichloropropane	U			0.204	0.500	1	08/06/2020 22:59	WG1521805
1,2,4-Trimethylbenzene	U			0.0464	0.200	1	08/06/2020 22:59	WG1521805
1,2,3-Trimethylbenzene	U			0.0460	0.200	1	08/06/2020 22:59	WG1521805
1,3,5-Trimethylbenzene	U			0.0432	0.200	1	08/06/2020 22:59	WG1521805
Vinyl chloride	2.68			0.0273	0.100	1	08/06/2020 22:59	WG1521805
Xylenes, Total	U			0.191	0.260	1	08/06/2020 22:59	WG1521805
Ethyl Ether	U			0.0170	0.100	1	08/06/2020 22:59	WG1521805
Tetrahydrofuran	1.19	J	J0	0.0900	0.500	1	08/06/2020 22:59	WG1521805
Iodomethane	U	UJ	J0	0.242	0.500	1	08/06/2020 22:59	WG1521805
Allyl chloride	U			0.580	1.00	1	08/06/2020 22:59	WG1521805
Trans-1,4-Dichloro-2-butene	U	UJ	J0	0.0560	0.200	1	08/06/2020 22:59	WG1521805
(S) Toluene-d8	*105*				*75.0-131*		*08/06/2020 22:59*	WG1521805
(S) 4-Bromofluorobenzene	*94.9*				*67.0-138*		*08/06/2020 22:59*	WG1521805
(S) 1,2-Dichloroethane-d4	*106*				*70.0-130*		*08/06/2020 22:59*	WG1521805

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Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	U		8450	20000	1	08/06/2020 23:51	WG1521057

Sample Narrative:

L1245641-08 WG1521057: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	489	J	379	1000	1	08/01/2020 18:07	WG1518747
Nitrate	U		48.0	100	1	08/01/2020 18:07	WG1518747
Sulfate	U		594	5000	1	08/01/2020 18:07	WG1518747

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	572	B J	102	1000	1	08/04/2020 22:25	WG1520074

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	498		48.9	100	1	08/07/2020 21:07	WG1519256
Manganese	12.2		1.32	5.00	1	08/07/2020 21:07	WG1519256

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	U		0.287	0.678	1	08/05/2020 14:36	WG1520607
Ethane	U		0.296	1.29	1	08/05/2020 14:36	WG1520607
Ethene	U		0.422	1.27	1	08/05/2020 14:36	WG1520607

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	0.974 J	J J0	0.548	1.00	1	08/06/2020 17:54	WG1521805
Acrylonitrile	U		0.0760	0.500	1	08/06/2020 17:54	WG1521805
Benzene	U		0.0160	0.0400	1	08/06/2020 17:54	WG1521805
Bromobenzene	U		0.0420	0.500	1	08/06/2020 17:54	WG1521805
Bromodichloromethane	U		0.0315	0.100	1	08/06/2020 17:54	WG1521805
Bromoform	U		0.239	1.00	1	08/06/2020 17:54	WG1521805
Bromomethane	U UJ	J0	0.148	0.500	1	08/06/2020 17:54	WG1521805
n-Butylbenzene	U		0.153	0.500	1	08/06/2020 17:54	WG1521805
sec-Butylbenzene	U		0.101	0.500	1	08/06/2020 17:54	WG1521805
tert-Butylbenzene	U		0.0620	0.200	1	08/06/2020 17:54	WG1521805
Carbon tetrachloride	U		0.0432	0.200	1	08/06/2020 17:54	WG1521805
Chlorobenzene	U		0.0229	0.100	1	08/06/2020 17:54	WG1521805
Chlorodibromomethane	U		0.0180	0.100	1	08/06/2020 17:54	WG1521805
Chloroethane	U		0.0432	0.200	1	08/06/2020 17:54	WG1521805
Chloroform	U		0.0166	0.100	1	08/06/2020 17:54	WG1521805
Chloromethane	U		0.0556	0.500	1	08/06/2020 17:54	WG1521805
2-Chlorotoluene	U		0.0368	0.100	1	08/06/2020 17:54	WG1521805
4-Chlorotoluene	U		0.0452	0.200	1	08/06/2020 17:54	WG1521805
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	08/06/2020 17:54	WG1521805
1,2-Dibromoethane	U		0.0210	0.100	1	08/06/2020 17:54	WG1521805

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Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Dibromomethane	U		0.0400	0.200	1	08/06/2020 17:54	WG1521805
1,2-Dichlorobenzene	U		0.0580	0.200	1	08/06/2020 17:54	WG1521805
1,3-Dichlorobenzene	U		0.0680	0.200	1	08/06/2020 17:54	WG1521805
1,4-Dichlorobenzene	U		0.0788	0.200	1	08/06/2020 17:54	WG1521805
Dichlorodifluoromethane	U		0.0327	0.100	1	08/06/2020 17:54	WG1521805
1,1-Dichloroethane	U		0.0230	0.100	1	08/06/2020 17:54	WG1521805
1,2-Dichloroethane	U		0.0190	0.100	1	08/06/2020 17:54	WG1521805
1,1-Dichloroethene	U	UJ J0	0.0200	0.100	1	08/06/2020 17:54	WG1521805
cis-1,2-Dichloroethene	U	UJ J0	0.0276	0.100	1	08/06/2020 17:54	WG1521805
trans-1,2-Dichloroethene	U	UJ J0	0.0572	0.200	1	08/06/2020 17:54	WG1521805
1,2-Dichloropropane	U		0.0508	0.200	1	08/06/2020 17:54	WG1521805
1,1-Dichloropropene	U		0.0280	0.100	1	08/06/2020 17:54	WG1521805
1,3-Dichloropropane	U		0.0700	0.200	1	08/06/2020 17:54	WG1521805
cis-1,3-Dichloropropene	U		0.0271	0.100	1	08/06/2020 17:54	WG1521805
trans-1,3-Dichloropropene	U		0.0612	0.200	1	08/06/2020 17:54	WG1521805
2,2-Dichloropropane	U	UJ J0	0.0317	0.100	1	08/06/2020 17:54	WG1521805
Di-isopropyl ether	U		0.0140	0.0400	1	08/06/2020 17:54	WG1521805
Ethylbenzene	U		0.0212	0.100	1	08/06/2020 17:54	WG1521805
Hexachloro-1,3-butadiene	U		0.508	1.00	1	08/06/2020 17:54	WG1521805
Isopropylbenzene	U		0.0345	0.100	1	08/06/2020 17:54	WG1521805
p-Isopropyltoluene	U		0.0932	0.200	1	08/06/2020 17:54	WG1521805
2-Butanone (MEK)	U		0.500	1.00	1	08/06/2020 17:54	WG1521805
Methylene Chloride	U		0.265	1.00	1	08/06/2020 17:54	WG1521805
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	08/06/2020 17:54	WG1521805
Methyl tert-butyl ether	U		0.0118	0.0400	1	08/06/2020 17:54	WG1521805
Naphthalene	U		0.124	0.500	1	08/06/2020 17:54	WG1521805
n-Propylbenzene	U		0.0472	0.200	1	08/06/2020 17:54	WG1521805
Styrene	U		0.109	0.500	1	08/06/2020 17:54	WG1521805
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	08/06/2020 17:54	WG1521805
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	08/06/2020 17:54	WG1521805
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	08/06/2020 17:54	WG1521805
Tetrachloroethene	U		0.0280	0.100	1	08/06/2020 17:54	WG1521805
Toluene	U		0.0500	0.200	1	08/06/2020 17:54	WG1521805
1,2,3-Trichlorobenzene	U		0.0250	0.500	1	08/06/2020 17:54	WG1521805
1,2,4-Trichlorobenzene	U		0.193	0.500	1	08/06/2020 17:54	WG1521805
1,1,1-Trichloroethane	U		0.0110	0.100	1	08/06/2020 17:54	WG1521805
1,1,2-Trichloroethane	U		0.0353	0.100	1	08/06/2020 17:54	WG1521805
Trichloroethene	U		0.0160	0.0400	1	08/06/2020 17:54	WG1521805
Trichlorofluoromethane	U	UJ J0	0.0200	0.100	1	08/06/2020 17:54	WG1521805
1,2,3-Trichloropropane	U		0.204	0.500	1	08/06/2020 17:54	WG1521805
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	08/06/2020 17:54	WG1521805
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	08/06/2020 17:54	WG1521805
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	08/06/2020 17:54	WG1521805
Vinyl chloride	U		0.0273	0.100	1	08/06/2020 17:54	WG1521805
Xylenes, Total	U		0.191	0.260	1	08/06/2020 17:54	WG1521805
Ethyl Ether	U		0.0170	0.100	1	08/06/2020 17:54	WG1521805
Tetrahydrofuran	U	UJ J0	0.0900	0.500	1	08/06/2020 17:54	WG1521805
Iodomethane	U	UJ J0	0.242	0.500	1	08/06/2020 17:54	WG1521805
Allyl chloride	U		0.580	1.00	1	08/06/2020 17:54	WG1521805
Trans-1,4-Dichloro-2-butene	U	UJ J0	0.0560	0.200	1	08/06/2020 17:54	WG1521805
(S) Toluene-d8	*103*			*75.0-131*		*08/06/2020 17:54*	WG1521805
(S) 4-Bromofluorobenzene	*105*			*67.0-138*		*08/06/2020 17:54*	WG1521805
(S) 1,2-Dichloroethane-d4	*109*			*70.0-130*		*08/06/2020 17:54*	WG1521805

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1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Volatile Organic Compounds (GC/MS) by Method 8260D

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Acetone	U	J0	0.548	1.00	1	08/06/2020 18:14	WG1521805
Acrylonitrile	U		0.0760	0.500	1	08/06/2020 18:14	WG1521805
Benzene	U		0.0160	0.0400	1	08/06/2020 18:14	WG1521805
Bromobenzene	U		0.0420	0.500	1	08/06/2020 18:14	WG1521805
Bromodichloromethane	U		0.0315	0.100	1	08/06/2020 18:14	WG1521805
Bromoform	U		0.239	1.00	1	08/06/2020 18:14	WG1521805
Bromomethane	U	J0	0.148	0.500	1	08/06/2020 18:14	WG1521805
n-Butylbenzene	U		0.153	0.500	1	08/06/2020 18:14	WG1521805
sec-Butylbenzene	U		0.101	0.500	1	08/06/2020 18:14	WG1521805
tert-Butylbenzene	U		0.0620	0.200	1	08/06/2020 18:14	WG1521805
Carbon tetrachloride	U		0.0432	0.200	1	08/06/2020 18:14	WG1521805
Chlorobenzene	U		0.0229	0.100	1	08/06/2020 18:14	WG1521805
Chlorodibromomethane	U		0.0180	0.100	1	08/06/2020 18:14	WG1521805
Chloroethane	U		0.0432	0.200	1	08/06/2020 18:14	WG1521805
Chloroform	U		0.0166	0.100	1	08/06/2020 18:14	WG1521805
Chloromethane	U		0.0556	0.500	1	08/06/2020 18:14	WG1521805
2-Chlorotoluene	U		0.0368	0.100	1	08/06/2020 18:14	WG1521805
4-Chlorotoluene	U		0.0452	0.200	1	08/06/2020 18:14	WG1521805
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	08/06/2020 18:14	WG1521805
1,2-Dibromoethane	U		0.0210	0.100	1	08/06/2020 18:14	WG1521805
Dibromomethane	U		0.0400	0.200	1	08/06/2020 18:14	WG1521805
1,2-Dichlorobenzene	U		0.0580	0.200	1	08/06/2020 18:14	WG1521805
1,3-Dichlorobenzene	U		0.0680	0.200	1	08/06/2020 18:14	WG1521805
1,4-Dichlorobenzene	U		0.0788	0.200	1	08/06/2020 18:14	WG1521805
Dichlorodifluoromethane	U		0.0327	0.100	1	08/06/2020 18:14	WG1521805
1,1-Dichloroethane	U		0.0230	0.100	1	08/06/2020 18:14	WG1521805
1,2-Dichloroethane	U		0.0190	0.100	1	08/06/2020 18:14	WG1521805
1,1-Dichloroethene	U	J0	0.0200	0.100	1	08/06/2020 18:14	WG1521805
cis-1,2-Dichloroethene	U	J0	0.0276	0.100	1	08/06/2020 18:14	WG1521805
trans-1,2-Dichloroethene	U	J0	0.0572	0.200	1	08/06/2020 18:14	WG1521805
1,2-Dichloropropane	U		0.0508	0.200	1	08/06/2020 18:14	WG1521805
1,1-Dichloropropene	U		0.0280	0.100	1	08/06/2020 18:14	WG1521805
1,3-Dichloropropane	U		0.0700	0.200	1	08/06/2020 18:14	WG1521805
cis-1,3-Dichloropropene	U		0.0271	0.100	1	08/06/2020 18:14	WG1521805
trans-1,3-Dichloropropene	U		0.0612	0.200	1	08/06/2020 18:14	WG1521805
2,2-Dichloropropane	U	J0	0.0317	0.100	1	08/06/2020 18:14	WG1521805
Di-isopropyl ether	U		0.0140	0.0400	1	08/06/2020 18:14	WG1521805
Ethylbenzene	U		0.0212	0.100	1	08/06/2020 18:14	WG1521805
Hexachloro-1,3-butadiene	U		0.508	1.00	1	08/06/2020 18:14	WG1521805
Isopropylbenzene	U		0.0345	0.100	1	08/06/2020 18:14	WG1521805
p-Isopropyltoluene	U		0.0932	0.200	1	08/06/2020 18:14	WG1521805
2-Butanone (MEK)	U		0.500	1.00	1	08/06/2020 18:14	WG1521805
Methylene Chloride	U		0.265	1.00	1	08/06/2020 18:14	WG1521805
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	08/06/2020 18:14	WG1521805
Methyl tert-butyl ether	U		0.0118	0.0400	1	08/06/2020 18:14	WG1521805
Naphthalene	U		0.124	0.500	1	08/06/2020 18:14	WG1521805
n-Propylbenzene	U		0.0472	0.200	1	08/06/2020 18:14	WG1521805
Styrene	U		0.109	0.500	1	08/06/2020 18:14	WG1521805
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	08/06/2020 18:14	WG1521805
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	08/06/2020 18:14	WG1521805
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	08/06/2020 18:14	WG1521805
Tetrachloroethene	U		0.0280	0.100	1	08/06/2020 18:14	WG1521805
Toluene	U		0.0500	0.200	1	08/06/2020 18:14	WG1521805
1,2,3-Trichlorobenzene	U		0.0250	0.500	1	08/06/2020 18:14	WG1521805
1,2,4-Trichlorobenzene	U		0.193	0.500	1	08/06/2020 18:14	WG1521805
1,1,1-Trichloroethane	U		0.0110	0.100	1	08/06/2020 18:14	WG1521805

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Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,1,2-Trichloroethane	U		0.0353	0.100	1	08/06/2020 18:14	WG1521805
Trichloroethene	U		0.0160	0.0400	1	08/06/2020 18:14	WG1521805
Trichlorofluoromethane	U	J0	0.0200	0.100	1	08/06/2020 18:14	WG1521805
1,2,3-Trichloropropane	U		0.204	0.500	1	08/06/2020 18:14	WG1521805
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	08/06/2020 18:14	WG1521805
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	08/06/2020 18:14	WG1521805
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	08/06/2020 18:14	WG1521805
Vinyl chloride	U		0.0273	0.100	1	08/06/2020 18:14	WG1521805
Xylenes, Total	U		0.191	0.260	1	08/06/2020 18:14	WG1521805
Ethyl Ether	U		0.0170	0.100	1	08/06/2020 18:14	WG1521805
Tetrahydrofuran	U	J0	0.0900	0.500	1	08/06/2020 18:14	WG1521805
Iodomethane	U	J0	0.242	0.500	1	08/06/2020 18:14	WG1521805
Allyl chloride	U		0.580	1.00	1	08/06/2020 18:14	WG1521805
Trans-1,4-Dichloro-2-butene	U	J0	0.0560	0.200	1	08/06/2020 18:14	WG1521805
(S) Toluene-d8	*108*			*75.0-131*		*08/06/2020 18:14*	WG1521805
(S) 4-Bromofluorobenzene	*99.0*			*67.0-138*		*08/06/2020 18:14*	WG1521805
(S) 1,2-Dichloroethane-d4	*104*			*70.0-130*		*08/06/2020 18:14*	WG1521805

JC 8/24/2020

Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	167000		8450	20000	1	08/07/2020 18:26	WG1521065

Sample Narrative:

L1246080-01 WG1521065: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	4600		379	1000	1	08/04/2020 15:54	WG1519944
Nitrate	U		48.0	100	1	08/04/2020 15:54	WG1519944
Sulfate	U		594	5000	1	08/04/2020 15:54	WG1519944

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	1960	~~B~~	102	1000	1	08/07/2020 02:08	WG1521819

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	1340		48.9	100	1	08/05/2020 01:26	WG1520224
Manganese	322		1.32	5.00	1	08/05/2020 12:27	WG1520224

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	30.0		0.287	0.678	1	08/06/2020 13:45	WG1521338
Ethane	U		0.296	1.29	1	08/06/2020 13:45	WG1521338
Ethene	U		0.422	1.27	1	08/06/2020 13:45	WG1521338

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U	UJ J0	0.548	1.00	1	08/06/2020 23:19	WG1521805
Acrylonitrile	U		0.0760	0.500	1	08/06/2020 23:19	WG1521805
Benzene	U		0.0160	0.0400	1	08/06/2020 23:19	WG1521805
Bromobenzene	U		0.0420	0.500	1	08/06/2020 23:19	WG1521805
Bromodichloromethane	U		0.0315	0.100	1	08/06/2020 23:19	WG1521805
Bromoform	U		0.239	1.00	1	08/06/2020 23:19	WG1521805
Bromomethane	U	UJ J0	0.148	0.500	1	08/06/2020 23:19	WG1521805
n-Butylbenzene	U		0.153	0.500	1	08/06/2020 23:19	WG1521805
sec-Butylbenzene	U		0.101	0.500	1	08/06/2020 23:19	WG1521805
tert-Butylbenzene	U		0.0620	0.200	1	08/06/2020 23:19	WG1521805
Carbon tetrachloride	U		0.0432	0.200	1	08/06/2020 23:19	WG1521805
Chlorobenzene	U		0.0229	0.100	1	08/06/2020 23:19	WG1521805
Chlorodibromomethane	U		0.0180	0.100	1	08/06/2020 23:19	WG1521805
Chloroethane	U		0.0432	0.200	1	08/06/2020 23:19	WG1521805
Chloroform	U		0.0166	0.100	1	08/06/2020 23:19	WG1521805
Chloromethane	U		0.0556	0.500	1	08/06/2020 23:19	WG1521805
2-Chlorotoluene	U		0.0368	0.100	1	08/06/2020 23:19	WG1521805
4-Chlorotoluene	U		0.0452	0.200	1	08/06/2020 23:19	WG1521805
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	08/06/2020 23:19	WG1521805
1,2-Dibromoethane	U		0.0210	0.100	1	08/06/2020 23:19	WG1521805

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Dibromomethane	U		0.0400	0.200	1	08/06/2020 23:19	WG1521805
1,2-Dichlorobenzene	U		0.0580	0.200	1	08/06/2020 23:19	WG1521805
1,3-Dichlorobenzene	U		0.0680	0.200	1	08/06/2020 23:19	WG1521805
1,4-Dichlorobenzene	U		0.0788	0.200	1	08/06/2020 23:19	WG1521805
Dichlorodifluoromethane	U		0.0327	0.100	1	08/06/2020 23:19	WG1521805
1,1-Dichloroethane	U		0.0230	0.100	1	08/06/2020 23:19	WG1521805
1,2-Dichloroethane	U		0.0190	0.100	1	08/06/2020 23:19	WG1521805
1,1-Dichloroethene	U UJ	J0	0.0200	0.100	1	08/06/2020 23:19	WG1521805
cis-1,2-Dichloroethene	U UJ	J0	0.0276	0.100	1	08/06/2020 23:19	WG1521805
trans-1,2-Dichloroethene	U UJ	J0	0.0572	0.200	1	08/06/2020 23:19	WG1521805
1,2-Dichloropropane	U		0.0508	0.200	1	08/06/2020 23:19	WG1521805
1,1-Dichloropropene	U		0.0280	0.100	1	08/06/2020 23:19	WG1521805
1,3-Dichloropropane	U		0.0700	0.200	1	08/06/2020 23:19	WG1521805
cis-1,3-Dichloropropene	U		0.0271	0.100	1	08/06/2020 23:19	WG1521805
trans-1,3-Dichloropropene	U		0.0612	0.200	1	08/06/2020 23:19	WG1521805
2,2-Dichloropropane	U UJ	J0	0.0317	0.100	1	08/06/2020 23:19	WG1521805
Di-isopropyl ether	U		0.0140	0.0400	1	08/06/2020 23:19	WG1521805
Ethylbenzene	0.102		0.0212	0.100	1	08/06/2020 23:19	WG1521805
Hexachloro-1,3-butadiene	U		0.508	1.00	1	08/06/2020 23:19	WG1521805
Isopropylbenzene	U		0.0345	0.100	1	08/06/2020 23:19	WG1521805
p-Isopropyltoluene	U		0.0932	0.200	1	08/06/2020 23:19	WG1521805
2-Butanone (MEK)	U		0.500	1.00	1	08/06/2020 23:19	WG1521805
Methylene Chloride	U		0.265	1.00	1	08/06/2020 23:19	WG1521805
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	08/06/2020 23:19	WG1521805
Methyl tert-butyl ether	U		0.0118	0.0400	1	08/06/2020 23:19	WG1521805
Naphthalene	U		0.124	0.500	1	08/06/2020 23:19	WG1521805
n-Propylbenzene	U		0.0472	0.200	1	08/06/2020 23:19	WG1521805
Styrene	U		0.109	0.500	1	08/06/2020 23:19	WG1521805
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	08/06/2020 23:19	WG1521805
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	08/06/2020 23:19	WG1521805
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	08/06/2020 23:19	WG1521805
Tetrachloroethene	U		0.0280	0.100	1	08/06/2020 23:19	WG1521805
Toluene	1.14		0.0500	0.200	1	08/06/2020 23:19	WG1521805
1,2,3-Trichlorobenzene	U		0.0250	0.500	1	08/06/2020 23:19	WG1521805
1,2,4-Trichlorobenzene	U		0.193	0.500	1	08/06/2020 23:19	WG1521805
1,1,1-Trichloroethane	U		0.0110	0.100	1	08/06/2020 23:19	WG1521805
1,1,2-Trichloroethane	U		0.0353	0.100	1	08/06/2020 23:19	WG1521805
Trichloroethene	U		0.0160	0.0400	1	08/06/2020 23:19	WG1521805
Trichlorofluoromethane	U UJ	J0	0.0200	0.100	1	08/06/2020 23:19	WG1521805
1,2,3-Trichloropropane	U		0.204	0.500	1	08/06/2020 23:19	WG1521805
1,2,4-Trimethylbenzene	0.0532	J	0.0464	0.200	1	08/06/2020 23:19	WG1521805
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	08/06/2020 23:19	WG1521805
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	08/06/2020 23:19	WG1521805
Vinyl chloride	U		0.0273	0.100	1	08/06/2020 23:19	WG1521805
Xylenes, Total	0.526		0.191	0.260	1	08/06/2020 23:19	WG1521805
Ethyl Ether	U		0.0170	0.100	1	08/06/2020 23:19	WG1521805
Tetrahydrofuran	U UJ	J0	0.0900	0.500	1	08/06/2020 23:19	WG1521805
Iodomethane	U UJ	J0	0.242	0.500	1	08/06/2020 23:19	WG1521805
Allyl chloride	U		0.580	1.00	1	08/06/2020 23:19	WG1521805
Trans-1,4-Dichloro-2-butene	U UJ	J0	0.0560	0.200	1	08/06/2020 23:19	WG1521805
(S) Toluene-d8	*105*			*75.0-131*		*08/06/2020 23:19*	WG1521805
(S) 4-Bromofluorobenzene	*96.0*			*67.0-138*		*08/06/2020 23:19*	WG1521805
(S) 1,2-Dichloroethane-d4	*105*			*70.0-130*		*08/06/2020 23:19*	WG1521805

MW-160-080320

Collected date/time: 08/03/20 09:00

SAMPLE RESULTS - 02

L1246080

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	173000		8450	20000	1	08/07/2020 18:34	WG1521065

Sample Narrative:

L1246080-02 WG1521065: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	6840		379	1000	1	08/04/2020 16:48	WG1519944
Nitrate	U		48.0	100	1	08/04/2020 16:48	WG1519944
Sulfate	3080	J	594	5000	1	08/04/2020 16:48	WG1519944

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	1710	~~B~~	102	1000	1	08/07/2020 02:19	WG1521819

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	2260		48.9	100	1	08/05/2020 01:39	WG1520224
Manganese	474		1.32	5.00	1	08/05/2020 01:39	WG1520224

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	817		0.287	0.678	1	08/06/2020 13:51	WG1521338
Ethane	U		0.296	1.29	1	08/06/2020 13:51	WG1521338
Ethene	U		0.422	1.27	1	08/06/2020 13:51	WG1521338

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	0.606 J	J J0	0.548	1.00	1	08/09/2020 16:19	WG1522682
Acrylonitrile	U		0.0760	0.500	1	08/09/2020 16:19	WG1522682
Benzene	0.0180	J	0.0160	0.0400	1	08/09/2020 16:19	WG1522682
Bromobenzene	U		0.0420	0.500	1	08/09/2020 16:19	WG1522682
Bromodichloromethane	U		0.0315	0.100	1	08/09/2020 16:19	WG1522682
Bromoform	U		0.239	1.00	1	08/09/2020 16:19	WG1522682
Bromomethane	U		0.148	0.500	1	08/09/2020 16:19	WG1522682
n-Butylbenzene	U		0.153	0.500	1	08/09/2020 16:19	WG1522682
sec-Butylbenzene	U		0.101	0.500	1	08/09/2020 16:19	WG1522682
tert-Butylbenzene	U		0.0620	0.200	1	08/09/2020 16:19	WG1522682
Carbon tetrachloride	U		0.0432	0.200	1	08/09/2020 16:19	WG1522682
Chlorobenzene	U		0.0229	0.100	1	08/09/2020 16:19	WG1522682
Chlorodibromomethane	U		0.0180	0.100	1	08/09/2020 16:19	WG1522682
Chloroethane	0.929 J	J0	0.0432	0.200	1	08/09/2020 16:19	WG1522682
Chloroform	U		0.0166	0.100	1	08/09/2020 16:19	WG1522682
Chloromethane	U	~~J4~~	0.0556	0.500	1	08/09/2020 16:19	WG1522682
2-Chlorotoluene	U		0.0368	0.100	1	08/09/2020 16:19	WG1522682
4-Chlorotoluene	U		0.0452	0.200	1	08/09/2020 16:19	WG1522682
1,2-Dibromo-3-Chloropropane	U UJ	J0	0.204	1.00	1	08/09/2020 16:19	WG1522682
1,2-Dibromoethane	U		0.0210	0.100	1	08/09/2020 16:19	WG1522682

MW-160-080320

Collected date/time: 08/03/20 09:00

SAMPLE RESULTS - 02

L1246080

Volatile Organic Compounds (GC/MS) by Method 8260D

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Dibromomethane	U		0.0400	0.200	1	08/09/2020 16:19	WG1522682
1,2-Dichlorobenzene	U		0.0580	0.200	1	08/09/2020 16:19	WG1522682
1,3-Dichlorobenzene	U		0.0680	0.200	1	08/09/2020 16:19	WG1522682
1,4-Dichlorobenzene	U		0.0788	0.200	1	08/09/2020 16:19	WG1522682
Dichlorodifluoromethane	U		0.0327	0.100	1	08/09/2020 16:19	WG1522682
1,1-Dichloroethane	U		0.0230	0.100	1	08/09/2020 16:19	WG1522682
1,2-Dichloroethane	U		0.0190	0.100	1	08/09/2020 16:19	WG1522682
1,1-Dichloroethene	0.316		0.0200	0.100	1	08/09/2020 16:19	WG1522682
cis-1,2-Dichloroethene	15.2		0.0276	0.100	1	08/09/2020 16:19	WG1522682
trans-1,2-Dichloroethene	0.144 J	J J4	0.0572	0.200	1	08/09/2020 16:19	WG1522682
1,2-Dichloropropane	U		0.0508	0.200	1	08/09/2020 16:19	WG1522682
1,1-Dichloropropene	U		0.0280	0.100	1	08/09/2020 16:19	WG1522682
1,3-Dichloropropane	U UJ	J0 J4	0.0700	0.200	1	08/09/2020 16:19	WG1522682
cis-1,3-Dichloropropene	U UJ	J0	0.0271	0.100	1	08/09/2020 16:19	WG1522682
trans-1,3-Dichloropropene	U		0.0612	0.200	1	08/09/2020 16:19	WG1522682
2,2-Dichloropropane	U		0.0317	0.100	1	08/09/2020 16:19	WG1522682
Di-isopropyl ether	U		0.0140	0.0400	1	08/09/2020 16:19	WG1522682
Ethylbenzene	0.0670	J	0.0212	0.100	1	08/09/2020 16:19	WG1522682
Hexachloro-1,3-butadiene	U		0.508	1.00	1	08/09/2020 16:19	WG1522682
Isopropylbenzene	U		0.0345	0.100	1	08/09/2020 16:19	WG1522682
p-Isopropyltoluene	U		0.0932	0.200	1	08/09/2020 16:19	WG1522682
2-Butanone (MEK)	U		0.500	1.00	1	08/09/2020 16:19	WG1522682
Methylene Chloride	U		0.265	1.00	1	08/09/2020 16:19	WG1522682
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	08/09/2020 16:19	WG1522682
Methyl tert-butyl ether	U		0.0118	0.0400	1	08/09/2020 16:19	WG1522682
Naphthalene	U		0.124	0.500	1	08/09/2020 16:19	WG1522682
n-Propylbenzene	U UJ	J0	0.0472	0.200	1	08/09/2020 16:19	WG1522682
Styrene	U		0.109	0.500	1	08/09/2020 16:19	WG1522682
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	08/09/2020 16:19	WG1522682
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	08/09/2020 16:19	WG1522682
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	08/09/2020 16:19	WG1522682
Tetrachloroethene	0.203		0.0280	0.100	1	08/09/2020 16:19	WG1522682
Toluene	1.04		0.0500	0.200	1	08/09/2020 16:19	WG1522682
1,2,3-Trichlorobenzene	U		0.0250	0.500	1	08/09/2020 16:19	WG1522682
1,2,4-Trichlorobenzene	U		0.193	0.500	1	08/09/2020 16:19	WG1522682
1,1,1-Trichloroethane	U		0.0110	0.100	1	08/09/2020 16:19	WG1522682
1,1,2-Trichloroethane	U		0.0353	0.100	1	08/09/2020 16:19	WG1522682
Trichloroethene	3.61		0.0160	0.0400	1	08/09/2020 16:19	WG1522682
Trichlorofluoromethane	U		0.0200	0.100	1	08/09/2020 16:19	WG1522682
1,2,3-Trichloropropane	U		0.204	0.500	1	08/09/2020 16:19	WG1522682
1,2,4-Trimethylbenzene	0.0510	J	0.0464	0.200	1	08/09/2020 16:19	WG1522682
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	08/09/2020 16:19	WG1522682
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	08/09/2020 16:19	WG1522682
Vinyl chloride	1.17 J	J0 J4	0.0273	0.100	1	08/09/2020 16:19	WG1522682
Xylenes, Total	0.321		0.191	0.260	1	08/09/2020 16:19	WG1522682
Ethyl Ether	U		0.0170	0.100	1	08/09/2020 16:19	WG1522682
Tetrahydrofuran	U		0.0900	0.500	1	08/09/2020 16:19	WG1522682
Iodomethane	U		0.242	0.500	1	08/09/2020 16:19	WG1522682
Allyl chloride	U		0.580	1.00	1	08/09/2020 16:19	WG1522682
Trans-1,4-Dichloro-2-butene	U UJ	J0	0.0560	0.200	1	08/09/2020 16:19	WG1522682
(S) Toluene-d8	*96.4*			*75.0-131*		*08/09/2020 16:19*	WG1522682
(S) 4-Bromofluorobenzene	*106*			*67.0-138*		*08/09/2020 16:19*	WG1522682
(S) 1,2-Dichloroethane-d4	*114*			*70.0-130*		*08/09/2020 16:19*	WG1522682

MW-144R-080320
Collected date/time: 08/03/20 10:30

SAMPLE RESULTS - 03
L1246080

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	618000		8450	20000	1	08/07/2020 18:42	WG1521065

Sample Narrative:
L1246080-03 WG1521065: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	97400		379	1000	1	08/04/2020 17:07	WG1519944
Nitrate	U		48.0	100	1	08/04/2020 17:07	WG1519944
Sulfate	U		594	5000	1	08/04/2020 17:07	WG1519944

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	4620		102	1000	1	08/07/2020 03:09	WG1521819

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	4540		48.9	100	1	08/05/2020 01:42	WG1520224
Manganese	1150		1.32	5.00	1	08/05/2020 01:42	WG1520224

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	18500		2.87	6.78	10	08/07/2020 14:13	WG1522285
Ethane	367		0.296	1.29	1	08/06/2020 13:54	WG1521338
Ethene	102		0.422	1.27	1	08/06/2020 13:54	WG1521338

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l		Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	28.4	J	J0	0.548	1.00	1	08/09/2020 14:52	WG1522682
Acrylonitrile	U			0.0760	0.500	1	08/09/2020 14:52	WG1522682
Benzene	0.0510			0.0160	0.0400	1	08/09/2020 14:52	WG1522682
Bromobenzene	U			0.0420	0.500	1	08/09/2020 14:52	WG1522682
Bromodichloromethane	U			0.0315	0.100	1	08/09/2020 14:52	WG1522682
Bromoform	U			0.239	1.00	1	08/09/2020 14:52	WG1522682
Bromomethane	U			0.148	0.500	1	08/09/2020 14:52	WG1522682
n-Butylbenzene	U			0.153	0.500	1	08/09/2020 14:52	WG1522682
sec-Butylbenzene	U			0.101	0.500	1	08/09/2020 14:52	WG1522682
tert-Butylbenzene	U			0.0620	0.200	1	08/09/2020 14:52	WG1522682
Carbon tetrachloride	U			0.0432	0.200	1	08/09/2020 14:52	WG1522682
Chlorobenzene	U			0.0229	0.100	1	08/09/2020 14:52	WG1522682
Chlorodibromomethane	U			0.0180	0.100	1	08/09/2020 14:52	WG1522682
Chloroethane	0.431	J	J0	0.0432	0.200	1	08/09/2020 14:52	WG1522682
Chloroform	U			0.0166	0.100	1	08/09/2020 14:52	WG1522682
Chloromethane	U		~~J4~~	0.0556	0.500	1	08/09/2020 14:52	WG1522682
2-Chlorotoluene	U			0.0368	0.100	1	08/09/2020 14:52	WG1522682
4-Chlorotoluene	U			0.0452	0.200	1	08/09/2020 14:52	WG1522682
1,2-Dibromo-3-Chloropropane	U	UJ	J0	0.204	1.00	1	08/09/2020 14:52	WG1522682
1,2-Dibromoethane	U			0.0210	0.100	1	08/09/2020 14:52	WG1522682

Volatile Organic Compounds (GC/MS) by Method 8260D

	Result		Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l			ug/l	ug/l		date / time	
Dibromomethane	U			0.0400	0.200	1	08/09/2020 14:52	WG1522682
1,2-Dichlorobenzene	U			0.0580	0.200	1	08/09/2020 14:52	WG1522682
1,3-Dichlorobenzene	U			0.0680	0.200	1	08/09/2020 14:52	WG1522682
1,4-Dichlorobenzene	U			0.0788	0.200	1	08/09/2020 14:52	WG1522682
Dichlorodifluoromethane	U			0.0327	0.100	1	08/09/2020 14:52	WG1522682
1,1-Dichloroethane	U			0.0230	0.100	1	08/09/2020 14:52	WG1522682
1,2-Dichloroethane	U			0.0190	0.100	1	08/09/2020 14:52	WG1522682
1,1-Dichloroethene	U			0.0200	0.100	1	08/09/2020 14:52	WG1522682
cis-1,2-Dichloroethene	0.459			0.0276	0.100	1	08/09/2020 14:52	WG1522682
trans-1,2-Dichloroethene	U		~~J4~~	0.0572	0.200	1	08/09/2020 14:52	WG1522682
1,2-Dichloropropane	U			0.0508	0.200	1	08/09/2020 14:52	WG1522682
1,1-Dichloropropene	U			0.0280	0.100	1	08/09/2020 14:52	WG1522682
1,3-Dichloropropane	U	UJ	J0 J4	0.0700	0.200	1	08/09/2020 14:52	WG1522682
cis-1,3-Dichloropropene	U	UJ	J0	0.0271	0.100	1	08/09/2020 14:52	WG1522682
trans-1,3-Dichloropropene	U			0.0612	0.200	1	08/09/2020 14:52	WG1522682
2,2-Dichloropropane	U			0.0317	0.100	1	08/09/2020 14:52	WG1522682
Di-isopropyl ether	U			0.0140	0.0400	1	08/09/2020 14:52	WG1522682
Ethylbenzene	0.0670		J	0.0212	0.100	1	08/09/2020 14:52	WG1522682
Hexachloro-1,3-butadiene	U			0.508	1.00	1	08/09/2020 14:52	WG1522682
Isopropylbenzene	U			0.0345	0.100	1	08/09/2020 14:52	WG1522682
p-Isopropyltoluene	U			0.0932	0.200	1	08/09/2020 14:52	WG1522682
2-Butanone (MEK)	U			0.500	1.00	1	08/09/2020 14:52	WG1522682
Methylene Chloride	U			0.265	1.00	1	08/09/2020 14:52	WG1522682
4-Methyl-2-pentanone (MIBK)	U			0.400	1.00	1	08/09/2020 14:52	WG1522682
Methyl tert-butyl ether	U			0.0118	0.0400	1	08/09/2020 14:52	WG1522682
Naphthalene	U			0.124	0.500	1	08/09/2020 14:52	WG1522682
n-Propylbenzene	U	UJ	J0	0.0472	0.200	1	08/09/2020 14:52	WG1522682
Styrene	U			0.109	0.500	1	08/09/2020 14:52	WG1522682
1,1,1,2-Tetrachloroethane	U			0.0200	0.100	1	08/09/2020 14:52	WG1522682
1,1,2,2-Tetrachloroethane	U			0.0156	0.100	1	08/09/2020 14:52	WG1522682
1,1,2-Trichlorotrifluoroethane	U			0.0270	0.100	1	08/09/2020 14:52	WG1522682
Tetrachloroethene	0.0500		J	0.0280	0.100	1	08/09/2020 14:52	WG1522682
Toluene	1.53			0.0500	0.200	1	08/09/2020 14:52	WG1522682
1,2,3-Trichlorobenzene	U			0.0250	0.500	1	08/09/2020 14:52	WG1522682
1,2,4-Trichlorobenzene	U			0.193	0.500	1	08/09/2020 14:52	WG1522682
1,1,1-Trichloroethane	U			0.0110	0.100	1	08/09/2020 14:52	WG1522682
1,1,2-Trichloroethane	U			0.0353	0.100	1	08/09/2020 14:52	WG1522682
Trichloroethene	0.0960			0.0160	0.0400	1	08/09/2020 14:52	WG1522682
Trichlorofluoromethane	U			0.0200	0.100	1	08/09/2020 14:52	WG1522682
1,2,3-Trichloropropane	U			0.204	0.500	1	08/09/2020 14:52	WG1522682
1,2,4-Trimethylbenzene	U			0.0464	0.200	1	08/09/2020 14:52	WG1522682
1,2,3-Trimethylbenzene	U			0.0460	0.200	1	08/09/2020 14:52	WG1522682
1,3,5-Trimethylbenzene	U			0.0432	0.200	1	08/09/2020 14:52	WG1522682
Vinyl chloride	1.58	J	J0 J4	0.0273	0.100	1	08/09/2020 14:52	WG1522682
Xylenes, Total	0.341			0.191	0.260	1	08/09/2020 14:52	WG1522682
Ethyl Ether	U			0.0170	0.100	1	08/09/2020 14:52	WG1522682
Tetrahydrofuran	U			0.0900	0.500	1	08/09/2020 14:52	WG1522682
Iodomethane	U			0.242	0.500	1	08/09/2020 14:52	WG1522682
Allyl chloride	U			0.580	1.00	1	08/09/2020 14:52	WG1522682
Trans-1,4-Dichloro-2-butene	U	UJ	J0	0.0560	0.200	1	08/09/2020 14:52	WG1522682
(S) Toluene-d8	*101*				*75.0-131*		*08/09/2020 14:52*	WG1522682
(S) 4-Bromofluorobenzene	*98.6*				*67.0-138*		*08/09/2020 14:52*	WG1522682
(S) 1,2-Dichloroethane-d4	*112*				*70.0-130*		*08/09/2020 14:52*	WG1522682

Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	266000		8450	20000	1	08/07/2020 18:49	WG1521065

Sample Narrative:

L1246080-04 WG1521065: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	29300		379	1000	1	08/04/2020 17:25	WG1519944
Nitrate	U		48.0	100	1	08/04/2020 17:25	WG1519944
Sulfate	1240	J	594	5000	1	08/04/2020 17:25	WG1519944

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	2270	~~B~~	102	1000	1	08/07/2020 03:24	WG1521819

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	1540		48.9	100	1	08/05/2020 01:45	WG1520224
Manganese	362		1.32	5.00	1	08/05/2020 01:45	WG1520224

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	8550		2.87	6.78	10	08/07/2020 14:17	WG1522285
Ethane	5.59		0.296	1.29	1	08/06/2020 13:59	WG1521338
Ethene	U		0.422	1.27	1	08/06/2020 13:59	WG1521338

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	0.808 J	J J0	0.548	1.00	1	08/09/2020 15:11	WG1522682
Acrylonitrile	U		0.0760	0.500	1	08/09/2020 15:11	WG1522682
Benzene	0.0190	J	0.0160	0.0400	1	08/09/2020 15:11	WG1522682
Bromobenzene	U		0.0420	0.500	1	08/09/2020 15:11	WG1522682
Bromodichloromethane	U		0.0315	0.100	1	08/09/2020 15:11	WG1522682
Bromoform	U		0.239	1.00	1	08/09/2020 15:11	WG1522682
Bromomethane	U		0.148	0.500	1	08/09/2020 15:11	WG1522682
n-Butylbenzene	U		0.153	0.500	1	08/09/2020 15:11	WG1522682
sec-Butylbenzene	U		0.101	0.500	1	08/09/2020 15:11	WG1522682
tert-Butylbenzene	U		0.0620	0.200	1	08/09/2020 15:11	WG1522682
Carbon tetrachloride	U		0.0432	0.200	1	08/09/2020 15:11	WG1522682
Chlorobenzene	U		0.0229	0.100	1	08/09/2020 15:11	WG1522682
Chlorodibromomethane	U		0.0180	0.100	1	08/09/2020 15:11	WG1522682
Chloroethane	U		0.0432	0.200	1	08/09/2020 15:11	WG1522682
Chloroform	U		0.0166	0.100	1	08/09/2020 15:11	WG1522682
Chloromethane	U	~~J4~~	0.0556	0.500	1	08/09/2020 15:11	WG1522682
2-Chlorotoluene	U		0.0368	0.100	1	08/09/2020 15:11	WG1522682
4-Chlorotoluene	U		0.0452	0.200	1	08/09/2020 15:11	WG1522682
1,2-Dibromo-3-Chloropropane	U UJ	J0	0.204	1.00	1	08/09/2020 15:11	WG1522682
1,2-Dibromoethane	U		0.0210	0.100	1	08/09/2020 15:11	WG1522682

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Dibromomethane	U		0.0400	0.200	1	08/09/2020 15:11	WG1522682
1,2-Dichlorobenzene	U		0.0580	0.200	1	08/09/2020 15:11	WG1522682
1,3-Dichlorobenzene	U		0.0680	0.200	1	08/09/2020 15:11	WG1522682
1,4-Dichlorobenzene	U		0.0788	0.200	1	08/09/2020 15:11	WG1522682
Dichlorodifluoromethane	U		0.0327	0.100	1	08/09/2020 15:11	WG1522682
1,1-Dichloroethane	U		0.0230	0.100	1	08/09/2020 15:11	WG1522682
1,2-Dichloroethane	U		0.0190	0.100	1	08/09/2020 15:11	WG1522682
1,1-Dichloroethene	U		0.0200	0.100	1	08/09/2020 15:11	WG1522682
cis-1,2-Dichloroethene	0.228		0.0276	0.100	1	08/09/2020 15:11	WG1522682
trans-1,2-Dichloroethene	U	~~J4~~	0.0572	0.200	1	08/09/2020 15:11	WG1522682
1,2-Dichloropropane	U		0.0508	0.200	1	08/09/2020 15:11	WG1522682
1,1-Dichloropropene	U		0.0280	0.100	1	08/09/2020 15:11	WG1522682
1,3-Dichloropropane	U	UJ J0 J4	0.0700	0.200	1	08/09/2020 15:11	WG1522682
cis-1,3-Dichloropropene	U	UJ J0	0.0271	0.100	1	08/09/2020 15:11	WG1522682
trans-1,3-Dichloropropene	U		0.0612	0.200	1	08/09/2020 15:11	WG1522682
2,2-Dichloropropane	U		0.0317	0.100	1	08/09/2020 15:11	WG1522682
Di-isopropyl ether	U		0.0140	0.0400	1	08/09/2020 15:11	WG1522682
Ethylbenzene	0.0460	J	0.0212	0.100	1	08/09/2020 15:11	WG1522682
Hexachloro-1,3-butadiene	U		0.508	1.00	1	08/09/2020 15:11	WG1522682
Isopropylbenzene	U		0.0345	0.100	1	08/09/2020 15:11	WG1522682
p-Isopropyltoluene	U		0.0932	0.200	1	08/09/2020 15:11	WG1522682
2-Butanone (MEK)	U		0.500	1.00	1	08/09/2020 15:11	WG1522682
Methylene Chloride	U		0.265	1.00	1	08/09/2020 15:11	WG1522682
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	08/09/2020 15:11	WG1522682
Methyl tert-butyl ether	U		0.0118	0.0400	1	08/09/2020 15:11	WG1522682
Naphthalene	U		0.124	0.500	1	08/09/2020 15:11	WG1522682
n-Propylbenzene	U	UJ J0	0.0472	0.200	1	08/09/2020 15:11	WG1522682
Styrene	U		0.109	0.500	1	08/09/2020 15:11	WG1522682
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	08/09/2020 15:11	WG1522682
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	08/09/2020 15:11	WG1522682
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	08/09/2020 15:11	WG1522682
Tetrachloroethene	0.0570	J	0.0280	0.100	1	08/09/2020 15:11	WG1522682
Toluene	1.45		0.0500	0.200	1	08/09/2020 15:11	WG1522682
1,2,3-Trichlorobenzene	U		0.0250	0.500	1	08/09/2020 15:11	WG1522682
1,2,4-Trichlorobenzene	U		0.193	0.500	1	08/09/2020 15:11	WG1522682
1,1,1-Trichloroethane	U		0.0110	0.100	1	08/09/2020 15:11	WG1522682
1,1,2-Trichloroethane	U		0.0353	0.100	1	08/09/2020 15:11	WG1522682
Trichloroethene	0.0270	J	0.0160	0.0400	1	08/09/2020 15:11	WG1522682
Trichlorofluoromethane	U		0.0200	0.100	1	08/09/2020 15:11	WG1522682
1,2,3-Trichloropropane	U		0.204	0.500	1	08/09/2020 15:11	WG1522682
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	08/09/2020 15:11	WG1522682
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	08/09/2020 15:11	WG1522682
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	08/09/2020 15:11	WG1522682
Vinyl chloride	U	J4	0.0273	0.100	1	08/09/2020 15:11	WG1522682
Xylenes, Total	U		0.191	0.260	1	08/09/2020 15:11	WG1522682
Ethyl Ether	U		0.0170	0.100	1	08/09/2020 15:11	WG1522682
Tetrahydrofuran	U		0.0900	0.500	1	08/09/2020 15:11	WG1522682
Iodomethane	U		0.242	0.500	1	08/09/2020 15:11	WG1522682
Allyl chloride	U		0.580	1.00	1	08/09/2020 15:11	WG1522682
Trans-1,4-Dichloro-2-butene	U	UJ J0	0.0560	0.200	1	08/09/2020 15:11	WG1522682
(S) Toluene-d8	*97.8*			*75.0-131*		*08/09/2020 15:11*	WG1522682
(S) 4-Bromofluorobenzene	*103*			*67.0-138*		*08/09/2020 15:11*	WG1522682
(S) 1,2-Dichloroethane-d4	*114*			*70.0-130*		*08/09/2020 15:11*	WG1522682

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	447000		8450	20000	1	08/07/2020 18:57	WG1521065

Sample Narrative:

L1246080-05 WG1521065: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	35500		379	1000	1	08/04/2020 17:44	WG1519944
Nitrate	U		48.0	100	1	08/04/2020 17:44	WG1519944
Sulfate	14000		594	5000	1	08/04/2020 17:44	WG1519944

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	3590		102	1000	1	08/07/2020 17:23	WG1522387

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	7750		48.9	100	1	08/05/2020 01:49	WG1520224
Manganese	2130		1.32	5.00	1	08/05/2020 01:49	WG1520224

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	630		0.287	0.678	1	08/06/2020 14:02	WG1521338
Ethane	15.7		0.296	1.29	1	08/06/2020 14:02	WG1521338
Ethene	U		0.422	1.27	1	08/06/2020 14:02	WG1521338

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l		Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	0.630	J	J J0	0.548	1.00	1	08/09/2020 15:30	WG1522682
Acrylonitrile	U			0.0760	0.500	1	08/09/2020 15:30	WG1522682
Benzene	0.628			0.0160	0.0400	1	08/09/2020 15:30	WG1522682
Bromobenzene	U			0.0420	0.500	1	08/09/2020 15:30	WG1522682
Bromodichloromethane	U			0.0315	0.100	1	08/09/2020 15:30	WG1522682
Bromoform	U			0.239	1.00	1	08/09/2020 15:30	WG1522682
Bromomethane	U			0.148	0.500	1	08/09/2020 15:30	WG1522682
n-Butylbenzene	U			0.153	0.500	1	08/09/2020 15:30	WG1522682
sec-Butylbenzene	U			0.101	0.500	1	08/09/2020 15:30	WG1522682
tert-Butylbenzene	U			0.0620	0.200	1	08/09/2020 15:30	WG1522682
Carbon tetrachloride	U			0.0432	0.200	1	08/09/2020 15:30	WG1522682
Chlorobenzene	U			0.0229	0.100	1	08/09/2020 15:30	WG1522682
Chlorodibromomethane	U			0.0180	0.100	1	08/09/2020 15:30	WG1522682
Chloroethane	U			0.0432	0.200	1	08/09/2020 15:30	WG1522682
Chloroform	U			0.0166	0.100	1	08/09/2020 15:30	WG1522682
Chloromethane	U		~~J4~~	0.0556	0.500	1	08/09/2020 15:30	WG1522682
2-Chlorotoluene	U			0.0368	0.100	1	08/09/2020 15:30	WG1522682
4-Chlorotoluene	U			0.0452	0.200	1	08/09/2020 15:30	WG1522682
1,2-Dibromo-3-Chloropropane	U	UJ	J0	0.204	1.00	1	08/09/2020 15:30	WG1522682
1,2-Dibromoethane	U			0.0210	0.100	1	08/09/2020 15:30	WG1522682

MW-329-080320

Collected date/time: 08/03/20 12:25

SAMPLE RESULTS - 05

L1246080

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Dibromomethane	U		0.0400	0.200	1	08/09/2020 15:30	WG1522682
1,2-Dichlorobenzene	U		0.0580	0.200	1	08/09/2020 15:30	WG1522682
1,3-Dichlorobenzene	U		0.0680	0.200	1	08/09/2020 15:30	WG1522682
1,4-Dichlorobenzene	U		0.0788	0.200	1	08/09/2020 15:30	WG1522682
Dichlorodifluoromethane	U		0.0327	0.100	1	08/09/2020 15:30	WG1522682
1,1-Dichloroethane	U		0.0230	0.100	1	08/09/2020 15:30	WG1522682
1,2-Dichloroethane	U		0.0190	0.100	1	08/09/2020 15:30	WG1522682
1,1-Dichloroethene	0.0290	J	0.0200	0.100	1	08/09/2020 15:30	WG1522682
cis-1,2-Dichloroethene	14.7		0.0276	0.100	1	08/09/2020 15:30	WG1522682
trans-1,2-Dichloroethene	U	J4	0.0572	0.200	1	08/09/2020 15:30	WG1522682
1,2-Dichloropropane	U		0.0508	0.200	1	08/09/2020 15:30	WG1522682
1,1-Dichloropropene	U		0.0280	0.100	1	08/09/2020 15:30	WG1522682
1,3-Dichloropropane	U UJ	J0 J4	0.0700	0.200	1	08/09/2020 15:30	WG1522682
cis-1,3-Dichloropropene	U UJ	J0	0.0271	0.100	1	08/09/2020 15:30	WG1522682
trans-1,3-Dichloropropene	U		0.0612	0.200	1	08/09/2020 15:30	WG1522682
2,2-Dichloropropane	U		0.0317	0.100	1	08/09/2020 15:30	WG1522682
Di-isopropyl ether	0.167		0.0140	0.0400	1	08/09/2020 15:30	WG1522682
Ethylbenzene	0.0290	J	0.0212	0.100	1	08/09/2020 15:30	WG1522682
Hexachloro-1,3-butadiene	U		0.508	1.00	1	08/09/2020 15:30	WG1522682
Isopropylbenzene	U		0.0345	0.100	1	08/09/2020 15:30	WG1522682
p-Isopropyltoluene	U		0.0932	0.200	1	08/09/2020 15:30	WG1522682
2-Butanone (MEK)	U		0.500	1.00	1	08/09/2020 15:30	WG1522682
Methylene Chloride	U		0.265	1.00	1	08/09/2020 15:30	WG1522682
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	08/09/2020 15:30	WG1522682
Methyl tert-butyl ether	U		0.0118	0.0400	1	08/09/2020 15:30	WG1522682
Naphthalene	U		0.124	0.500	1	08/09/2020 15:30	WG1522682
n-Propylbenzene	U UJ	J0	0.0472	0.200	1	08/09/2020 15:30	WG1522682
Styrene	U		0.109	0.500	1	08/09/2020 15:30	WG1522682
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	08/09/2020 15:30	WG1522682
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	08/09/2020 15:30	WG1522682
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	08/09/2020 15:30	WG1522682
Tetrachloroethene	U		0.0280	0.100	1	08/09/2020 15:30	WG1522682
Toluene	1.06		0.0500	0.200	1	08/09/2020 15:30	WG1522682
1,2,3-Trichlorobenzene	U		0.0250	0.500	1	08/09/2020 15:30	WG1522682
1,2,4-Trichlorobenzene	U		0.193	0.500	1	08/09/2020 15:30	WG1522682
1,1,1-Trichloroethane	U		0.0110	0.100	1	08/09/2020 15:30	WG1522682
1,1,2-Trichloroethane	U		0.0353	0.100	1	08/09/2020 15:30	WG1522682
Trichloroethene	U		0.0160	0.0400	1	08/09/2020 15:30	WG1522682
Trichlorofluoromethane	U		0.0200	0.100	1	08/09/2020 15:30	WG1522682
1,2,3-Trichloropropane	U		0.204	0.500	1	08/09/2020 15:30	WG1522682
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	08/09/2020 15:30	WG1522682
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	08/09/2020 15:30	WG1522682
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	08/09/2020 15:30	WG1522682
Vinyl chloride	32.2 J	J4	0.0273	0.100	1	08/09/2020 15:30	WG1522682
Xylenes, Total	U		0.191	0.260	1	08/09/2020 15:30	WG1522682
Ethyl Ether	0.0923	J	0.0170	0.100	1	08/10/2020 22:27	WG1523515
Tetrahydrofuran	U		0.0900	0.500	1	08/09/2020 15:30	WG1522682
Iodomethane	U		0.242	0.500	1	08/09/2020 15:30	WG1522682
Allyl chloride	U		0.580	1.00	1	08/09/2020 15:30	WG1522682
Trans-1,4-Dichloro-2-butene	U UJ	J0	0.0560	0.200	1	08/09/2020 15:30	WG1522682
(S) Toluene-d8	*97.1*			*75.0-131*		*08/09/2020 15:30*	WG1522682
(S) Toluene-d8	*97.6*			*75.0-131*		*08/10/2020 22:27*	WG1523515
(S) 4-Bromofluorobenzene	*109*			*67.0-138*		*08/09/2020 15:30*	WG1522682
(S) 4-Bromofluorobenzene	*97.0*			*67.0-138*		*08/10/2020 22:27*	WG1523515
(S) 1,2-Dichloroethane-d4	*116*			*70.0-130*		*08/09/2020 15:30*	WG1522682
(S) 1,2-Dichloroethane-d4	*95.6*			*70.0-130*		*08/10/2020 22:27*	WG1523515

Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	251000		8450	20000	1	08/07/2020 19:04	WG1521065

Sample Narrative:

L1246080-06 WG1521065: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	14800		379	1000	1	08/04/2020 18:02	WG1519944
Nitrate	5060		48.0	100	1	08/04/2020 18:02	WG1519944
Sulfate	86500		594	5000	1	08/04/2020 18:02	WG1519944

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	2430		102	1000	1	08/07/2020 18:09	WG1522387

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	2990		48.9	100	1	08/05/2020 01:58	WG1520224
Manganese	821		1.32	5.00	1	08/05/2020 01:58	WG1520224

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	12.3		0.287	0.678	1	08/06/2020 14:04	WG1521338
Ethane	U		0.296	1.29	1	08/06/2020 14:04	WG1521338
Ethene	U		0.422	1.27	1	08/06/2020 14:04	WG1521338

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U		0.548	1.00	1	08/09/2020 16:38	WG1522682
Acrylonitrile	U		0.0760	0.500	1	08/09/2020 16:38	WG1522682
Benzene	0.0310	J	0.0160	0.0400	1	08/09/2020 16:38	WG1522682
Bromobenzene	U		0.0420	0.500	1	08/09/2020 16:38	WG1522682
Bromodichloromethane	U		0.0315	0.100	1	08/09/2020 16:38	WG1522682
Bromoform	U		0.239	1.00	1	08/09/2020 16:38	WG1522682
Bromomethane	U		0.148	0.500	1	08/09/2020 16:38	WG1522682
n-Butylbenzene	U		0.153	0.500	1	08/09/2020 16:38	WG1522682
sec-Butylbenzene	U		0.101	0.500	1	08/09/2020 16:38	WG1522682
tert-Butylbenzene	U		0.0620	0.200	1	08/09/2020 16:38	WG1522682
Carbon tetrachloride	U		0.0432	0.200	1	08/09/2020 16:38	WG1522682
Chlorobenzene	U		0.0229	0.100	1	08/09/2020 16:38	WG1522682
Chlorodibromomethane	U		0.0180	0.100	1	08/09/2020 16:38	WG1522682
Chloroethane	U		0.0432	0.200	1	08/09/2020 16:38	WG1522682
Chloroform	U		0.0166	0.100	1	08/09/2020 16:38	WG1522682
Chloromethane	U	~~J4~~	0.0556	0.500	1	08/09/2020 16:38	WG1522682
2-Chlorotoluene	U		0.0368	0.100	1	08/09/2020 16:38	WG1522682
4-Chlorotoluene	U		0.0452	0.200	1	08/09/2020 16:38	WG1522682
1,2-Dibromo-3-Chloropropane	U	UJ J0	0.204	1.00	1	08/09/2020 16:38	WG1522682
1,2-Dibromoethane	U		0.0210	0.100	1	08/09/2020 16:38	WG1522682

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Dibromomethane	U		0.0400	0.200	1	08/09/2020 16:38	WG1522682
1,2-Dichlorobenzene	U		0.0580	0.200	1	08/09/2020 16:38	WG1522682
1,3-Dichlorobenzene	U		0.0680	0.200	1	08/09/2020 16:38	WG1522682
1,4-Dichlorobenzene	U		0.0788	0.200	1	08/09/2020 16:38	WG1522682
Dichlorodifluoromethane	U		0.0327	0.100	1	08/09/2020 16:38	WG1522682
1,1-Dichloroethane	U		0.0230	0.100	1	08/09/2020 16:38	WG1522682
1,2-Dichloroethane	U		0.0190	0.100	1	08/09/2020 16:38	WG1522682
1,1-Dichloroethene	U		0.0200	0.100	1	08/09/2020 16:38	WG1522682
cis-1,2-Dichloroethene	9.74		0.0276	0.100	1	08/09/2020 16:38	WG1522682
trans-1,2-Dichloroethene	0.216 J	J4	0.0572	0.200	1	08/09/2020 16:38	WG1522682
1,2-Dichloropropane	U		0.0508	0.200	1	08/09/2020 16:38	WG1522682
1,1-Dichloropropene	U		0.0280	0.100	1	08/09/2020 16:38	WG1522682
1,3-Dichloropropane	U UJ	J0 J4	0.0700	0.200	1	08/09/2020 16:38	WG1522682
cis-1,3-Dichloropropene	U UJ	J0	0.0271	0.100	1	08/09/2020 16:38	WG1522682
trans-1,3-Dichloropropene	U		0.0612	0.200	1	08/09/2020 16:38	WG1522682
2,2-Dichloropropane	U		0.0317	0.100	1	08/09/2020 16:38	WG1522682
Di-isopropyl ether	U		0.0140	0.0400	1	08/09/2020 16:38	WG1522682
Ethylbenzene	U		0.0212	0.100	1	08/09/2020 16:38	WG1522682
Hexachloro-1,3-butadiene	U		0.508	1.00	1	08/09/2020 16:38	WG1522682
Isopropylbenzene	U		0.0345	0.100	1	08/09/2020 16:38	WG1522682
p-Isopropyltoluene	U		0.0932	0.200	1	08/09/2020 16:38	WG1522682
2-Butanone (MEK)	U		0.500	1.00	1	08/09/2020 16:38	WG1522682
Methylene Chloride	U		0.265	1.00	1	08/09/2020 16:38	WG1522682
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	08/09/2020 16:38	WG1522682
Methyl tert-butyl ether	U		0.0118	0.0400	1	08/09/2020 16:38	WG1522682
Naphthalene	U		0.124	0.500	1	08/09/2020 16:38	WG1522682
n-Propylbenzene	U UJ	J0	0.0472	0.200	1	08/09/2020 16:38	WG1522682
Styrene	U		0.109	0.500	1	08/09/2020 16:38	WG1522682
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	08/09/2020 16:38	WG1522682
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	08/09/2020 16:38	WG1522682
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	08/09/2020 16:38	WG1522682
Tetrachloroethene	63.4		0.140	0.500	5	08/10/2020 23:45	WG1523515
Toluene	0.355		0.0500	0.200	1	08/09/2020 16:38	WG1522682
1,2,3-Trichlorobenzene	U		0.0250	0.500	1	08/09/2020 16:38	WG1522682
1,2,4-Trichlorobenzene	U		0.193	0.500	1	08/09/2020 16:38	WG1522682
1,1,1-Trichloroethane	U		0.0110	0.100	1	08/09/2020 16:38	WG1522682
1,1,2-Trichloroethane	U		0.0353	0.100	1	08/09/2020 16:38	WG1522682
Trichloroethene	28.0		0.0160	0.0400	1	08/09/2020 16:38	WG1522682
Trichlorofluoromethane	U		0.0200	0.100	1	08/09/2020 16:38	WG1522682
1,2,3-Trichloropropane	U		0.204	0.500	1	08/09/2020 16:38	WG1522682
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	08/09/2020 16:38	WG1522682
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	08/09/2020 16:38	WG1522682
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	08/09/2020 16:38	WG1522682
Vinyl chloride	U	~~J4~~	0.0273	0.100	1	08/09/2020 16:38	WG1522682
Xylenes, Total	U		0.191	0.260	1	08/09/2020 16:38	WG1522682
Ethyl Ether	U		0.0170	0.100	1	08/09/2020 16:38	WG1522682
Tetrahydrofuran	U		0.0900	0.500	1	08/09/2020 16:38	WG1522682
Iodomethane	U		0.242	0.500	1	08/09/2020 16:38	WG1522682
Allyl chloride	U		0.580	1.00	1	08/09/2020 16:38	WG1522682
Trans-1,4-Dichloro-2-butene	U UJ	J0	0.0560	0.200	1	08/09/2020 16:38	WG1522682
(S) Toluene-d8	*98.7*			*75.0-131*		*08/09/2020 16:38*	WG1522682
(S) Toluene-d8	*99.0*			*75.0-131*		*08/10/2020 23:45*	WG1523515
(S) 4-Bromofluorobenzene	*104*			*67.0-138*		*08/09/2020 16:38*	WG1522682
(S) 4-Bromofluorobenzene	*98.9*			*67.0-138*		*08/10/2020 23:45*	WG1523515
(S) 1,2-Dichloroethane-d4	*115*			*70.0-130*		*08/09/2020 16:38*	WG1522682
(S) 1,2-Dichloroethane-d4	*99.0*			*70.0-130*		*08/10/2020 23:45*	WG1523515

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Wet Chemistry by Method 2320 B-2011

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Alkalinity	165000		8450	20000	1	08/10/2020 22:07	WG1522239

Sample Narrative:

L1246679-01 WG1522239: Endpoint pH 4.5

Wet Chemistry by Method 9056A

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Chloride	12800		379	1000	1	08/05/2020 22:35	WG1520818
Nitrate	U		48.0	100	1	08/05/2020 22:35	WG1520818
Sulfate	43000		594	5000	1	08/05/2020 22:35	WG1520818

Wet Chemistry by Method 9060A

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
TOC (Total Organic Carbon)	1510	~~B~~	102	1000	1	08/10/2020 14:54	WG1523290

Metals (ICPMS) by Method 6020B

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Iron	1420		48.9	100	1	08/06/2020 02:42	WG1521039
Manganese	709		6.60	25.0	5	08/06/2020 10:41	WG1521039

Volatile Organic Compounds (GC) by Method RSK175

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Methane	51.6		0.287	0.678	1	08/07/2020 16:13	WG1521342
Ethane	U		0.296	1.29	1	08/07/2020 16:13	WG1521342
Ethene	U		0.422	1.27	1	08/07/2020 16:13	WG1521342

Volatile Organic Compounds (GC/MS) by Method 8260D

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Acetone	U		0.548	1.00	1	08/09/2020 21:22	WG1522682
Acrylonitrile	U		0.0760	0.500	1	08/09/2020 21:22	WG1522682
Benzene	U		0.0160	0.0400	1	08/09/2020 21:22	WG1522682
Bromobenzene	U		0.0420	0.500	1	08/09/2020 21:22	WG1522682
Bromodichloromethane	U		0.0315	0.100	1	08/09/2020 21:22	WG1522682
Bromoform	U		0.239	1.00	1	08/09/2020 21:22	WG1522682
Bromomethane	U		0.148	0.500	1	08/09/2020 21:22	WG1522682
n-Butylbenzene	U		0.153	0.500	1	08/09/2020 21:22	WG1522682
sec-Butylbenzene	U		0.101	0.500	1	08/09/2020 21:22	WG1522682
tert-Butylbenzene	U		0.0620	0.200	1	08/09/2020 21:22	WG1522682
Carbon tetrachloride	U		0.0432	0.200	1	08/09/2020 21:22	WG1522682
Chlorobenzene	U		0.0229	0.100	1	08/09/2020 21:22	WG1522682
Chlorodibromomethane	U		0.0180	0.100	1	08/09/2020 21:22	WG1522682
Chloroethane	U		0.0432	0.200	1	08/09/2020 21:22	WG1522682
Chloroform	U		0.0166	0.100	1	08/09/2020 21:22	WG1522682
Chloromethane	U	~~J4~~	0.0556	0.500	1	08/09/2020 21:22	WG1522682
2-Chlorotoluene	U		0.0368	0.100	1	08/09/2020 21:22	WG1522682
4-Chlorotoluene	U		0.0452	0.200	1	08/09/2020 21:22	WG1522682
1,2-Dibromo-3-Chloropropane	U	UJ J0	0.204	1.00	1	08/09/2020 21:22	WG1522682
1,2-Dibromoethane	U		0.0210	0.100	1	08/09/2020 21:22	WG1522682

JC 8/24/2020

MW-189-080420

Collected date/time: 08/04/20 08:50

SAMPLE RESULTS - 01

L1246679

Volatile Organic Compounds (GC/MS) by Method 8260D

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

	Result		Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l			ug/l	ug/l		date / time	
Dibromomethane	U			0.0400	0.200	1	08/09/2020 21:22	WG1522682
1,2-Dichlorobenzene	U			0.0580	0.200	1	08/09/2020 21:22	WG1522682
1,3-Dichlorobenzene	U			0.0680	0.200	1	08/09/2020 21:22	WG1522682
1,4-Dichlorobenzene	U			0.0788	0.200	1	08/09/2020 21:22	WG1522682
Dichlorodifluoromethane	U			0.0327	0.100	1	08/09/2020 21:22	WG1522682
1,1-Dichloroethane	U			0.0230	0.100	1	08/09/2020 21:22	WG1522682
1,2-Dichloroethane	U			0.0190	0.100	1	08/09/2020 21:22	WG1522682
1,1-Dichloroethene	U			0.0200	0.100	1	08/09/2020 21:22	WG1522682
cis-1,2-Dichloroethene	0.115			0.0276	0.100	1	08/09/2020 21:22	WG1522682
trans-1,2-Dichloroethene	U		~~J4~~	0.0572	0.200	1	08/09/2020 21:22	WG1522682
1,2-Dichloropropane	U			0.0508	0.200	1	08/09/2020 21:22	WG1522682
1,1-Dichloropropene	U			0.0280	0.100	1	08/09/2020 21:22	WG1522682
1,3-Dichloropropane	U	UJ	J0 J4	0.0700	0.200	1	08/09/2020 21:22	WG1522682
cis-1,3-Dichloropropene	U	UJ	J0	0.0271	0.100	1	08/09/2020 21:22	WG1522682
trans-1,3-Dichloropropene	U			0.0612	0.200	1	08/09/2020 21:22	WG1522682
2,2-Dichloropropane	U			0.0317	0.100	1	08/09/2020 21:22	WG1522682
Di-isopropyl ether	U			0.0140	0.0400	1	08/09/2020 21:22	WG1522682
Ethylbenzene	0.0240		J	0.0212	0.100	1	08/09/2020 21:22	WG1522682
Hexachloro-1,3-butadiene	U			0.508	1.00	1	08/09/2020 21:22	WG1522682
Isopropylbenzene	U			0.0345	0.100	1	08/09/2020 21:22	WG1522682
p-Isopropyltoluene	U			0.0932	0.200	1	08/09/2020 21:22	WG1522682
2-Butanone (MEK)	U			0.500	1.00	1	08/09/2020 21:22	WG1522682
Methylene Chloride	U			0.265	1.00	1	08/09/2020 21:22	WG1522682
4-Methyl-2-pentanone (MIBK)	U			0.400	1.00	1	08/09/2020 21:22	WG1522682
Methyl tert-butyl ether	U			0.0118	0.0400	1	08/09/2020 21:22	WG1522682
Naphthalene	U			0.124	0.500	1	08/09/2020 21:22	WG1522682
n-Propylbenzene	U	UJ	J0	0.0472	0.200	1	08/09/2020 21:22	WG1522682
Styrene	U			0.109	0.500	1	08/09/2020 21:22	WG1522682
1,1,1,2-Tetrachloroethane	U			0.0200	0.100	1	08/09/2020 21:22	WG1522682
1,1,2,2-Tetrachloroethane	U			0.0156	0.100	1	08/09/2020 21:22	WG1522682
1,1,2-Trichlorotrifluoroethane	U			0.0270	0.100	1	08/09/2020 21:22	WG1522682
Tetrachloroethene	U			0.0280	0.100	1	08/09/2020 21:22	WG1522682
Toluene	0.300			0.0500	0.200	1	08/09/2020 21:22	WG1522682
1,2,3-Trichlorobenzene	U			0.0250	0.500	1	08/09/2020 21:22	WG1522682
1,2,4-Trichlorobenzene	U			0.193	0.500	1	08/09/2020 21:22	WG1522682
1,1,1-Trichloroethane	U			0.0110	0.100	1	08/09/2020 21:22	WG1522682
1,1,2-Trichloroethane	U			0.0353	0.100	1	08/09/2020 21:22	WG1522682
Trichloroethene	U			0.0160	0.0400	1	08/09/2020 21:22	WG1522682
Trichlorofluoromethane	U			0.0200	0.100	1	08/09/2020 21:22	WG1522682
1,2,3-Trichloropropane	U			0.204	0.500	1	08/09/2020 21:22	WG1522682
1,2,4-Trimethylbenzene	U			0.0464	0.200	1	08/09/2020 21:22	WG1522682
1,2,3-Trimethylbenzene	U			0.0460	0.200	1	08/09/2020 21:22	WG1522682
1,3,5-Trimethylbenzene	U			0.0432	0.200	1	08/09/2020 21:22	WG1522682
Vinyl chloride	0.879	J	J0 J4	0.0273	0.100	1	08/09/2020 21:22	WG1522682
Xylenes, Total	0.207		J	0.191	0.260	1	08/09/2020 21:22	WG1522682
Ethyl Ether	U			0.0170	0.100	1	08/09/2020 21:22	WG1522682
Tetrahydrofuran	U			0.0900	0.500	1	08/09/2020 21:22	WG1522682
Iodomethane	U			0.242	0.500	1	08/09/2020 21:22	WG1522682
Allyl chloride	U			0.580	1.00	1	08/09/2020 21:22	WG1522682
Trans-1,4-Dichloro-2-butene	U	UJ	J0	0.0560	0.200	1	08/09/2020 21:22	WG1522682
(S) Toluene-d8	*98.6*				*75.0-131*		*08/09/2020 21:22*	WG1522682
(S) 4-Bromofluorobenzene	*102*				*67.0-138*		*08/09/2020 21:22*	WG1522682
(S) 1,2-Dichloroethane-d4	*118*				*70.0-130*		*08/09/2020 21:22*	WG1522682

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1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	151000		8450	20000	1	08/10/2020 22:15	WG1522239

Sample Narrative:

L1246679-02 WG1522239: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	5560		379	1000	1	08/05/2020 22:53	WG1520818
Nitrate	U		48.0	100	1	08/05/2020 22:53	WG1520818
Sulfate	3730	J	594	5000	1	08/05/2020 22:53	WG1520818

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	1180 J	~~B~~	102	1000	1	08/10/2020 15:06	WG1523290

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	1410 J		48.9	100	1	08/06/2020 02:45	WG1521039
Manganese	215		1.32	5.00	1	08/06/2020 02:45	WG1521039

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	22.2 J		0.287	0.678	1	08/07/2020 16:15	WG1521342
Ethane	U		0.296	1.29	1	08/07/2020 16:15	WG1521342
Ethene	U		0.422	1.27	1	08/07/2020 16:15	WG1521342

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	1.03 U	J0	0.548	1.00	1	08/09/2020 22:23	WG1522682
Acrylonitrile	U		0.0760	0.500	1	08/09/2020 22:23	WG1522682
Benzene	U		0.0160	0.0400	1	08/09/2020 22:23	WG1522682
Bromobenzene	U		0.0420	0.500	1	08/09/2020 22:23	WG1522682
Bromodichloromethane	U		0.0315	0.100	1	08/09/2020 22:23	WG1522682
Bromoform	U		0.239	1.00	1	08/09/2020 22:23	WG1522682
Bromomethane	U		0.148	0.500	1	08/09/2020 22:23	WG1522682
n-Butylbenzene	U		0.153	0.500	1	08/09/2020 22:23	WG1522682
sec-Butylbenzene	U		0.101	0.500	1	08/09/2020 22:23	WG1522682
tert-Butylbenzene	U		0.0620	0.200	1	08/09/2020 22:23	WG1522682
Carbon tetrachloride	U		0.0432	0.200	1	08/09/2020 22:23	WG1522682
Chlorobenzene	U		0.0229	0.100	1	08/09/2020 22:23	WG1522682
Chlorodibromomethane	U		0.0180	0.100	1	08/09/2020 22:23	WG1522682
Chloroethane	U		0.0432	0.200	1	08/09/2020 22:23	WG1522682
Chloroform	U		0.0166	0.100	1	08/09/2020 22:23	WG1522682
Chloromethane	U	~~J4~~	0.0556	0.500	1	08/09/2020 22:23	WG1522682
2-Chlorotoluene	U		0.0368	0.100	1	08/09/2020 22:23	WG1522682
4-Chlorotoluene	U		0.0452	0.200	1	08/09/2020 22:23	WG1522682
1,2-Dibromo-3-Chloropropane	U	J0	0.204	1.00	1	08/09/2020 22:23	WG1522682
1,2-Dibromoethane	U		0.0210	0.100	1	08/09/2020 22:23	WG1522682

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Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Dibromomethane	U		0.0400	0.200	1	08/09/2020 22:23	WG1522682
1,2-Dichlorobenzene	U		0.0580	0.200	1	08/09/2020 22:23	WG1522682
1,3-Dichlorobenzene	U		0.0680	0.200	1	08/09/2020 22:23	WG1522682
1,4-Dichlorobenzene	U		0.0788	0.200	1	08/09/2020 22:23	WG1522682
Dichlorodifluoromethane	U		0.0327	0.100	1	08/09/2020 22:23	WG1522682
1,1-Dichloroethane	U		0.0230	0.100	1	08/09/2020 22:23	WG1522682
1,2-Dichloroethane	U		0.0190	0.100	1	08/09/2020 22:23	WG1522682
1,1-Dichloroethene	U		0.0200	0.100	1	08/09/2020 22:23	WG1522682
cis-1,2-Dichloroethene	U		0.0276	0.100	1	08/09/2020 22:23	WG1522682
trans-1,2-Dichloroethene	U	~~J4~~	0.0572	0.200	1	08/09/2020 22:23	WG1522682
1,2-Dichloropropane	U		0.0508	0.200	1	08/09/2020 22:23	WG1522682
1,1-Dichloropropene	U		0.0280	0.100	1	08/09/2020 22:23	WG1522682
1,3-Dichloropropane	U UJ	J0 J4	0.0700	0.200	1	08/09/2020 22:23	WG1522682
cis-1,3-Dichloropropene	U UJ	J0	0.0271	0.100	1	08/09/2020 22:23	WG1522682
trans-1,3-Dichloropropene	U		0.0612	0.200	1	08/09/2020 22:23	WG1522682
2,2-Dichloropropane	U		0.0317	0.100	1	08/09/2020 22:23	WG1522682
Di-isopropyl ether	U		0.0140	0.0400	1	08/09/2020 22:23	WG1522682
Ethylbenzene	0.0340	J	0.0212	0.100	1	08/09/2020 22:23	WG1522682
Hexachloro-1,3-butadiene	U		0.508	1.00	1	08/09/2020 22:23	WG1522682
Isopropylbenzene	U		0.0345	0.100	1	08/09/2020 22:23	WG1522682
p-Isopropyltoluene	U		0.0932	0.200	1	08/09/2020 22:23	WG1522682
2-Butanone (MEK)	U		0.500	1.00	1	08/09/2020 22:23	WG1522682
Methylene Chloride	U		0.265	1.00	1	08/09/2020 22:23	WG1522682
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	08/09/2020 22:23	WG1522682
Methyl tert-butyl ether	U		0.0118	0.0400	1	08/09/2020 22:23	WG1522682
Naphthalene	U		0.124	0.500	1	08/09/2020 22:23	WG1522682
n-Propylbenzene	U UJ	J0	0.0472	0.200	1	08/09/2020 22:23	WG1522682
Styrene	U		0.109	0.500	1	08/09/2020 22:23	WG1522682
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	08/09/2020 22:23	WG1522682
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	08/09/2020 22:23	WG1522682
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	08/09/2020 22:23	WG1522682
Tetrachloroethene	U		0.0280	0.100	1	08/09/2020 22:23	WG1522682
Toluene	0.880		0.0500	0.200	1	08/09/2020 22:23	WG1522682
1,2,3-Trichlorobenzene	U		0.0250	0.500	1	08/09/2020 22:23	WG1522682
1,2,4-Trichlorobenzene	U		0.193	0.500	1	08/09/2020 22:23	WG1522682
1,1,1-Trichloroethane	U		0.0110	0.100	1	08/09/2020 22:23	WG1522682
1,1,2-Trichloroethane	U		0.0353	0.100	1	08/09/2020 22:23	WG1522682
Trichloroethene	U		0.0160	0.0400	1	08/09/2020 22:23	WG1522682
Trichlorofluoromethane	U		0.0200	0.100	1	08/09/2020 22:23	WG1522682
1,2,3-Trichloropropane	U		0.204	0.500	1	08/09/2020 22:23	WG1522682
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	08/09/2020 22:23	WG1522682
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	08/09/2020 22:23	WG1522682
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	08/09/2020 22:23	WG1522682
Vinyl chloride	U	~~J4~~	0.0273	0.100	1	08/09/2020 22:23	WG1522682
Xylenes, Total	U		0.191	0.260	1	08/09/2020 22:23	WG1522682
Ethyl Ether	U		0.0170	0.100	1	08/09/2020 22:23	WG1522682
Tetrahydrofuran	U		0.0900	0.500	1	08/09/2020 22:23	WG1522682
Iodomethane	U		0.242	0.500	1	08/09/2020 22:23	WG1522682
Allyl chloride	U		0.580	1.00	1	08/09/2020 22:23	WG1522682
Trans-1,4-Dichloro-2-butene	U UJ	J0	0.0560	0.200	1	08/09/2020 22:23	WG1522682
(S) Toluene-d8	*98.1*			*75.0-131*		*08/09/2020 22:23*	WG1522682
(S) 4-Bromofluorobenzene	*92.4*			*67.0-138*		*08/09/2020 22:23*	WG1522682
(S) 1,2-Dichloroethane-d4	*117*			*70.0-130*		*08/09/2020 22:23*	WG1522682

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Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	174000		8450	20000	1	08/10/2020 22:23	WG1522239

Sample Narrative:

L1246679-03 WG1522239: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	14700		379	1000	1	08/05/2020 23:11	WG1520818
Nitrate	U		48.0	100	1	08/05/2020 23:11	WG1520818
Sulfate	23300		594	5000	1	08/05/2020 23:11	WG1520818

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	1870	~~B~~	102	1000	1	08/10/2020 15:59	WG1523290

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	957		48.9	100	1	08/06/2020 02:56	WG1521039
Manganese	507		6.60	25.0	5	08/06/2020 10:44	WG1521039

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	230		0.287	0.678	1	08/07/2020 16:17	WG1521342
Ethane	U		0.296	1.29	1	08/07/2020 16:17	WG1521342
Ethene	U		0.422	1.27	1	08/07/2020 16:17	WG1521342

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	0.846 U	J J0	0.548	1.00	1	08/09/2020 22:42	WG1522682
Acrylonitrile	U		0.0760	0.500	1	08/09/2020 22:42	WG1522682
Benzene	0.0270	J	0.0160	0.0400	1	08/09/2020 22:42	WG1522682
Bromobenzene	U		0.0420	0.500	1	08/09/2020 22:42	WG1522682
Bromodichloromethane	U		0.0315	0.100	1	08/09/2020 22:42	WG1522682
Bromoform	U		0.239	1.00	1	08/09/2020 22:42	WG1522682
Bromomethane	U		0.148	0.500	1	08/09/2020 22:42	WG1522682
n-Butylbenzene	U		0.153	0.500	1	08/09/2020 22:42	WG1522682
sec-Butylbenzene	U		0.101	0.500	1	08/09/2020 22:42	WG1522682
tert-Butylbenzene	U		0.0620	0.200	1	08/09/2020 22:42	WG1522682
Carbon tetrachloride	U		0.0432	0.200	1	08/09/2020 22:42	WG1522682
Chlorobenzene	U		0.0229	0.100	1	08/09/2020 22:42	WG1522682
Chlorodibromomethane	U		0.0180	0.100	1	08/09/2020 22:42	WG1522682
Chloroethane	U		0.0432	0.200	1	08/09/2020 22:42	WG1522682
Chloroform	U		0.0166	0.100	1	08/09/2020 22:42	WG1522682
Chloromethane	U	~~J4~~	0.0556	0.500	1	08/09/2020 22:42	WG1522682
2-Chlorotoluene	U		0.0368	0.100	1	08/09/2020 22:42	WG1522682
4-Chlorotoluene	U		0.0452	0.200	1	08/09/2020 22:42	WG1522682
1,2-Dibromo-3-Chloropropane	U	J0	0.204	1.00	1	08/09/2020 22:42	WG1522682
1,2-Dibromoethane	U		0.0210	0.100	1	08/09/2020 22:42	WG1522682

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Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l		Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Dibromomethane	U			0.0400	0.200	1	08/09/2020 22:42	WG1522682
1,2-Dichlorobenzene	U			0.0580	0.200	1	08/09/2020 22:42	WG1522682
1,3-Dichlorobenzene	U			0.0680	0.200	1	08/09/2020 22:42	WG1522682
1,4-Dichlorobenzene	U			0.0788	0.200	1	08/09/2020 22:42	WG1522682
Dichlorodifluoromethane	U			0.0327	0.100	1	08/09/2020 22:42	WG1522682
1,1-Dichloroethane	U			0.0230	0.100	1	08/09/2020 22:42	WG1522682
1,2-Dichloroethane	U			0.0190	0.100	1	08/09/2020 22:42	WG1522682
1,1-Dichloroethene	U			0.0200	0.100	1	08/09/2020 22:42	WG1522682
cis-1,2-Dichloroethene	1.74			0.0276	0.100	1	08/09/2020 22:42	WG1522682
trans-1,2-Dichloroethene	U		~~J4~~	0.0572	0.200	1	08/09/2020 22:42	WG1522682
1,2-Dichloropropane	U			0.0508	0.200	1	08/09/2020 22:42	WG1522682
1,1-Dichloropropene	U			0.0280	0.100	1	08/09/2020 22:42	WG1522682
1,3-Dichloropropane	U	UJ	J0 J4	0.0700	0.200	1	08/09/2020 22:42	WG1522682
cis-1,3-Dichloropropene	U	UJ	J0	0.0271	0.100	1	08/09/2020 22:42	WG1522682
trans-1,3-Dichloropropene	U			0.0612	0.200	1	08/09/2020 22:42	WG1522682
2,2-Dichloropropane	U			0.0317	0.100	1	08/09/2020 22:42	WG1522682
Di-isopropyl ether	U			0.0140	0.0400	1	08/09/2020 22:42	WG1522682
Ethylbenzene	0.0330		J	0.0212	0.100	1	08/09/2020 22:42	WG1522682
Hexachloro-1,3-butadiene	U			0.508	1.00	1	08/09/2020 22:42	WG1522682
Isopropylbenzene	U			0.0345	0.100	1	08/09/2020 22:42	WG1522682
p-Isopropyltoluene	U			0.0932	0.200	1	08/09/2020 22:42	WG1522682
2-Butanone (MEK)	U			0.500	1.00	1	08/09/2020 22:42	WG1522682
Methylene Chloride	U			0.265	1.00	1	08/09/2020 22:42	WG1522682
4-Methyl-2-pentanone (MIBK)	U			0.400	1.00	1	08/09/2020 22:42	WG1522682
Methyl tert-butyl ether	U			0.0118	0.0400	1	08/09/2020 22:42	WG1522682
Naphthalene	U			0.124	0.500	1	08/09/2020 22:42	WG1522682
n-Propylbenzene	U	UJ	J0	0.0472	0.200	1	08/09/2020 22:42	WG1522682
Styrene	U			0.109	0.500	1	08/09/2020 22:42	WG1522682
1,1,1,2-Tetrachloroethane	U			0.0200	0.100	1	08/09/2020 22:42	WG1522682
1,1,2,2-Tetrachloroethane	U			0.0156	0.100	1	08/09/2020 22:42	WG1522682
1,1,2-Trichlorotrifluoroethane	U			0.0270	0.100	1	08/09/2020 22:42	WG1522682
Tetrachloroethene	U			0.0280	0.100	1	08/09/2020 22:42	WG1522682
Toluene	2.09			0.0500	0.200	1	08/09/2020 22:42	WG1522682
1,2,3-Trichlorobenzene	U			0.0250	0.500	1	08/09/2020 22:42	WG1522682
1,2,4-Trichlorobenzene	U			0.193	0.500	1	08/09/2020 22:42	WG1522682
1,1,1-Trichloroethane	U			0.0110	0.100	1	08/09/2020 22:42	WG1522682
1,1,2-Trichloroethane	U			0.0353	0.100	1	08/09/2020 22:42	WG1522682
Trichloroethene	U			0.0160	0.0400	1	08/09/2020 22:42	WG1522682
Trichlorofluoromethane	U			0.0200	0.100	1	08/09/2020 22:42	WG1522682
1,2,3-Trichloropropane	U			0.204	0.500	1	08/09/2020 22:42	WG1522682
1,2,4-Trimethylbenzene	U			0.0464	0.200	1	08/09/2020 22:42	WG1522682
1,2,3-Trimethylbenzene	U			0.0460	0.200	1	08/09/2020 22:42	WG1522682
1,3,5-Trimethylbenzene	U			0.0432	0.200	1	08/09/2020 22:42	WG1522682
Vinyl chloride	3.77	J	J0 J4	0.0273	0.100	1	08/09/2020 22:42	WG1522682
Xylenes, Total	U			0.191	0.260	1	08/09/2020 22:42	WG1522682
Ethyl Ether	U			0.0170	0.100	1	08/09/2020 22:42	WG1522682
Tetrahydrofuran	U			0.0900	0.500	1	08/09/2020 22:42	WG1522682
Iodomethane	U			0.242	0.500	1	08/09/2020 22:42	WG1522682
Allyl chloride	U			0.580	1.00	1	08/09/2020 22:42	WG1522682
Trans-1,4-Dichloro-2-butene	U	UJ	J0	0.0560	0.200	1	08/09/2020 22:42	WG1522682
(S) Toluene-d8	*93.1*				*75.0-131*		*08/09/2020 22:42*	WG1522682
(S) 4-Bromofluorobenzene	*105*				*67.0-138*		*08/09/2020 22:42*	WG1522682
(S) 1,2-Dichloroethane-d4	*119*				*70.0-130*		*08/09/2020 22:42*	WG1522682

JC 8/24/2020

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Wet Chemistry by Method 2320 B-2011

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Alkalinity	1030000		8450	20000	1	08/10/2020 22:31	WG1522239

Sample Narrative:

L1246679-04 WG1522239: Endpoint pH 4.5

Wet Chemistry by Method 9056A

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Chloride	7300		379	1000	1	08/05/2020 23:30	WG1520818
Nitrate	U		48.0	100	1	08/05/2020 23:30	WG1520818
Sulfate	11900		594	5000	1	08/05/2020 23:30	WG1520818

Wet Chemistry by Method 9060A

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
TOC (Total Organic Carbon)	11700		102	1000	1	08/10/2020 16:14	WG1523290

Metals (ICPMS) by Method 6020B

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Iron	8770		489	1000	10	08/06/2020 10:47	WG1521039
Manganese	2120		13.2	50.0	10	08/06/2020 10:47	WG1521039

Volatile Organic Compounds (GC) by Method RSK175

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Methane	556		0.287	0.678	1	08/07/2020 16:26	WG1521342
Ethane	U		0.296	1.29	1	08/07/2020 16:26	WG1521342
Ethene	U		0.422	1.27	1	08/07/2020 16:26	WG1521342

Volatile Organic Compounds (GC/MS) by Method 8260D

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Acetone	3.29 U	~~J0 J4~~	0.548	1.00	1	08/12/2020 07:31	WG1524178
Acrylonitrile	U		0.0760	0.500	1	08/12/2020 07:31	WG1524178
Benzene	U		0.0160	0.0400	1	08/12/2020 07:31	WG1524178
Bromobenzene	U		0.0420	0.500	1	08/12/2020 07:31	WG1524178
Bromodichloromethane	U		0.0315	0.100	1	08/12/2020 07:31	WG1524178
Bromoform	U		0.239	1.00	1	08/12/2020 07:31	WG1524178
Bromomethane	U		0.148	0.500	1	08/12/2020 07:31	WG1524178
n-Butylbenzene	U		0.153	0.500	1	08/12/2020 07:31	WG1524178
sec-Butylbenzene	U		0.101	0.500	1	08/12/2020 07:31	WG1524178
tert-Butylbenzene	U		0.0620	0.200	1	08/12/2020 07:31	WG1524178
Carbon tetrachloride	U		0.0432	0.200	1	08/12/2020 07:31	WG1524178
Chlorobenzene	U		0.0229	0.100	1	08/12/2020 07:31	WG1524178
Chlorodibromomethane	U		0.0180	0.100	1	08/12/2020 07:31	WG1524178
Chloroethane	U		0.0432	0.200	1	08/12/2020 07:31	WG1524178
Chloroform	U		0.0166	0.100	1	08/12/2020 07:31	WG1524178
Chloromethane	U		0.0556	0.500	1	08/12/2020 07:31	WG1524178
2-Chlorotoluene	U		0.0368	0.100	1	08/12/2020 07:31	WG1524178
4-Chlorotoluene	U		0.0452	0.200	1	08/12/2020 07:31	WG1524178
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	08/12/2020 07:31	WG1524178
1,2-Dibromoethane	U		0.0210	0.100	1	08/12/2020 07:31	WG1524178

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Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Dibromomethane	U		0.0400	0.200	1	08/12/2020 07:31	WG1524178
1,2-Dichlorobenzene	U		0.0580	0.200	1	08/12/2020 07:31	WG1524178
1,3-Dichlorobenzene	U		0.0680	0.200	1	08/12/2020 07:31	WG1524178
1,4-Dichlorobenzene	U		0.0788	0.200	1	08/12/2020 07:31	WG1524178
Dichlorodifluoromethane	U		0.0327	0.100	1	08/12/2020 07:31	WG1524178
1,1-Dichloroethane	0.0350 J	J J0	0.0230	0.100	1	08/12/2020 07:31	WG1524178
1,2-Dichloroethane	U		0.0190	0.100	1	08/12/2020 07:31	WG1524178
1,1-Dichloroethene	U		0.0200	0.100	1	08/12/2020 07:31	WG1524178
cis-1,2-Dichloroethene	0.0440	J	0.0276	0.100	1	08/12/2020 07:31	WG1524178
trans-1,2-Dichloroethene	U		0.0572	0.200	1	08/12/2020 07:31	WG1524178
1,2-Dichloropropane	U		0.0508	0.200	1	08/12/2020 07:31	WG1524178
1,1-Dichloropropene	U		0.0280	0.100	1	08/12/2020 07:31	WG1524178
1,3-Dichloropropane	U		0.0700	0.200	1	08/12/2020 07:31	WG1524178
cis-1,3-Dichloropropene	U		0.0271	0.100	1	08/12/2020 07:31	WG1524178
trans-1,3-Dichloropropene	U		0.0612	0.200	1	08/12/2020 07:31	WG1524178
2,2-Dichloropropane	U		0.0317	0.100	1	08/12/2020 07:31	WG1524178
Di-isopropyl ether	U		0.0140	0.0400	1	08/12/2020 07:31	WG1524178
Ethylbenzene	U		0.0212	0.100	1	08/12/2020 07:31	WG1524178
Hexachloro-1,3-butadiene	U		0.508	1.00	1	08/12/2020 07:31	WG1524178
Isopropylbenzene	U		0.0345	0.100	1	08/12/2020 07:31	WG1524178
p-Isopropyltoluene	U		0.0932	0.200	1	08/12/2020 07:31	WG1524178
2-Butanone (MEK)	U		0.500	1.00	1	08/12/2020 07:31	WG1524178
Methylene Chloride	U	~~J4~~	0.265	1.00	1	08/12/2020 07:31	WG1524178
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	08/12/2020 07:31	WG1524178
Methyl tert-butyl ether	U		0.0118	0.0400	1	08/12/2020 07:31	WG1524178
Naphthalene	U		0.124	0.500	1	08/12/2020 07:31	WG1524178
n-Propylbenzene	U		0.0472	0.200	1	08/12/2020 07:31	WG1524178
Styrene	U		0.109	0.500	1	08/12/2020 07:31	WG1524178
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	08/12/2020 07:31	WG1524178
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	08/12/2020 07:31	WG1524178
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	08/12/2020 07:31	WG1524178
Tetrachloroethene	U		0.0280	0.100	1	08/12/2020 07:31	WG1524178
Toluene	0.0690 U	J	0.0500	0.200	1	08/12/2020 07:31	WG1524178
1,2,3-Trichlorobenzene	U		0.0250	0.500	1	08/12/2020 10:00	WG1524783
1,2,4-Trichlorobenzene	U		0.193	0.500	1	08/12/2020 10:00	WG1524783
1,1,1-Trichloroethane	U		0.0110	0.100	1	08/12/2020 07:31	WG1524178
1,1,2-Trichloroethane	U		0.0353	0.100	1	08/12/2020 07:31	WG1524178
Trichloroethene	U		0.0160	0.0400	1	08/12/2020 07:31	WG1524178
Trichlorofluoromethane	U		0.0200	0.100	1	08/12/2020 07:31	WG1524178
1,2,3-Trichloropropane	U		0.204	0.500	1	08/12/2020 07:31	WG1524178
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	08/12/2020 07:31	WG1524178
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	08/12/2020 07:31	WG1524178
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	08/12/2020 07:31	WG1524178
Vinyl chloride	U		0.0273	0.100	1	08/12/2020 07:31	WG1524178
Xylenes, Total	U		0.191	0.260	1	08/12/2020 07:31	WG1524178
Ethyl Ether	U		0.0170	0.100	1	08/12/2020 07:31	WG1524178
Tetrahydrofuran	U		0.0900	0.500	1	08/12/2020 07:31	WG1524178
Iodomethane	U		0.242	0.500	1	08/12/2020 07:31	WG1524178
Allyl chloride	U		0.580	1.00	1	08/12/2020 07:31	WG1524178
Trans-1,4-Dichloro-2-butene	U		0.0560	0.200	1	08/12/2020 07:31	WG1524178
(S) Toluene-d8	*95.4*			*75.0-131*		*08/12/2020 07:31*	WG1524178
(S) Toluene-d8	*103*			*75.0-131*		*08/12/2020 10:00*	WG1524783
(S) 4-Bromofluorobenzene	*104*			*67.0-138*		*08/12/2020 07:31*	WG1524178
(S) 4-Bromofluorobenzene	*97.4*			*67.0-138*		*08/12/2020 10:00*	WG1524783
(S) 1,2-Dichloroethane-d4	*111*			*70.0-130*		*08/12/2020 07:31*	WG1524178
(S) 1,2-Dichloroethane-d4	*110*			*70.0-130*		*08/12/2020 10:00*	WG1524783

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Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	152000		8450	20000	1	08/10/2020 22:38	WG1522239

Sample Narrative:

L1246679-05 WG1522239: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	5570		379	1000	1	08/05/2020 23:48	WG1520818
Nitrate	U		48.0	100	1	08/05/2020 23:48	WG1520818
Sulfate	3740	J	594	5000	1	08/05/2020 23:48	WG1520818

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	1510	J ~~B~~	102	1000	1	08/10/2020 16:29	WG1523290

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	1830	J	48.9	100	1	08/06/2020 03:04	WG1521039
Manganese	220		1.32	5.00	1	08/06/2020 03:04	WG1521039

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	13.6	J	0.287	0.678	1	08/07/2020 16:30	WG1521342
Ethane	U		0.296	1.29	1	08/07/2020 16:30	WG1521342
Ethene	U		0.422	1.27	1	08/07/2020 16:30	WG1521342

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U	~~J4~~	0.548	1.00	1	08/12/2020 07:49	WG1524178
Acrylonitrile	U		0.0760	0.500	1	08/12/2020 07:49	WG1524178
Benzene	U		0.0160	0.0400	1	08/12/2020 07:49	WG1524178
Bromobenzene	U		0.0420	0.500	1	08/12/2020 07:49	WG1524178
Bromodichloromethane	U		0.0315	0.100	1	08/12/2020 07:49	WG1524178
Bromoform	U		0.239	1.00	1	08/12/2020 07:49	WG1524178
Bromomethane	U		0.148	0.500	1	08/12/2020 07:49	WG1524178
n-Butylbenzene	U		0.153	0.500	1	08/12/2020 07:49	WG1524178
sec-Butylbenzene	U		0.101	0.500	1	08/12/2020 07:49	WG1524178
tert-Butylbenzene	U		0.0620	0.200	1	08/12/2020 07:49	WG1524178
Carbon tetrachloride	U		0.0432	0.200	1	08/12/2020 07:49	WG1524178
Chlorobenzene	U		0.0229	0.100	1	08/12/2020 07:49	WG1524178
Chlorodibromomethane	U		0.0180	0.100	1	08/12/2020 07:49	WG1524178
Chloroethane	U		0.0432	0.200	1	08/12/2020 07:49	WG1524178
Chloroform	U		0.0166	0.100	1	08/12/2020 07:49	WG1524178
Chloromethane	U		0.0556	0.500	1	08/12/2020 07:49	WG1524178
2-Chlorotoluene	U		0.0368	0.100	1	08/12/2020 07:49	WG1524178
4-Chlorotoluene	U		0.0452	0.200	1	08/12/2020 07:49	WG1524178
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	08/12/2020 07:49	WG1524178
1,2-Dibromoethane	U		0.0210	0.100	1	08/12/2020 07:49	WG1524178

JC 8/24/2020

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Dibromomethane	U		0.0400	0.200	1	08/12/2020 07:49	WG1524178
1,2-Dichlorobenzene	U		0.0580	0.200	1	08/12/2020 07:49	WG1524178
1,3-Dichlorobenzene	U		0.0680	0.200	1	08/12/2020 07:49	WG1524178
1,4-Dichlorobenzene	U		0.0788	0.200	1	08/12/2020 07:49	WG1524178
Dichlorodifluoromethane	U		0.0327	0.100	1	08/12/2020 07:49	WG1524178
1,1-Dichloroethane	U		0.0230	0.100	1	08/12/2020 07:49	WG1524178
1,2-Dichloroethane	U		0.0190	0.100	1	08/12/2020 07:49	WG1524178
1,1-Dichloroethene	U		0.0200	0.100	1	08/12/2020 07:49	WG1524178
cis-1,2-Dichloroethene	U		0.0276	0.100	1	08/12/2020 07:49	WG1524178
trans-1,2-Dichloroethene	U		0.0572	0.200	1	08/12/2020 07:49	WG1524178
1,2-Dichloropropane	U		0.0508	0.200	1	08/12/2020 07:49	WG1524178
1,1-Dichloropropene	U		0.0280	0.100	1	08/12/2020 07:49	WG1524178
1,3-Dichloropropane	U		0.0700	0.200	1	08/12/2020 07:49	WG1524178
cis-1,3-Dichloropropene	U		0.0271	0.100	1	08/12/2020 07:49	WG1524178
trans-1,3-Dichloropropene	U		0.0612	0.200	1	08/12/2020 07:49	WG1524178
2,2-Dichloropropane	U		0.0317	0.100	1	08/12/2020 07:49	WG1524178
Di-isopropyl ether	U		0.0140	0.0400	1	08/12/2020 07:49	WG1524178
Ethylbenzene	U		0.0212	0.100	1	08/12/2020 07:49	WG1524178
Hexachloro-1,3-butadiene	U UJ	J0	0.508	1.00	1	08/12/2020 07:49	WG1524178
Isopropylbenzene	U		0.0345	0.100	1	08/12/2020 07:49	WG1524178
p-Isopropyltoluene	U		0.0932	0.200	1	08/12/2020 07:49	WG1524178
2-Butanone (MEK)	U		0.500	1.00	1	08/12/2020 07:49	WG1524178
Methylene Chloride	U	~~J4~~	0.265	1.00	1	08/12/2020 07:49	WG1524178
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	08/12/2020 07:49	WG1524178
Methyl tert-butyl ether	U		0.0118	0.0400	1	08/12/2020 07:49	WG1524178
Naphthalene	U		0.124	0.500	1	08/12/2020 07:49	WG1524178
n-Propylbenzene	U		0.0472	0.200	1	08/12/2020 07:49	WG1524178
Styrene	U		0.109	0.500	1	08/12/2020 07:49	WG1524178
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	08/12/2020 07:49	WG1524178
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	08/12/2020 07:49	WG1524178
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	08/12/2020 07:49	WG1524178
Tetrachloroethene	U		0.0280	0.100	1	08/12/2020 07:49	WG1524178
Toluene	1.00		0.0500	0.200	1	08/12/2020 07:49	WG1524178
1,2,3-Trichlorobenzene	U		0.0250	0.500	1	08/12/2020 10:19	WG1524783
1,2,4-Trichlorobenzene	U		0.193	0.500	1	08/12/2020 10:19	WG1524783
1,1,1-Trichloroethane	U		0.0110	0.100	1	08/12/2020 07:49	WG1524178
1,1,2-Trichloroethane	U		0.0353	0.100	1	08/12/2020 07:49	WG1524178
Trichloroethene	U		0.0160	0.0400	1	08/12/2020 07:49	WG1524178
Trichlorofluoromethane	U		0.0200	0.100	1	08/12/2020 07:49	WG1524178
1,2,3-Trichloropropane	U		0.204	0.500	1	08/12/2020 07:49	WG1524178
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	08/12/2020 07:49	WG1524178
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	08/12/2020 07:49	WG1524178
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	08/12/2020 07:49	WG1524178
Vinyl chloride	U		0.0273	0.100	1	08/12/2020 07:49	WG1524178
Xylenes, Total	U		0.191	0.260	1	08/12/2020 07:49	WG1524178
Ethyl Ether	U		0.0170	0.100	1	08/12/2020 07:49	WG1524178
Tetrahydrofuran	U		0.0900	0.500	1	08/12/2020 07:49	WG1524178
Iodomethane	U		0.242	0.500	1	08/12/2020 07:49	WG1524178
Allyl chloride	U		0.580	1.00	1	08/12/2020 07:49	WG1524178
Trans-1,4-Dichloro-2-butene	U		0.0560	0.200	1	08/12/2020 07:49	WG1524178
(S) Toluene-d8	*97.5*			*75.0-131*		*08/12/2020 07:49*	WG1524178
(S) Toluene-d8	*103*			*75.0-131*		*08/12/2020 10:19*	WG1524783
(S) 4-Bromofluorobenzene	*101*			*67.0-138*		*08/12/2020 07:49*	WG1524178
(S) 4-Bromofluorobenzene	*96.6*			*67.0-138*		*08/12/2020 10:19*	WG1524783
(S) 1,2-Dichloroethane-d4	*111*			*70.0-130*		*08/12/2020 07:49*	WG1524178
(S) 1,2-Dichloroethane-d4	*112*			*70.0-130*		*08/12/2020 10:19*	WG1524783

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Wet Chemistry by Method 2320 B-2011

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Alkalinity	791000		8450	20000	1	08/10/2020 22:47	WG1522239

Sample Narrative:

L1246679-06 WG1522239: Endpoint pH 4.5

Wet Chemistry by Method 9056A

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Chloride	9820		379	1000	1	08/06/2020 00:25	WG1520818
Nitrate	U		48.0	100	1	08/06/2020 00:25	WG1520818
Sulfate	43500		594	5000	1	08/06/2020 00:25	WG1520818

Wet Chemistry by Method 9060A

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
TOC (Total Organic Carbon)	8730		102	1000	1	08/10/2020 16:44	WG1523290

Metals (ICPMS) by Method 6020B

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Iron	23300		2440	5000	50	08/06/2020 10:51	WG1521039
Manganese	5900		66.0	250	50	08/06/2020 10:51	WG1521039

Volatile Organic Compounds (GC) by Method RSK175

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Methane	757		0.287	0.678	1	08/07/2020 16:33	WG1521342
Ethane	U		0.296	1.29	1	08/07/2020 16:33	WG1521342
Ethene	U		0.422	1.27	1	08/07/2020 16:33	WG1521342

Volatile Organic Compounds (GC/MS) by Method 8260D

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Acetone	U	~~J4~~	0.548	1.00	1	08/12/2020 08:08	WG1524178
Acrylonitrile	U		0.0760	0.500	1	08/12/2020 08:08	WG1524178
Benzene	0.0270	J	0.0160	0.0400	1	08/12/2020 08:08	WG1524178
Bromobenzene	U		0.0420	0.500	1	08/12/2020 08:08	WG1524178
Bromodichloromethane	U		0.0315	0.100	1	08/12/2020 08:08	WG1524178
Bromoform	U		0.239	1.00	1	08/12/2020 08:08	WG1524178
Bromomethane	U		0.148	0.500	1	08/12/2020 08:08	WG1524178
n-Butylbenzene	U		0.153	0.500	1	08/12/2020 08:08	WG1524178
sec-Butylbenzene	U		0.101	0.500	1	08/12/2020 08:08	WG1524178
tert-Butylbenzene	U		0.0620	0.200	1	08/12/2020 08:08	WG1524178
Carbon tetrachloride	U		0.0432	0.200	1	08/12/2020 08:08	WG1524178
Chlorobenzene	U		0.0229	0.100	1	08/12/2020 08:08	WG1524178
Chlorodibromomethane	U		0.0180	0.100	1	08/12/2020 08:08	WG1524178
Chloroethane	U		0.0432	0.200	1	08/12/2020 08:08	WG1524178
Chloroform	U		0.0166	0.100	1	08/12/2020 08:08	WG1524178
Chloromethane	U		0.0556	0.500	1	08/12/2020 08:08	WG1524178
2-Chlorotoluene	U		0.0368	0.100	1	08/12/2020 08:08	WG1524178
4-Chlorotoluene	U		0.0452	0.200	1	08/12/2020 08:08	WG1524178
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	08/12/2020 08:08	WG1524178
1,2-Dibromoethane	U		0.0210	0.100	1	08/12/2020 08:08	WG1524178

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Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Dibromomethane	U		0.0400	0.200	1	08/12/2020 08:08	WG1524178
1,2-Dichlorobenzene	U		0.0580	0.200	1	08/12/2020 08:08	WG1524178
1,3-Dichlorobenzene	U		0.0680	0.200	1	08/12/2020 08:08	WG1524178
1,4-Dichlorobenzene	U		0.0788	0.200	1	08/12/2020 08:08	WG1524178
Dichlorodifluoromethane	U		0.0327	0.100	1	08/12/2020 08:08	WG1524178
1,1-Dichloroethane	U		0.0230	0.100	1	08/12/2020 08:08	WG1524178
1,2-Dichloroethane	U		0.0190	0.100	1	08/12/2020 08:08	WG1524178
1,1-Dichloroethene	U		0.0200	0.100	1	08/12/2020 08:08	WG1524178
cis-1,2-Dichloroethene	U		0.0276	0.100	1	08/12/2020 08:08	WG1524178
trans-1,2-Dichloroethene	U		0.0572	0.200	1	08/12/2020 08:08	WG1524178
1,2-Dichloropropane	U		0.0508	0.200	1	08/12/2020 08:08	WG1524178
1,1-Dichloropropene	U		0.0280	0.100	1	08/12/2020 08:08	WG1524178
1,3-Dichloropropane	U		0.0700	0.200	1	08/12/2020 08:08	WG1524178
cis-1,3-Dichloropropene	U		0.0271	0.100	1	08/12/2020 08:08	WG1524178
trans-1,3-Dichloropropene	U		0.0612	0.200	1	08/12/2020 08:08	WG1524178
2,2-Dichloropropane	U		0.0317	0.100	1	08/12/2020 08:08	WG1524178
Di-isopropyl ether	U		0.0140	0.0400	1	08/12/2020 08:08	WG1524178
Ethylbenzene	U		0.0212	0.100	1	08/12/2020 08:08	WG1524178
Hexachloro-1,3-butadiene	U UJ	J0	0.508	1.00	1	08/12/2020 08:08	WG1524178
Isopropylbenzene	0.129		0.0345	0.100	1	08/12/2020 08:08	WG1524178
p-Isopropyltoluene	U		0.0932	0.200	1	08/12/2020 08:08	WG1524178
2-Butanone (MEK)	U		0.500	1.00	1	08/12/2020 08:08	WG1524178
Methylene Chloride	U	~~J4~~	0.265	1.00	1	08/12/2020 08:08	WG1524178
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	08/12/2020 08:08	WG1524178
Methyl tert-butyl ether	U		0.0118	0.0400	1	08/12/2020 08:08	WG1524178
Naphthalene	U		0.124	0.500	1	08/12/2020 08:08	WG1524178
n-Propylbenzene	U		0.0472	0.200	1	08/12/2020 08:08	WG1524178
Styrene	U		0.109	0.500	1	08/12/2020 08:08	WG1524178
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	08/12/2020 08:08	WG1524178
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	08/12/2020 08:08	WG1524178
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	08/12/2020 08:08	WG1524178
Tetrachloroethene	U		0.0280	0.100	1	08/12/2020 08:08	WG1524178
Toluene	0.982		0.0500	0.200	1	08/12/2020 08:08	WG1524178
1,2,3-Trichlorobenzene	U		0.0250	0.500	1	08/12/2020 10:38	WG1524783
1,2,4-Trichlorobenzene	U		0.193	0.500	1	08/12/2020 10:38	WG1524783
1,1,1-Trichloroethane	U		0.0110	0.100	1	08/12/2020 08:08	WG1524178
1,1,2-Trichloroethane	U		0.0353	0.100	1	08/12/2020 08:08	WG1524178
Trichloroethene	U		0.0160	0.0400	1	08/12/2020 08:08	WG1524178
Trichlorofluoromethane	U		0.0200	0.100	1	08/12/2020 08:08	WG1524178
1,2,3-Trichloropropane	U		0.204	0.500	1	08/12/2020 08:08	WG1524178
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	08/12/2020 08:08	WG1524178
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	08/12/2020 08:08	WG1524178
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	08/12/2020 08:08	WG1524178
Vinyl chloride	U		0.0273	0.100	1	08/12/2020 08:08	WG1524178
Xylenes, Total	U		0.191	0.260	1	08/12/2020 08:08	WG1524178
Ethyl Ether	U		0.0170	0.100	1	08/12/2020 08:08	WG1524178
Tetrahydrofuran	U		0.0900	0.500	1	08/12/2020 08:08	WG1524178
Iodomethane	U		0.242	0.500	1	08/12/2020 08:08	WG1524178
Allyl chloride	U		0.580	1.00	1	08/12/2020 08:08	WG1524178
Trans-1,4-Dichloro-2-butene	U		0.0560	0.200	1	08/12/2020 08:08	WG1524178
(S) Toluene-d8	*95.8*			*75.0-131*		*08/12/2020 08:08*	WG1524178
(S) Toluene-d8	*102*			*75.0-131*		*08/12/2020 10:38*	WG1524783
(S) 4-Bromofluorobenzene	*102*			*67.0-138*		*08/12/2020 08:08*	WG1524178
(S) 4-Bromofluorobenzene	*95.1*			*67.0-138*		*08/12/2020 10:38*	WG1524783
(S) 1,2-Dichloroethane-d4	*108*			*70.0-130*		*08/12/2020 08:08*	WG1524178
(S) 1,2-Dichloroethane-d4	*111*			*70.0-130*		*08/12/2020 10:38*	WG1524783

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Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	787000		8450	20000	1	08/10/2020 23:02	WG1522239

Sample Narrative:

L1246679-07 WG1522239: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	9950		379	1000	1	08/06/2020 01:57	WG1520818
Nitrate	U		48.0	100	1	08/06/2020 01:57	WG1520818
Sulfate	43900		594	5000	1	08/06/2020 01:57	WG1520818

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	8770		102	1000	1	08/10/2020 16:59	WG1523290

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	23400		2440	5000	50	08/06/2020 11:06	WG1521039
Manganese	6120		66.0	250	50	08/06/2020 11:06	WG1521039

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	754		0.287	0.678	1	08/07/2020 16:35	WG1521342
Ethane	U		0.296	1.29	1	08/07/2020 16:35	WG1521342
Ethene	U		0.422	1.27	1	08/07/2020 16:35	WG1521342

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U	~~J4~~	0.548	1.00	1	08/12/2020 08:27	WG1524178
Acrylonitrile	U		0.0760	0.500	1	08/12/2020 08:27	WG1524178
Benzene	0.0360	J	0.0160	0.0400	1	08/12/2020 08:27	WG1524178
Bromobenzene	U		0.0420	0.500	1	08/12/2020 08:27	WG1524178
Bromodichloromethane	U		0.0315	0.100	1	08/12/2020 08:27	WG1524178
Bromoform	U		0.239	1.00	1	08/12/2020 08:27	WG1524178
Bromomethane	U		0.148	0.500	1	08/12/2020 08:27	WG1524178
n-Butylbenzene	U		0.153	0.500	1	08/12/2020 08:27	WG1524178
sec-Butylbenzene	U		0.101	0.500	1	08/12/2020 08:27	WG1524178
tert-Butylbenzene	U		0.0620	0.200	1	08/12/2020 08:27	WG1524178
Carbon tetrachloride	U		0.0432	0.200	1	08/12/2020 08:27	WG1524178
Chlorobenzene	U		0.0229	0.100	1	08/12/2020 08:27	WG1524178
Chlorodibromomethane	U		0.0180	0.100	1	08/12/2020 08:27	WG1524178
Chloroethane	U		0.0432	0.200	1	08/12/2020 08:27	WG1524178
Chloroform	U		0.0166	0.100	1	08/12/2020 08:27	WG1524178
Chloromethane	U		0.0556	0.500	1	08/12/2020 08:27	WG1524178
2-Chlorotoluene	U		0.0368	0.100	1	08/12/2020 08:27	WG1524178
4-Chlorotoluene	U		0.0452	0.200	1	08/12/2020 08:27	WG1524178
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	08/12/2020 08:27	WG1524178
1,2-Dibromoethane	U		0.0210	0.100	1	08/12/2020 08:27	WG1524178

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Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch	
Dibromomethane	U		0.0400	0.200	1	08/12/2020 08:27	WG1524178	
1,2-Dichlorobenzene	U		0.0580	0.200	1	08/12/2020 08:27	WG1524178	
1,3-Dichlorobenzene	U		0.0680	0.200	1	08/12/2020 08:27	WG1524178	
1,4-Dichlorobenzene	U		0.0788	0.200	1	08/12/2020 08:27	WG1524178	
Dichlorodifluoromethane	U		0.0327	0.100	1	08/12/2020 08:27	WG1524178	
1,1-Dichloroethane	U		0.0230	0.100	1	08/12/2020 08:27	WG1524178	
1,2-Dichloroethane	U		0.0190	0.100	1	08/12/2020 08:27	WG1524178	
1,1-Dichloroethene	U		0.0200	0.100	1	08/12/2020 08:27	WG1524178	
cis-1,2-Dichloroethene	U		0.0276	0.100	1	08/12/2020 08:27	WG1524178	
trans-1,2-Dichloroethene	U		0.0572	0.200	1	08/12/2020 08:27	WG1524178	
1,2-Dichloropropane	U		0.0508	0.200	1	08/12/2020 08:27	WG1524178	
1,1-Dichloropropene	U		0.0280	0.100	1	08/12/2020 08:27	WG1524178	
1,3-Dichloropropane	U		0.0700	0.200	1	08/12/2020 08:27	WG1524178	
cis-1,3-Dichloropropene	U		0.0271	0.100	1	08/12/2020 08:27	WG1524178	
trans-1,3-Dichloropropene	U		0.0612	0.200	1	08/12/2020 08:27	WG1524178	
2,2-Dichloropropane	U		0.0317	0.100	1	08/12/2020 08:27	WG1524178	
Di-isopropyl ether	U		0.0140	0.0400	1	08/12/2020 08:27	WG1524178	
Ethylbenzene	U		0.0212	0.100	1	08/12/2020 08:27	WG1524178	
Hexachloro-1,3-butadiene	U UJ	J0	0.508	1.00	1	08/12/2020 08:27	WG1524178	
Isopropylbenzene	0.128		0.0345	0.100	1	08/12/2020 08:27	WG1524178	
p-Isopropyltoluene	U		0.0932	0.200	1	08/12/2020 08:27	WG1524178	
2-Butanone (MEK)	U		0.500	1.00	1	08/12/2020 08:27	WG1524178	
Methylene Chloride	U	~~J4~~	0.265	1.00	1	08/12/2020 08:27	WG1524178	
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	08/12/2020 08:27	WG1524178	
Methyl tert-butyl ether	U		0.0118	0.0400	1	08/12/2020 08:27	WG1524178	
Naphthalene	U		0.124	0.500	1	08/12/2020 08:27	WG1524178	
n-Propylbenzene	U		0.0472	0.200	1	08/12/2020 08:27	WG1524178	
Styrene	U		0.109	0.500	1	08/12/2020 08:27	WG1524178	
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	08/12/2020 08:27	WG1524178	
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	08/12/2020 08:27	WG1524178	
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	08/12/2020 08:27	WG1524178	
Tetrachloroethene	U		0.0280	0.100	1	08/12/2020 08:27	WG1524178	
Toluene	0.959		0.0500	0.200	1	08/12/2020 08:27	WG1524178	
1,2,3-Trichlorobenzene	U		0.0250	0.500	1	08/12/2020 10:57	WG1524783	
1,2,4-Trichlorobenzene	U		0.193	0.500	1	08/12/2020 10:57	WG1524783	
1,1,1-Trichloroethane	U		0.0110	0.100	1	08/12/2020 08:27	WG1524178	
1,1,2-Trichloroethane	U		0.0353	0.100	1	08/12/2020 08:27	WG1524178	
Trichloroethene	U		0.0160	0.0400	1	08/12/2020 08:27	WG1524178	
Trichlorofluoromethane	U		0.0200	0.100	1	08/12/2020 08:27	WG1524178	
1,2,3-Trichloropropane	U		0.204	0.500	1	08/12/2020 08:27	WG1524178	
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	08/12/2020 08:27	WG1524178	
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	08/12/2020 08:27	WG1524178	
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	08/12/2020 08:27	WG1524178	
Vinyl chloride	U		0.0273	0.100	1	08/12/2020 08:27	WG1524178	
Xylenes, Total	U		0.191	0.260	1	08/12/2020 08:27	WG1524178	
Ethyl Ether	U		0.0170	0.100	1	08/12/2020 08:27	WG1524178	
Tetrahydrofuran	U		0.0900	0.500	1	08/12/2020 08:27	WG1524178	
Iodomethane	U		0.242	0.500	1	08/12/2020 08:27	WG1524178	
Allyl chloride	U		0.580	1.00	1	08/12/2020 08:27	WG1524178	
Trans-1,4-Dichloro-2-butene	U		0.0560	0.200	1	08/12/2020 08:27	WG1524178	
(S) Toluene-d8	*96.1*			*75.0-131*		*08/12/2020 08:27*	WG1524178	
(S) Toluene-d8	*102*			*75.0-131*		*08/12/2020 10:57*	WG1524783	
(S) 4-Bromofluorobenzene	*103*			*67.0-138*		*08/12/2020 08:27*	WG1524178	
(S) 4-Bromofluorobenzene	*94.5*			*67.0-138*		*08/12/2020 10:57*	WG1524783	
(S) 1,2-Dichloroethane-d4	*108*			*70.0-130*		*08/12/2020 08:27*	WG1524178	
(S) 1,2-Dichloroethane-d4	*113*			*70.0-130*		*08/12/2020 10:57*	WG1524783	JC 8/24/2020

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	2.83	J0 J4	0.548	1.00	1	08/12/2020 05:38	WG1524178
Acrylonitrile	U		0.0760	0.500	1	08/12/2020 05:38	WG1524178
Benzene	U		0.0160	0.0400	1	08/12/2020 05:38	WG1524178
Bromobenzene	U		0.0420	0.500	1	08/12/2020 05:38	WG1524178
Bromodichloromethane	U		0.0315	0.100	1	08/12/2020 05:38	WG1524178
Bromoform	U		0.239	1.00	1	08/12/2020 05:38	WG1524178
Bromomethane	U		0.148	0.500	1	08/12/2020 05:38	WG1524178
n-Butylbenzene	U		0.153	0.500	1	08/12/2020 05:38	WG1524178
sec-Butylbenzene	U		0.101	0.500	1	08/12/2020 05:38	WG1524178
tert-Butylbenzene	U		0.0620	0.200	1	08/12/2020 05:38	WG1524178
Carbon tetrachloride	U		0.0432	0.200	1	08/12/2020 05:38	WG1524178
Chlorobenzene	U		0.0229	0.100	1	08/12/2020 05:38	WG1524178
Chlorodibromomethane	U		0.0180	0.100	1	08/12/2020 05:38	WG1524178
Chloroethane	U		0.0432	0.200	1	08/12/2020 05:38	WG1524178
Chloroform	U		0.0166	0.100	1	08/12/2020 05:38	WG1524178
Chloromethane	U		0.0556	0.500	1	08/12/2020 05:38	WG1524178
2-Chlorotoluene	U		0.0368	0.100	1	08/12/2020 05:38	WG1524178
4-Chlorotoluene	U		0.0452	0.200	1	08/12/2020 05:38	WG1524178
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	08/12/2020 05:38	WG1524178
1,2-Dibromoethane	U		0.0210	0.100	1	08/12/2020 05:38	WG1524178
Dibromomethane	U		0.0400	0.200	1	08/12/2020 05:38	WG1524178
1,2-Dichlorobenzene	U		0.0580	0.200	1	08/12/2020 05:38	WG1524178
1,3-Dichlorobenzene	U		0.0680	0.200	1	08/12/2020 05:38	WG1524178
1,4-Dichlorobenzene	U		0.0788	0.200	1	08/12/2020 05:38	WG1524178
Dichlorodifluoromethane	U		0.0327	0.100	1	08/12/2020 05:38	WG1524178
1,1-Dichloroethane	U		0.0230	0.100	1	08/12/2020 05:38	WG1524178
1,2-Dichloroethane	U		0.0190	0.100	1	08/12/2020 05:38	WG1524178
1,1-Dichloroethene	U		0.0200	0.100	1	08/12/2020 05:38	WG1524178
cis-1,2-Dichloroethene	U		0.0276	0.100	1	08/12/2020 05:38	WG1524178
trans-1,2-Dichloroethene	U		0.0572	0.200	1	08/12/2020 05:38	WG1524178
1,2-Dichloropropane	U		0.0508	0.200	1	08/12/2020 05:38	WG1524178
1,1-Dichloropropene	U		0.0280	0.100	1	08/12/2020 05:38	WG1524178
1,3-Dichloropropane	U		0.0700	0.200	1	08/12/2020 05:38	WG1524178
cis-1,3-Dichloropropene	U		0.0271	0.100	1	08/12/2020 05:38	WG1524178
trans-1,3-Dichloropropene	U		0.0612	0.200	1	08/12/2020 05:38	WG1524178
2,2-Dichloropropane	U		0.0317	0.100	1	08/12/2020 05:38	WG1524178
Di-isopropyl ether	U		0.0140	0.0400	1	08/12/2020 05:38	WG1524178
Ethylbenzene	U		0.0212	0.100	1	08/12/2020 05:38	WG1524178
Hexachloro-1,3-butadiene	U	J0	0.508	1.00	1	08/12/2020 05:38	WG1524178
Isopropylbenzene	U		0.0345	0.100	1	08/12/2020 05:38	WG1524178
p-Isopropyltoluene	U		0.0932	0.200	1	08/12/2020 05:38	WG1524178
2-Butanone (MEK)	U		0.500	1.00	1	08/12/2020 05:38	WG1524178
Methylene Chloride	U	J4	0.265	1.00	1	08/12/2020 05:38	WG1524178
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	08/12/2020 05:38	WG1524178
Methyl tert-butyl ether	U		0.0118	0.0400	1	08/12/2020 05:38	WG1524178
Naphthalene	U		0.124	0.500	1	08/12/2020 05:38	WG1524178
n-Propylbenzene	U		0.0472	0.200	1	08/12/2020 05:38	WG1524178
Styrene	U		0.109	0.500	1	08/12/2020 05:38	WG1524178
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	08/12/2020 05:38	WG1524178
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	08/12/2020 05:38	WG1524178
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	08/12/2020 05:38	WG1524178
Tetrachloroethene	U		0.0280	0.100	1	08/12/2020 05:38	WG1524178
Toluene	0.153	J	0.0500	0.200	1	08/12/2020 05:38	WG1524178
1,2,3-Trichlorobenzene	U		0.0250	0.500	1	08/12/2020 09:41	WG1524783
1,2,4-Trichlorobenzene	U		0.193	0.500	1	08/12/2020 09:41	WG1524783
1,1,1-Trichloroethane	U		0.0110	0.100	1	08/12/2020 05:38	WG1524178

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Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,1,2-Trichloroethane	U		0.0353	0.100	1	08/12/2020 05:38	WG1524178
Trichloroethene	U		0.0160	0.0400	1	08/12/2020 05:38	WG1524178
Trichlorofluoromethane	U		0.0200	0.100	1	08/12/2020 05:38	WG1524178
1,2,3-Trichloropropane	U		0.204	0.500	1	08/12/2020 05:38	WG1524178
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	08/12/2020 05:38	WG1524178
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	08/12/2020 05:38	WG1524178
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	08/12/2020 05:38	WG1524178
Vinyl chloride	U		0.0273	0.100	1	08/12/2020 05:38	WG1524178
Xylenes, Total	U		0.191	0.260	1	08/12/2020 05:38	WG1524178
Ethyl Ether	U		0.0170	0.100	1	08/12/2020 05:38	WG1524178
Tetrahydrofuran	U		0.0900	0.500	1	08/12/2020 05:38	WG1524178
Iodomethane	U		0.242	0.500	1	08/12/2020 05:38	WG1524178
Allyl chloride	U		0.580	1.00	1	08/12/2020 05:38	WG1524178
Trans-1,4-Dichloro-2-butene	U		0.0560	0.200	1	08/12/2020 05:38	WG1524178
(S) Toluene-d8	*93.1*			*75.0-131*		*08/12/2020 05:38*	WG1524178
(S) Toluene-d8	*104*			*75.0-131*		*08/12/2020 09:41*	WG1524783
(S) 4-Bromofluorobenzene	*112*			*67.0-138*		*08/12/2020 05:38*	WG1524178
(S) 4-Bromofluorobenzene	*96.4*			*67.0-138*		*08/12/2020 09:41*	WG1524783
(S) 1,2-Dichloroethane-d4	*116*			*70.0-130*		*08/12/2020 05:38*	WG1524178
(S) 1,2-Dichloroethane-d4	*112*			*70.0-130*		*08/12/2020 09:41*	WG1524783

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1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Wet Chemistry by Method 2320 B-2011

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Alkalinity	380000		8450	20000	1	08/13/2020 01:40	WG1524707

Sample Narrative:

L1248266-01 WG1524707: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 9056A

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Chloride	21800		379	1000	1	08/08/2020 15:43	WG1522712
Nitrate	U		48.0	100	1	08/08/2020 15:43	WG1522712
Sulfate	17100		594	5000	1	08/08/2020 15:43	WG1522712

Wet Chemistry by Method 9060A

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
TOC (Total Organic Carbon)	4830		102	1000	1	08/14/2020 21:00	WG1524491

Metals (ICPMS) by Method 6020B

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Iron	4710		244	500	5	08/11/2020 11:15	WG1522977
Manganese	2640		26.4	100	20	08/11/2020 11:12	WG1522977

Volatile Organic Compounds (GC) by Method RSK175

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Methane	2350		0.287	0.678	1	08/13/2020 16:03	WG1525159
Ethane	U		0.296	1.29	1	08/13/2020 16:03	WG1525159
Ethene	U		0.422	1.27	1	08/13/2020 16:03	WG1525159

Volatile Organic Compounds (GC/MS) by Method 8260D

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Acetone	3.48 J	J0 J4	0.548	1.00	1	08/12/2020 08:46	WG1524178
Acrylonitrile	U		0.0760	0.500	1	08/12/2020 08:46	WG1524178
Benzene	0.0320	J	0.0160	0.0400	1	08/12/2020 08:46	WG1524178
Bromobenzene	U		0.0420	0.500	1	08/12/2020 08:46	WG1524178
Bromodichloromethane	U		0.0315	0.100	1	08/12/2020 08:46	WG1524178
Bromoform	U		0.239	1.00	1	08/12/2020 08:46	WG1524178
Bromomethane	U		0.148	0.500	1	08/12/2020 08:46	WG1524178
n-Butylbenzene	U		0.153	0.500	1	08/12/2020 08:46	WG1524178
sec-Butylbenzene	U		0.101	0.500	1	08/12/2020 08:46	WG1524178
tert-Butylbenzene	U		0.0620	0.200	1	08/12/2020 08:46	WG1524178
Carbon tetrachloride	U		0.0432	0.200	1	08/12/2020 08:46	WG1524178
Chlorobenzene	U		0.0229	0.100	1	08/12/2020 08:46	WG1524178
Chlorodibromomethane	U		0.0180	0.100	1	08/12/2020 08:46	WG1524178
Chloroethane	U		0.0432	0.200	1	08/12/2020 08:46	WG1524178
Chloroform	U		0.0166	0.100	1	08/12/2020 08:46	WG1524178
Chloromethane	U		0.0556	0.500	1	08/12/2020 08:46	WG1524178
2-Chlorotoluene	U		0.0368	0.100	1	08/12/2020 08:46	WG1524178
4-Chlorotoluene	U		0.0452	0.200	1	08/12/2020 08:46	WG1524178
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	08/12/2020 08:46	WG1524178
1,2-Dibromoethane	U		0.0210	0.100	1	08/12/2020 08:46	WG1524178

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1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Volatile Organic Compounds (GC/MS) by Method 8260D

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Dibromomethane	U		0.0400	0.200	1	08/12/2020 08:46	WG1524178
1,2-Dichlorobenzene	U		0.0580	0.200	1	08/12/2020 08:46	WG1524178
1,3-Dichlorobenzene	U		0.0680	0.200	1	08/12/2020 08:46	WG1524178
1,4-Dichlorobenzene	U		0.0788	0.200	1	08/12/2020 08:46	WG1524178
Dichlorodifluoromethane	U		0.0327	0.100	1	08/12/2020 08:46	WG1524178
1,1-Dichloroethane	U		0.0230	0.100	1	08/12/2020 08:46	WG1524178
1,2-Dichloroethane	U		0.0190	0.100	1	08/12/2020 08:46	WG1524178
1,1-Dichloroethene	U		0.0200	0.100	1	08/12/2020 08:46	WG1524178
cis-1,2-Dichloroethene	U		0.0276	0.100	1	08/12/2020 08:46	WG1524178
trans-1,2-Dichloroethene	U		0.0572	0.200	1	08/12/2020 08:46	WG1524178
1,2-Dichloropropane	U		0.0508	0.200	1	08/12/2020 08:46	WG1524178
1,1-Dichloropropene	U		0.0280	0.100	1	08/12/2020 08:46	WG1524178
1,3-Dichloropropane	U		0.0700	0.200	1	08/12/2020 08:46	WG1524178
cis-1,3-Dichloropropene	U		0.0271	0.100	1	08/12/2020 08:46	WG1524178
trans-1,3-Dichloropropene	U		0.0612	0.200	1	08/12/2020 08:46	WG1524178
2,2-Dichloropropane	U		0.0317	0.100	1	08/12/2020 08:46	WG1524178
Di-isopropyl ether	0.0860	J J0	0.0140	0.0400	1	08/12/2020 08:46	WG1524178
Ethylbenzene	U		0.0212	0.100	1	08/12/2020 08:46	WG1524178
Hexachloro-1,3-butadiene	U	UJ J0	0.508	1.00	1	08/12/2020 08:46	WG1524178
Isopropylbenzene	U		0.0345	0.100	1	08/12/2020 08:46	WG1524178
p-Isopropyltoluene	U		0.0932	0.200	1	08/12/2020 08:46	WG1524178
2-Butanone (MEK)	U		0.500	1.00	1	08/12/2020 08:46	WG1524178
Methylene Chloride	U	~~J4~~	0.265	1.00	1	08/12/2020 08:46	WG1524178
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	08/12/2020 08:46	WG1524178
Methyl tert-butyl ether	U		0.0118	0.0400	1	08/12/2020 08:46	WG1524178
Naphthalene	U		0.124	0.500	1	08/12/2020 08:46	WG1524178
n-Propylbenzene	U		0.0472	0.200	1	08/12/2020 08:46	WG1524178
Styrene	U		0.109	0.500	1	08/12/2020 08:46	WG1524178
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	08/12/2020 08:46	WG1524178
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	08/12/2020 08:46	WG1524178
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	08/12/2020 08:46	WG1524178
Tetrachloroethene	U		0.0280	0.100	1	08/12/2020 08:46	WG1524178
Toluene	0.162	J	0.0500	0.200	1	08/12/2020 08:46	WG1524178
1,2,3-Trichlorobenzene	U		0.0250	0.500	1	08/12/2020 16:25	WG1524794
1,2,4-Trichlorobenzene	U		0.193	0.500	1	08/12/2020 16:25	WG1524794
1,1,1-Trichloroethane	U		0.0110	0.100	1	08/12/2020 08:46	WG1524178
1,1,2-Trichloroethane	U		0.0353	0.100	1	08/12/2020 08:46	WG1524178
Trichloroethene	U		0.0160	0.0400	1	08/12/2020 08:46	WG1524178
Trichlorofluoromethane	U		0.0200	0.100	1	08/12/2020 08:46	WG1524178
1,2,3-Trichloropropane	U		0.204	0.500	1	08/12/2020 08:46	WG1524178
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	08/12/2020 08:46	WG1524178
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	08/12/2020 08:46	WG1524178
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	08/12/2020 08:46	WG1524178
Vinyl chloride	U		0.0273	0.100	1	08/12/2020 08:46	WG1524178
Xylenes, Total	U		0.191	0.260	1	08/12/2020 08:46	WG1524178
Ethyl Ether	U		0.0170	0.100	1	08/12/2020 08:46	WG1524178
Tetrahydrofuran	U		0.0900	0.500	1	08/12/2020 08:46	WG1524178
Iodomethane	U		0.242	0.500	1	08/12/2020 08:46	WG1524178
Allyl chloride	U		0.580	1.00	1	08/12/2020 08:46	WG1524178
Trans-1,4-Dichloro-2-butene	U		0.0560	0.200	1	08/12/2020 08:46	WG1524178
(S) Toluene-d8	*96.4*			*75.0-131*		*08/12/2020 08:46*	WG1524178
(S) Toluene-d8	*105*			*75.0-131*		*08/12/2020 16:25*	WG1524794
(S) 4-Bromofluorobenzene	*106*			*67.0-138*		*08/12/2020 08:46*	WG1524178
(S) 4-Bromofluorobenzene	*103*			*67.0-138*		*08/12/2020 16:25*	WG1524794
(S) 1,2-Dichloroethane-d4	*111*			*70.0-130*		*08/12/2020 08:46*	WG1524178
(S) 1,2-Dichloroethane-d4	*101*			*70.0-130*		*08/12/2020 16:25*	WG1524794

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MEMORANDUM

TO: Project File **DATE:** August 6, 2020

FROM: Jessie Compeau

SUBJECT: Laboratory Data Validation Review

PROJECT: American Linen Data Validation

PROJECT #: 1413.001.02.501G

TASK: EIM Data Validation Level EPA2A for June and July 2020 – Soil Samples

LAB: Pace Sample Delivery Groups (SDGs): L1237982 and L1238798

Twenty-eight (28) soil samples (including one field duplicate) and a trip blank were collected as part of the during installation of the new soil vapor probes at the Former American Linen Supply Site, in Seattle, Washington on June 29-30, July 1-2, and 9-10 of 2020. The samples were shipped and delivered to Pace Lab Sciences (Pace) of Mount Juliet, TN for laboratory analysis. Samples were analyzed for the following:

- Volatile organic compounds (VOCs) by United States Environmental Protection Agency (USEPA) Method 8260D

The quality assurance review of the sample data associated with SDGs L1237982 and L1238798 are summarized below.

DATA QUALIFICATIONS

Guidelines established by USEPA for a limited data validation review of analytical data along with PACE control limit criteria were used to validate the data. The comments presented in this memorandum refer to the laboratory's performance in meeting the quality control criteria outlined in the USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (USEPA, 2017). Following Guidelines, non-project-specific laboratory duplicates and matrix spike results were not evaluated as part of this data validation.

DATA VALIDATION

Completeness

All samples were collected and analyzed as requested.

Sample Collection and Preservation

The samples were delivered to the project laboratory in coolers under standard chain-of-custody protocols. Review of Pace's notes on the chain of custody form indicates that all samples were received in good condition below the recommended preservation temperature 6.0°C. No data qualifications were assigned due to sample receipt or temperature preservation issues with the following discussion:

- SDG L1238798: Soil sample SV-**28**-13.5 was incorrectly recorded on the chain of custody (COC) and should read SV-**27**-13.5. PES contacted Pace on July 21, 2020 and the report was revised and reissued.
- SDG L1237982: Pace contacted PES to confirm requested analysis on the COC and proceeded once confirming requests for analysis.

Holding Times

USEPA Method 8260D:
All samples were analyzed for VOCs within the USEPA recommended holding time of fourteen days for soils (preserved waters) from the date of sample collection. All holding time criteria were met.

Initial and Continuing Calibration

USEPA Method 8260D (VOCs):
Initial and continuing calibration data for this project are retained by the laboratory and available for review if necessary. Pace indicated within the laboratory report that continuing calibration verification (CCV) criteria for were not met for the following:

- SDGs L1237982 and L1238798: CCV compounds outside of criteria are qualified by the laboratory (J0). **The associated sample results with laboratory qualifiers (J0) are estimated (UJ/J) as the associated CCV recoveries are outside of laboratory control limits.**

Method Blank Results

USEPA Method 8260D:
Laboratory method blanks are included with the analytical batches per method requirement. The target analytes are not detected in the method blanks at or above the reporting detection limits (RDLs).

Trip Blank Results

One trip blank (TB-071020) were collected and submitted for analysis. The target analytes were not detected in the trip blank at or above the RDLs with the following exception:

- SDG L1238798: A low level of 2-butanone is detected at a low level in the trip blank and in the associated sample SV-27-13.5. **Sample SV-27-13.5 2-butanone (methyl ethyl ketone) result is qualified as not detected (U) due to trip blank contamination.**

Field Duplicate Analyses

Field duplicate sample pair is as follows:

- SDG L1237982: Samples SV-16-5 and SV-100-5

Target analyte results are comparable and within a relative percent difference (RPD) of 30% for the field duplicate pair with the following exceptions:

- Samples SV-16-5 and SV-100-5: Select VOC results are not comparable with an RPD greater than 30% (or for results < 5X RDL the absolute difference < 1X RDL). **Field duplicate results for ethylbenzene, n-hexane, p-isopropyltoluene, tetrachloroethene, toluene, 1,2,4-trimethylbenzene, and 1,2,3-trimethylbenzene, and total xylenes are estimated and qualified (J).**

Laboratory Duplicate/Replicate Analyses

USEPA Method 8260D:
Laboratory duplicate samples were not analyzed. Refer to laboratory control sample/sample duplicate (LCS/LCSD) or matrix spike/matrix spike duplicate (MS/MSD) results for precision data.

Surrogate Recoveries

USEPA Method 8260D:
The surrogate recovery results for the samples, laboratory control samples, matrix spike samples, and the method blanks are within the laboratory surrogate control limits for all the analyses.

Laboratory Control Samples

USEPA Method 8260D:
Laboratory control sample/laboratory control sample duplicates (LCS/LCSD) were analyzed by USEPA Method 8260D. In some cases, only an LCS was analyzed. Refer to matrix spike duplicate or field duplicate results in these cases. The LCS or LCS/LCSD %R's and RPDs for the target compounds are within the laboratory control criteria for soils with the following exceptions:

- SDG L1238798: LCS/LCSD (analytical batch WG1510393) RPDs for acetone and carbon disulfide are laboratory qualified (J3) to indicate an elevated RPD exceeding laboratory criterion. No action is taken since the spike recoveries are within acceptance criteria but are recovered wide.

- SDG L1238798: LCS (analytical batch WG1510393) recovery for n-hexane is above acceptance criteria and laboratory qualified (J4). **Positive detection in sample SV-22-8.5 for n-hexane are qualified as estimated (J).** No action is required for n-hexane non-detects in the associated samples.

- SDG L1238798: LCS (analytical batch WG1510584) recovery for chloroform and n-hexane are above acceptance criteria and laboratory qualified (J4). No action is taken since chloroform and n-hexane are not detected in the associated samples.

- SDG L1237982: LCS (analytical batch WG1507172) recoveries for 1,2-dichlorobenzene and cis-1,2-dichloroethene are slightly below acceptance criteria and laboratory qualified (J4). No action is taken since the LCSD results are within criteria and LCS recoveries are only marginally outside of criteria.

- SDG L1237982: LCS (analytical batch WG1507499) recovery for trans-1,2-dichloroethene is above acceptance criteria and laboratory qualified (J4). No action is taken since trans-1,2-dichloroethene is not detected in the associated samples.

Matrix Spike/Matrix Spike Duplicates

USEPA Method 8260D:
Matrix spike/matrix spike duplicate (MS/MSD) analyses were performed on non-client samples. The MS/MSD percent recoveries (%R's) and RPDs for all target compounds are within the laboratory control criteria for soil with the following exceptions:

- SDG L1238798: MS/MSD (analytical batch WG1509734) was performed on a non-client sample within the analytical batch. No action is taken since the non-client MS/MSD is associated with the trip blank and samples are not impacted by associated spike QC.

Other Quality Control Issues

No laboratory quality control issues were identified in the laboratory report with the following discussion:

- Electronic data deliverables (EDDs) for these SDGs were provided by the laboratory and data validator qualifiers were entered. In some cases, different chemical synonyms are used between the EDD and the hardcopy however associated Chemical Abstracts Service (CAS) numbers are provided in the EDD to confirm chemical identifications.

Quantitation Limits

Electronic data deliverables (EDDs) for these SDGs were provided by the laboratory and data validator qualifiers were entered, as appropriate, into the EDDs.

Data Assessment

The laboratory data reported for this project were reviewed based on the criteria outlined in:

- USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (USEPA, 2017).

Data qualifiers are assigned and laboratory report pages with qualifiers are attached. All data, including qualified data, are judged to be acceptable for their intended use.

SAMPLE RESULTS - 01

L1237982

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	88.1		1	07/11/2020 22:19	WG1507276

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	U		0.0473	0.0648	1	07/12/2020 00:10	WG1507499
Acrylonitrile	U		0.00468	0.0162	1	07/12/2020 00:10	WG1507499
Benzene	U		0.000605	0.00130	1	07/12/2020 00:10	WG1507499
Bromobenzene	U		0.00117	0.0162	1	07/12/2020 00:10	WG1507499
Bromodichloromethane	U		0.000940	0.00324	1	07/12/2020 00:10	WG1507499
Bromochloromethane	U		0.000731	0.00648	1	07/12/2020 00:10	WG1507499
Bromoform	U		0.00152	0.0324	1	07/12/2020 00:10	WG1507499
Bromomethane	U		0.00255	0.0162	1	07/12/2020 00:10	WG1507499
n-Butylbenzene	U		0.00680	0.0162	1	07/12/2020 00:10	WG1507499
sec-Butylbenzene	U		0.00373	0.0162	1	07/12/2020 00:10	WG1507499
tert-Butylbenzene	U		0.00253	0.00648	1	07/12/2020 00:10	WG1507499
Carbon disulfide	U		0.000907	0.0162	1	07/12/2020 00:10	WG1507499
Carbon tetrachloride	U		0.00116	0.00648	1	07/12/2020 00:10	WG1507499
Chlorobenzene	U		0.000272	0.00324	1	07/12/2020 00:10	WG1507499
Chlorodibromomethane	U		0.000793	0.00324	1	07/12/2020 00:10	WG1507499
Chloroethane	U		0.00220	0.00648	1	07/12/2020 00:10	WG1507499
Chloroform	U		0.00133	0.00324	1	07/12/2020 00:10	WG1507499
Chloromethane	U		0.00564	0.0162	1	07/12/2020 00:10	WG1507499
2-Chlorotoluene	U		0.00112	0.00324	1	07/12/2020 00:10	WG1507499
4-Chlorotoluene	U		0.000583	0.00648	1	07/12/2020 00:10	WG1507499
1,2-Dibromo-3-Chloropropane	U	UJ J0	0.00505	0.0324	1	07/12/2020 00:10	WG1507499
1,2-Dibromoethane	U		0.000840	0.00324	1	07/12/2020 00:10	WG1507499
Dibromomethane	U		0.000972	0.00648	1	07/12/2020 00:10	WG1507499
1,2-Dichlorobenzene	U		0.000551	0.00648	1	07/12/2020 00:10	WG1507499
1,3-Dichlorobenzene	U		0.000778	0.00648	1	07/12/2020 00:10	WG1507499
1,4-Dichlorobenzene	U		0.000907	0.00648	1	07/12/2020 00:10	WG1507499
Dichlorodifluoromethane	U		0.00209	0.00324	1	07/12/2020 00:10	WG1507499
1,1-Dichloroethane	U		0.000636	0.00324	1	07/12/2020 00:10	WG1507499
1,2-Dichloroethane	U		0.000841	0.00324	1	07/12/2020 00:10	WG1507499
1,1-Dichloroethene	U		0.000785	0.00324	1	07/12/2020 00:10	WG1507499
cis-1,2-Dichloroethene	U		0.000951	0.00324	1	07/12/2020 00:10	WG1507499
trans-1,2-Dichloroethene	U	~~J4~~	0.00135	0.00648	1	07/12/2020 00:10	WG1507499
1,2-Dichloropropane	U		0.00184	0.00648	1	07/12/2020 00:10	WG1507499
1,1-Dichloropropene	U		0.00105	0.00324	1	07/12/2020 00:10	WG1507499
1,3-Dichloropropane	U		0.000649	0.00648	1	07/12/2020 00:10	WG1507499
cis-1,3-Dichloropropene	U		0.000981	0.00324	1	07/12/2020 00:10	WG1507499
trans-1,3-Dichloropropene	U		0.00148	0.00648	1	07/12/2020 00:10	WG1507499
trans-1,4-Dichloro-2-butene	U	UJ J0	0.00241	0.00648	1	07/12/2020 00:10	WG1507499
2,2-Dichloropropane	U		0.00179	0.00324	1	07/12/2020 00:10	WG1507499
Di-isopropyl ether	U		0.000531	0.00130	1	07/12/2020 00:10	WG1507499
Ethylbenzene	U		0.000955	0.00324	1	07/12/2020 00:10	WG1507499
Hexachloro-1,3-butadiene	U		0.00778	0.0324	1	07/12/2020 00:10	WG1507499
2-Hexanone	U		0.00435	0.0324	1	07/12/2020 00:10	WG1507499
n-Hexane	U		0.00293	0.00648	1	07/12/2020 00:10	WG1507499
Iodomethane	U		0.00301	0.0162	1	07/12/2020 00:10	WG1507499
Isopropylbenzene	U		0.000551	0.00324	1	07/12/2020 00:10	WG1507499
p-Isopropyltoluene	U		0.00330	0.00648	1	07/12/2020 00:10	WG1507499
2-Butanone (MEK)	U		0.0823	0.130	1	07/12/2020 00:10	WG1507499
Methylene Chloride	U		0.00860	0.0324	1	07/12/2020 00:10	WG1507499
4-Methyl-2-pentanone (MIBK)	U		0.00295	0.0324	1	07/12/2020 00:10	WG1507499

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Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.000454	0.00130	1	07/12/2020 00:10	WG1507499
Naphthalene	U		0.00632	0.0162	1	07/12/2020 00:10	WG1507499
n-Propylbenzene	U		0.00123	0.00648	1	07/12/2020 00:10	WG1507499
Styrene	U		0.000297	0.0162	1	07/12/2020 00:10	WG1507499
1,1,1,2-Tetrachloroethane	U		0.00123	0.00324	1	07/12/2020 00:10	WG1507499
1,1,2,2-Tetrachloroethane	U		0.000901	0.00324	1	07/12/2020 00:10	WG1507499
1,1,2-Trichlorotrifluoroethane	U		0.000977	0.00324	1	07/12/2020 00:10	WG1507499
Tetrachloroethene	0.00158	J	0.00116	0.00324	1	07/12/2020 00:10	WG1507499
Toluene	U		0.00168	0.00648	1	07/12/2020 00:10	WG1507499
1,2,3-Trichlorobenzene	U		0.00950	0.0162	1	07/12/2020 00:10	WG1507499
1,2,4-Trichlorobenzene	U		0.00570	0.0162	1	07/12/2020 00:10	WG1507499
1,1,1-Trichloroethane	U		0.00120	0.00324	1	07/12/2020 00:10	WG1507499
1,1,2-Trichloroethane	U		0.000774	0.00324	1	07/12/2020 00:10	WG1507499
Trichloroethene	U		0.000757	0.00130	1	07/12/2020 00:10	WG1507499
Trichlorofluoromethane	U		0.00107	0.00324	1	07/12/2020 00:10	WG1507499
1,2,3-Trichloropropane	U		0.00210	0.0162	1	07/12/2020 00:10	WG1507499
1,2,4-Trimethylbenzene	U		0.00205	0.00648	1	07/12/2020 00:10	WG1507499
1,2,3-Trimethylbenzene	U		0.00205	0.00648	1	07/12/2020 00:10	WG1507499
1,3,5-Trimethylbenzene	U		0.00259	0.00648	1	07/12/2020 00:10	WG1507499
Vinyl acetate	U		0.00329	0.0162	1	07/12/2020 00:10	WG1507499
Vinyl chloride	U		0.00150	0.00324	1	07/12/2020 00:10	WG1507499
Xylenes, Total	U		0.00114	0.00842	1	07/12/2020 00:10	WG1507499
(S) Toluene-d8	*104*			*75.0-131*		*07/12/2020 00:10*	WG1507499
(S) 4-Bromofluorobenzene	*91.4*			*67.0-138*		*07/12/2020 00:10*	WG1507499
(S) 1,2-Dichloroethane-d4	*92.5*			*70.0-130*		*07/12/2020 00:10*	WG1507499

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

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Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	86.4		1	07/11/2020 22:19	WG1507276

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	U		0.0505	0.0692	1	07/11/2020 17:34	WG1507172
Acrylonitrile	U		0.00500	0.0173	1	07/11/2020 17:34	WG1507172
Benzene	U		0.000647	0.00138	1	07/11/2020 17:34	WG1507172
Bromobenzene	U		0.00125	0.0173	1	07/11/2020 17:34	WG1507172
Bromodichloromethane	U		0.00100	0.00346	1	07/11/2020 17:34	WG1507172
Bromochloromethane	U		0.000781	0.00692	1	07/11/2020 17:34	WG1507172
Bromoform	U		0.00162	0.0346	1	07/11/2020 17:34	WG1507172
Bromomethane	U		0.00273	0.0173	1	07/11/2020 17:34	WG1507172
n-Butylbenzene	U		0.00727	0.0173	1	07/11/2020 17:34	WG1507172
sec-Butylbenzene	U		0.00399	0.0173	1	07/11/2020 17:34	WG1507172
tert-Butylbenzene	U		0.00270	0.00692	1	07/11/2020 17:34	WG1507172
Carbon disulfide	U		0.000969	0.0173	1	07/11/2020 17:34	WG1507172
Carbon tetrachloride	U		0.00124	0.00692	1	07/11/2020 17:34	WG1507172
Chlorobenzene	U		0.000291	0.00346	1	07/11/2020 17:34	WG1507172
Chlorodibromomethane	U		0.000847	0.00346	1	07/11/2020 17:34	WG1507172
Chloroethane	U		0.00235	0.00692	1	07/11/2020 17:34	WG1507172
Chloroform	U		0.00143	0.00346	1	07/11/2020 17:34	WG1507172
Chloromethane	U		0.00602	0.0173	1	07/11/2020 17:34	WG1507172
2-Chlorotoluene	U		0.00120	0.00346	1	07/11/2020 17:34	WG1507172
4-Chlorotoluene	U		0.000623	0.00692	1	07/11/2020 17:34	WG1507172
1,2-Dibromo-3-Chloropropane	U UJ	J0	0.00540	0.0346	1	07/11/2020 17:34	WG1507172
1,2-Dibromoethane	U		0.000897	0.00346	1	07/11/2020 17:34	WG1507172
Dibromomethane	U		0.00104	0.00692	1	07/11/2020 17:34	WG1507172
1,2-Dichlorobenzene	U	~~J4~~	0.000588	0.00692	1	07/11/2020 17:34	WG1507172
1,3-Dichlorobenzene	U		0.000831	0.00692	1	07/11/2020 17:34	WG1507172
1,4-Dichlorobenzene	U		0.000969	0.00692	1	07/11/2020 17:34	WG1507172
Dichlorodifluoromethane	U		0.00223	0.00346	1	07/11/2020 17:34	WG1507172
1,1-Dichloroethane	U		0.000680	0.00346	1	07/11/2020 17:34	WG1507172
1,2-Dichloroethane	U		0.000899	0.00346	1	07/11/2020 17:34	WG1507172
1,1-Dichloroethene	U		0.000839	0.00346	1	07/11/2020 17:34	WG1507172
cis-1,2-Dichloroethene	U	~~J4~~	0.00102	0.00346	1	07/11/2020 17:34	WG1507172
trans-1,2-Dichloroethene	U		0.00144	0.00692	1	07/11/2020 17:34	WG1507172
1,2-Dichloropropane	U		0.00197	0.00692	1	07/11/2020 17:34	WG1507172
1,1-Dichloropropene	U		0.00112	0.00346	1	07/11/2020 17:34	WG1507172
1,3-Dichloropropane	U		0.000694	0.00692	1	07/11/2020 17:34	WG1507172
cis-1,3-Dichloropropene	U		0.00105	0.00346	1	07/11/2020 17:34	WG1507172
trans-1,3-Dichloropropene	U		0.00158	0.00692	1	07/11/2020 17:34	WG1507172
trans-1,4-Dichloro-2-butene	U		0.00258	0.00692	1	07/11/2020 17:34	WG1507172
2,2-Dichloropropane	U		0.00191	0.00346	1	07/11/2020 17:34	WG1507172
Di-isopropyl ether	U		0.000568	0.00138	1	07/11/2020 17:34	WG1507172
Ethylbenzene	U		0.00102	0.00346	1	07/11/2020 17:34	WG1507172
Hexachloro-1,3-butadiene	U		0.00831	0.0346	1	07/11/2020 17:34	WG1507172
2-Hexanone	U		0.00465	0.0346	1	07/11/2020 17:34	WG1507172
n-Hexane	U		0.00313	0.00692	1	07/11/2020 17:34	WG1507172
Iodomethane	U		0.00321	0.0173	1	07/11/2020 17:34	WG1507172
Isopropylbenzene	U		0.000588	0.00346	1	07/11/2020 17:34	WG1507172
p-Isopropyltoluene	U		0.00353	0.00692	1	07/11/2020 17:34	WG1507172
2-Butanone (MEK)	U		0.0879	0.138	1	07/11/2020 17:34	WG1507172
Methylene Chloride	U		0.00919	0.0346	1	07/11/2020 17:34	WG1507172
4-Methyl-2-pentanone (MIBK)	U		0.00316	0.0346	1	07/11/2020 17:34	WG1507172

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Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.000485	0.00138	1	07/11/2020 17:34	WG1507172
Naphthalene	U UJ	J0	0.00676	0.0173	1	07/11/2020 17:34	WG1507172
n-Propylbenzene	U		0.00132	0.00692	1	07/11/2020 17:34	WG1507172
Styrene	U		0.000317	0.0173	1	07/11/2020 17:34	WG1507172
1,1,1,2-Tetrachloroethane	U		0.00131	0.00346	1	07/11/2020 17:34	WG1507172
1,1,2,2-Tetrachloroethane	U		0.000962	0.00346	1	07/11/2020 17:34	WG1507172
1,1,2-Trichlorotrifluoroethane	U		0.00104	0.00346	1	07/11/2020 17:34	WG1507172
Tetrachloroethene	0.00184	J	0.00124	0.00346	1	07/11/2020 17:34	WG1507172
Toluene	U		0.00180	0.00692	1	07/11/2020 17:34	WG1507172
1,2,3-Trichlorobenzene	U UJ	J0	0.0101	0.0173	1	07/11/2020 17:34	WG1507172
1,2,4-Trichlorobenzene	U UJ	J0	0.00609	0.0173	1	07/11/2020 17:34	WG1507172
1,1,1-Trichloroethane	U		0.00128	0.00346	1	07/11/2020 17:34	WG1507172
1,1,2-Trichloroethane	U		0.000827	0.00346	1	07/11/2020 17:34	WG1507172
Trichloroethene	U		0.000809	0.00138	1	07/11/2020 17:34	WG1507172
Trichlorofluoromethane	U		0.00114	0.00346	1	07/11/2020 17:34	WG1507172
1,2,3-Trichloropropane	U		0.00224	0.0173	1	07/11/2020 17:34	WG1507172
1,2,4-Trimethylbenzene	U		0.00219	0.00692	1	07/11/2020 17:34	WG1507172
1,2,3-Trimethylbenzene	U		0.00219	0.00692	1	07/11/2020 17:34	WG1507172
1,3,5-Trimethylbenzene	U		0.00277	0.00692	1	07/11/2020 17:34	WG1507172
Vinyl acetate	U UJ	J0	0.00352	0.0173	1	07/11/2020 17:34	WG1507172
Vinyl chloride	U		0.00161	0.00346	1	07/11/2020 17:34	WG1507172
Xylenes, Total	U		0.00122	0.00900	1	07/11/2020 17:34	WG1507172
(S) Toluene-d8	*106*			*75.0-131*		*07/11/2020 17:34*	WG1507172
(S) 4-Bromofluorobenzene	*92.7*			*67.0-138*		*07/11/2020 17:34*	WG1507172
(S) 1,2-Dichloroethane-d4	*95.3*			*70.0-130*		*07/11/2020 17:34*	WG1507172

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Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	89.7		1	07/11/2020 22:43	WG1507277

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	U		0.0466	0.0638	1	07/11/2020 17:53	WG1507172
Acrylonitrile	U		0.00461	0.0159	1	07/11/2020 17:53	WG1507172
Benzene	U		0.000596	0.00128	1	07/11/2020 17:53	WG1507172
Bromobenzene	U		0.00115	0.0159	1	07/11/2020 17:53	WG1507172
Bromodichloromethane	U		0.000925	0.00319	1	07/11/2020 17:53	WG1507172
Bromochloromethane	U		0.000720	0.00638	1	07/11/2020 17:53	WG1507172
Bromoform	U		0.00149	0.0319	1	07/11/2020 17:53	WG1507172
Bromomethane	U		0.00251	0.0159	1	07/11/2020 17:53	WG1507172
n-Butylbenzene	U		0.00670	0.0159	1	07/11/2020 17:53	WG1507172
sec-Butylbenzene	U		0.00367	0.0159	1	07/11/2020 17:53	WG1507172
tert-Butylbenzene	U		0.00249	0.00638	1	07/11/2020 17:53	WG1507172
Carbon disulfide	U		0.000893	0.0159	1	07/11/2020 17:53	WG1507172
Carbon tetrachloride	U		0.00115	0.00638	1	07/11/2020 17:53	WG1507172
Chlorobenzene	U		0.000268	0.00319	1	07/11/2020 17:53	WG1507172
Chlorodibromomethane	U		0.000781	0.00319	1	07/11/2020 17:53	WG1507172
Chloroethane	U		0.00217	0.00638	1	07/11/2020 17:53	WG1507172
Chloroform	U		0.00131	0.00319	1	07/11/2020 17:53	WG1507172
Chloromethane	U		0.00555	0.0159	1	07/11/2020 17:53	WG1507172
2-Chlorotoluene	U		0.00110	0.00319	1	07/11/2020 17:53	WG1507172
4-Chlorotoluene	U		0.000574	0.00638	1	07/11/2020 17:53	WG1507172
1,2-Dibromo-3-Chloropropane	U	UJ J0	0.00498	0.0319	1	07/11/2020 17:53	WG1507172
1,2-Dibromoethane	U		0.000827	0.00319	1	07/11/2020 17:53	WG1507172
Dibromomethane	U		0.000957	0.00638	1	07/11/2020 17:53	WG1507172
1,2-Dichlorobenzene	U	~~J4~~	0.000542	0.00638	1	07/11/2020 17:53	WG1507172
1,3-Dichlorobenzene	U		0.000765	0.00638	1	07/11/2020 17:53	WG1507172
1,4-Dichlorobenzene	U		0.000893	0.00638	1	07/11/2020 17:53	WG1507172
Dichlorodifluoromethane	U		0.00205	0.00319	1	07/11/2020 17:53	WG1507172
1,1-Dichloroethane	U		0.000626	0.00319	1	07/11/2020 17:53	WG1507172
1,2-Dichloroethane	U		0.000828	0.00319	1	07/11/2020 17:53	WG1507172
1,1-Dichloroethene	U		0.000773	0.00319	1	07/11/2020 17:53	WG1507172
cis-1,2-Dichloroethene	U	~~J4~~	0.000936	0.00319	1	07/11/2020 17:53	WG1507172
trans-1,2-Dichloroethene	U		0.00133	0.00638	1	07/11/2020 17:53	WG1507172
1,2-Dichloropropane	U		0.00181	0.00638	1	07/11/2020 17:53	WG1507172
1,1-Dichloropropene	U		0.00103	0.00319	1	07/11/2020 17:53	WG1507172
1,3-Dichloropropane	U		0.000639	0.00638	1	07/11/2020 17:53	WG1507172
cis-1,3-Dichloropropene	U		0.000966	0.00319	1	07/11/2020 17:53	WG1507172
trans-1,3-Dichloropropene	U		0.00145	0.00638	1	07/11/2020 17:53	WG1507172
trans-1,4-Dichloro-2-butene	U		0.00237	0.00638	1	07/11/2020 17:53	WG1507172
2,2-Dichloropropane	U		0.00176	0.00319	1	07/11/2020 17:53	WG1507172
Di-isopropyl ether	U		0.000523	0.00128	1	07/11/2020 17:53	WG1507172
Ethylbenzene	U		0.000940	0.00319	1	07/11/2020 17:53	WG1507172
Hexachloro-1,3-butadiene	U		0.00765	0.0319	1	07/11/2020 17:53	WG1507172
2-Hexanone	U		0.00429	0.0319	1	07/11/2020 17:53	WG1507172
n-Hexane	U		0.00288	0.00638	1	07/11/2020 17:53	WG1507172
Iodomethane	U		0.00296	0.0159	1	07/11/2020 17:53	WG1507172
Isopropylbenzene	U		0.000542	0.00319	1	07/11/2020 17:53	WG1507172
p-Isopropyltoluene	U		0.00325	0.00638	1	07/11/2020 17:53	WG1507172
2-Butanone (MEK)	U		0.0810	0.128	1	07/11/2020 17:53	WG1507172
Methylene Chloride	U		0.00847	0.0319	1	07/11/2020 17:53	WG1507172
4-Methyl-2-pentanone (MIBK)	U		0.00291	0.0319	1	07/11/2020 17:53	WG1507172

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Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.000447	0.00128	1	07/11/2020 17:53	WG1507172
Naphthalene	U	UJ J0	0.00623	0.0159	1	07/11/2020 17:53	WG1507172
n-Propylbenzene	U		0.00121	0.00638	1	07/11/2020 17:53	WG1507172
Styrene	U		0.000292	0.0159	1	07/11/2020 17:53	WG1507172
1,1,1,2-Tetrachloroethane	U		0.00121	0.00319	1	07/11/2020 17:53	WG1507172
1,1,2,2-Tetrachloroethane	U		0.000887	0.00319	1	07/11/2020 17:53	WG1507172
1,1,2-Trichlorotrifluoroethane	U		0.000962	0.00319	1	07/11/2020 17:53	WG1507172
Tetrachloroethene	0.00273	J	0.00114	0.00319	1	07/11/2020 17:53	WG1507172
Toluene	U		0.00166	0.00638	1	07/11/2020 17:53	WG1507172
1,2,3-Trichlorobenzene	U	UJ J0	0.00935	0.0159	1	07/11/2020 17:53	WG1507172
1,2,4-Trichlorobenzene	U	UJ J0	0.00561	0.0159	1	07/11/2020 17:53	WG1507172
1,1,1-Trichloroethane	U		0.00118	0.00319	1	07/11/2020 17:53	WG1507172
1,1,2-Trichloroethane	U		0.000762	0.00319	1	07/11/2020 17:53	WG1507172
Trichloroethene	U		0.000745	0.00128	1	07/11/2020 17:53	WG1507172
Trichlorofluoromethane	U		0.00106	0.00319	1	07/11/2020 17:53	WG1507172
1,2,3-Trichloropropane	U		0.00207	0.0159	1	07/11/2020 17:53	WG1507172
1,2,4-Trimethylbenzene	U		0.00202	0.00638	1	07/11/2020 17:53	WG1507172
1,2,3-Trimethylbenzene	U		0.00202	0.00638	1	07/11/2020 17:53	WG1507172
1,3,5-Trimethylbenzene	U		0.00255	0.00638	1	07/11/2020 17:53	WG1507172
Vinyl acetate	U	UJ J0	0.00324	0.0159	1	07/11/2020 17:53	WG1507172
Vinyl chloride	U		0.00148	0.00319	1	07/11/2020 17:53	WG1507172
Xylenes, Total	U		0.00112	0.00829	1	07/11/2020 17:53	WG1507172
(S) Toluene-d8	*106*			*75.0-131*		*07/11/2020 17:53*	WG1507172
(S) 4-Bromofluorobenzene	*90.4*			*67.0-138*		*07/11/2020 17:53*	WG1507172
(S) 1,2-Dichloroethane-d4	*97.9*			*70.0-130*		*07/11/2020 17:53*	WG1507172

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1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	91.2		1	07/11/2020 22:43	WG1507277

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	U		0.0400	0.0548	1	07/11/2020 18:12	WG1507172
Acrylonitrile	U		0.00396	0.0137	1	07/11/2020 18:12	WG1507172
Benzene	U		0.000512	0.00110	1	07/11/2020 18:12	WG1507172
Bromobenzene	U		0.000986	0.0137	1	07/11/2020 18:12	WG1507172
Bromodichloromethane	U		0.000795	0.00274	1	07/11/2020 18:12	WG1507172
Bromochloromethane	U		0.000618	0.00548	1	07/11/2020 18:12	WG1507172
Bromoform	U		0.00128	0.0274	1	07/11/2020 18:12	WG1507172
Bromomethane	U		0.00216	0.0137	1	07/11/2020 18:12	WG1507172
n-Butylbenzene	U		0.00575	0.0137	1	07/11/2020 18:12	WG1507172
sec-Butylbenzene	U		0.00316	0.0137	1	07/11/2020 18:12	WG1507172
tert-Butylbenzene	U		0.00214	0.00548	1	07/11/2020 18:12	WG1507172
Carbon disulfide	U		0.000767	0.0137	1	07/11/2020 18:12	WG1507172
Carbon tetrachloride	U		0.000984	0.00548	1	07/11/2020 18:12	WG1507172
Chlorobenzene	U		0.000230	0.00274	1	07/11/2020 18:12	WG1507172
Chlorodibromomethane	U		0.000671	0.00274	1	07/11/2020 18:12	WG1507172
Chloroethane	U		0.00186	0.00548	1	07/11/2020 18:12	WG1507172
Chloroform	U		0.00113	0.00274	1	07/11/2020 18:12	WG1507172
Chloromethane	U		0.00477	0.0137	1	07/11/2020 18:12	WG1507172
2-Chlorotoluene	U		0.000948	0.00274	1	07/11/2020 18:12	WG1507172
4-Chlorotoluene	U		0.000493	0.00548	1	07/11/2020 18:12	WG1507172
1,2-Dibromo-3-Chloropropane	U	UJ J0	0.00427	0.0274	1	07/11/2020 18:12	WG1507172
1,2-Dibromoethane	U		0.000710	0.00274	1	07/11/2020 18:12	WG1507172
Dibromomethane	U		0.000822	0.00548	1	07/11/2020 18:12	WG1507172
1,2-Dichlorobenzene	U	~~J4~~	0.000466	0.00548	1	07/11/2020 18:12	WG1507172
1,3-Dichlorobenzene	0.000792	J	0.000658	0.00548	1	07/11/2020 18:12	WG1507172
1,4-Dichlorobenzene	U		0.000767	0.00548	1	07/11/2020 18:12	WG1507172
Dichlorodifluoromethane	U		0.00176	0.00274	1	07/11/2020 18:12	WG1507172
1,1-Dichloroethane	U		0.000538	0.00274	1	07/11/2020 18:12	WG1507172
1,2-Dichloroethane	U		0.000711	0.00274	1	07/11/2020 18:12	WG1507172
1,1-Dichloroethene	U		0.000664	0.00274	1	07/11/2020 18:12	WG1507172
cis-1,2-Dichloroethene	U	~~J4~~	0.000804	0.00274	1	07/11/2020 18:12	WG1507172
trans-1,2-Dichloroethene	U		0.00114	0.00548	1	07/11/2020 18:12	WG1507172
1,2-Dichloropropane	U		0.00156	0.00548	1	07/11/2020 18:12	WG1507172
1,1-Dichloropropene	U		0.000887	0.00274	1	07/11/2020 18:12	WG1507172
1,3-Dichloropropane	U		0.000549	0.00548	1	07/11/2020 18:12	WG1507172
cis-1,3-Dichloropropene	U		0.000830	0.00274	1	07/11/2020 18:12	WG1507172
trans-1,3-Dichloropropene	U		0.00125	0.00548	1	07/11/2020 18:12	WG1507172
trans-1,4-Dichloro-2-butene	U		0.00204	0.00548	1	07/11/2020 18:12	WG1507172
2,2-Dichloropropane	U		0.00151	0.00274	1	07/11/2020 18:12	WG1507172
Di-isopropyl ether	U		0.000449	0.00110	1	07/11/2020 18:12	WG1507172
Ethylbenzene	U		0.000808	0.00274	1	07/11/2020 18:12	WG1507172
Hexachloro-1,3-butadiene	U		0.00658	0.0274	1	07/11/2020 18:12	WG1507172
2-Hexanone	U		0.00368	0.0274	1	07/11/2020 18:12	WG1507172
n-Hexane	U		0.00248	0.00548	1	07/11/2020 18:12	WG1507172
Iodomethane	U		0.00254	0.0137	1	07/11/2020 18:12	WG1507172
Isopropylbenzene	U		0.000466	0.00274	1	07/11/2020 18:12	WG1507172
p-Isopropyltoluene	U		0.00279	0.00548	1	07/11/2020 18:12	WG1507172
2-Butanone (MEK)	U		0.0696	0.110	1	07/11/2020 18:12	WG1507172
Methylene Chloride	U		0.00728	0.0274	1	07/11/2020 18:12	WG1507172
4-Methyl-2-pentanone (MIBK)	U		0.00250	0.0274	1	07/11/2020 18:12	WG1507172

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Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.000384	0.00110	1	07/11/2020 18:12	WG1507172
Naphthalene	U	UJ J0	0.00535	0.0137	1	07/11/2020 18:12	WG1507172
n-Propylbenzene	U		0.00104	0.00548	1	07/11/2020 18:12	WG1507172
Styrene	U		0.000251	0.0137	1	07/11/2020 18:12	WG1507172
1,1,1,2-Tetrachloroethane	U		0.00104	0.00274	1	07/11/2020 18:12	WG1507172
1,1,2,2-Tetrachloroethane	U		0.000762	0.00274	1	07/11/2020 18:12	WG1507172
1,1,2-Trichlorotrifluoroethane	U		0.000826	0.00274	1	07/11/2020 18:12	WG1507172
Tetrachloroethene	U		0.000982	0.00274	1	07/11/2020 18:12	WG1507172
Toluene	U		0.00142	0.00548	1	07/11/2020 18:12	WG1507172
1,2,3-Trichlorobenzene	U	UJ J0	0.00803	0.0137	1	07/11/2020 18:12	WG1507172
1,2,4-Trichlorobenzene	U	UJ J0	0.00482	0.0137	1	07/11/2020 18:12	WG1507172
1,1,1-Trichloroethane	U		0.00101	0.00274	1	07/11/2020 18:12	WG1507172
1,1,2-Trichloroethane	U		0.000654	0.00274	1	07/11/2020 18:12	WG1507172
Trichloroethene	U		0.000640	0.00110	1	07/11/2020 18:12	WG1507172
Trichlorofluoromethane	U		0.000906	0.00274	1	07/11/2020 18:12	WG1507172
1,2,3-Trichloropropane	U		0.00178	0.0137	1	07/11/2020 18:12	WG1507172
1,2,4-Trimethylbenzene	U		0.00173	0.00548	1	07/11/2020 18:12	WG1507172
1,2,3-Trimethylbenzene	U		0.00173	0.00548	1	07/11/2020 18:12	WG1507172
1,3,5-Trimethylbenzene	U		0.00219	0.00548	1	07/11/2020 18:12	WG1507172
Vinyl acetate	U	UJ J0	0.00278	0.0137	1	07/11/2020 18:12	WG1507172
Vinyl chloride	U		0.00127	0.00274	1	07/11/2020 18:12	WG1507172
Xylenes, Total	U		0.000965	0.00712	1	07/11/2020 18:12	WG1507172
(S) Toluene-d8	*103*			*75.0-131*		*07/11/2020 18:12*	WG1507172
(S) 4-Bromofluorobenzene	*92.5*			*67.0-138*		*07/11/2020 18:12*	WG1507172
(S) 1,2-Dichloroethane-d4	*99.2*			*70.0-130*		*07/11/2020 18:12*	WG1507172

JC 8/3/2020

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	84.0		1	07/11/2020 22:43	WG1507277

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	U		0.0508	0.0695	1	07/11/2020 18:31	WG1507172
Acrylonitrile	U		0.00502	0.0174	1	07/11/2020 18:31	WG1507172
Benzene	0.00156		0.000649	0.00139	1	07/11/2020 18:31	WG1507172
Bromobenzene	U		0.00125	0.0174	1	07/11/2020 18:31	WG1507172
Bromodichloromethane	U		0.00101	0.00348	1	07/11/2020 18:31	WG1507172
Bromochloromethane	U		0.000784	0.00695	1	07/11/2020 18:31	WG1507172
Bromoform	U		0.00163	0.0348	1	07/11/2020 18:31	WG1507172
Bromomethane	U		0.00274	0.0174	1	07/11/2020 18:31	WG1507172
n-Butylbenzene	U		0.00730	0.0174	1	07/11/2020 18:31	WG1507172
sec-Butylbenzene	U		0.00400	0.0174	1	07/11/2020 18:31	WG1507172
tert-Butylbenzene	U		0.00271	0.00695	1	07/11/2020 18:31	WG1507172
Carbon disulfide	U		0.000973	0.0174	1	07/11/2020 18:31	WG1507172
Carbon tetrachloride	U		0.00125	0.00695	1	07/11/2020 18:31	WG1507172
Chlorobenzene	U		0.000292	0.00348	1	07/11/2020 18:31	WG1507172
Chlorodibromomethane	U		0.000851	0.00348	1	07/11/2020 18:31	WG1507172
Chloroethane	U		0.00236	0.00695	1	07/11/2020 18:31	WG1507172
Chloroform	U		0.00143	0.00348	1	07/11/2020 18:31	WG1507172
Chloromethane	U		0.00605	0.0174	1	07/11/2020 18:31	WG1507172
2-Chlorotoluene	U		0.00120	0.00348	1	07/11/2020 18:31	WG1507172
4-Chlorotoluene	U		0.000626	0.00695	1	07/11/2020 18:31	WG1507172
1,2-Dibromo-3-Chloropropane	U	UJ J0	0.00542	0.0348	1	07/11/2020 18:31	WG1507172
1,2-Dibromoethane	U		0.000901	0.00348	1	07/11/2020 18:31	WG1507172
Dibromomethane	U		0.00104	0.00695	1	07/11/2020 18:31	WG1507172
1,2-Dichlorobenzene	0.00307	J J J4	0.000591	0.00695	1	07/11/2020 18:31	WG1507172
1,3-Dichlorobenzene	U		0.000834	0.00695	1	07/11/2020 18:31	WG1507172
1,4-Dichlorobenzene	U		0.000973	0.00695	1	07/11/2020 18:31	WG1507172
Dichlorodifluoromethane	U		0.00224	0.00348	1	07/11/2020 18:31	WG1507172
1,1-Dichloroethane	U		0.000683	0.00348	1	07/11/2020 18:31	WG1507172
1,2-Dichloroethane	U		0.000902	0.00348	1	07/11/2020 18:31	WG1507172
1,1-Dichloroethene	U		0.000843	0.00348	1	07/11/2020 18:31	WG1507172
cis-1,2-Dichloroethene	U	~~J4~~	0.00102	0.00348	1	07/11/2020 18:31	WG1507172
trans-1,2-Dichloroethene	U		0.00145	0.00695	1	07/11/2020 18:31	WG1507172
1,2-Dichloropropane	U		0.00197	0.00695	1	07/11/2020 18:31	WG1507172
1,1-Dichloropropene	U		0.00112	0.00348	1	07/11/2020 18:31	WG1507172
1,3-Dichloropropane	U		0.000697	0.00695	1	07/11/2020 18:31	WG1507172
cis-1,3-Dichloropropene	U		0.00105	0.00348	1	07/11/2020 18:31	WG1507172
trans-1,3-Dichloropropene	U		0.00159	0.00695	1	07/11/2020 18:31	WG1507172
trans-1,4-Dichloro-2-butene	U		0.00259	0.00695	1	07/11/2020 18:31	WG1507172
2,2-Dichloropropane	U		0.00192	0.00348	1	07/11/2020 18:31	WG1507172
Di-isopropyl ether	U		0.000570	0.00139	1	07/11/2020 18:31	WG1507172
Ethylbenzene	0.00452		0.00102	0.00348	1	07/11/2020 18:31	WG1507172
Hexachloro-1,3-butadiene	U		0.00834	0.0348	1	07/11/2020 18:31	WG1507172
2-Hexanone	U		0.00467	0.0348	1	07/11/2020 18:31	WG1507172
n-Hexane	0.0112		0.00314	0.00695	1	07/11/2020 18:31	WG1507172
Iodomethane	U		0.00323	0.0174	1	07/11/2020 18:31	WG1507172
Isopropylbenzene	0.00106	J	0.000591	0.00348	1	07/11/2020 18:31	WG1507172
p-Isopropyltoluene	U		0.00355	0.00695	1	07/11/2020 18:31	WG1507172
2-Butanone (MEK)	U		0.0883	0.139	1	07/11/2020 18:31	WG1507172
Methylene Chloride	U		0.00923	0.0348	1	07/11/2020 18:31	WG1507172
4-Methyl-2-pentanone (MIBK)	U		0.00317	0.0348	1	07/11/2020 18:31	WG1507172

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Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.000487	0.00139	1	07/11/2020 18:31	WG1507172
Naphthalene	U	UJ J0	0.00679	0.0174	1	07/11/2020 18:31	WG1507172
n-Propylbenzene	0.00202	J	0.00132	0.00695	1	07/11/2020 18:31	WG1507172
Styrene	U		0.000318	0.0174	1	07/11/2020 18:31	WG1507172
1,1,1,2-Tetrachloroethane	U		0.00132	0.00348	1	07/11/2020 18:31	WG1507172
1,1,2,2-Tetrachloroethane	U		0.000966	0.00348	1	07/11/2020 18:31	WG1507172
1,1,2-Trichlorotrifluoroethane	U		0.00105	0.00348	1	07/11/2020 18:31	WG1507172
Tetrachloroethene	0.00538		0.00125	0.00348	1	07/11/2020 18:31	WG1507172
Toluene	0.00495	J	0.00181	0.00695	1	07/11/2020 18:31	WG1507172
1,2,3-Trichlorobenzene	U	UJ J0	0.0102	0.0174	1	07/11/2020 18:31	WG1507172
1,2,4-Trichlorobenzene	U	UJ J0	0.00612	0.0174	1	07/11/2020 18:31	WG1507172
1,1,1-Trichloroethane	U		0.00128	0.00348	1	07/11/2020 18:31	WG1507172
1,1,2-Trichloroethane	U		0.000830	0.00348	1	07/11/2020 18:31	WG1507172
Trichloroethene	U		0.000812	0.00139	1	07/11/2020 18:31	WG1507172
Trichlorofluoromethane	U		0.00115	0.00348	1	07/11/2020 18:31	WG1507172
1,2,3-Trichloropropane	U		0.00225	0.0174	1	07/11/2020 18:31	WG1507172
1,2,4-Trimethylbenzene	0.00261	J	0.00220	0.00695	1	07/11/2020 18:31	WG1507172
1,2,3-Trimethylbenzene	0.00254	J	0.00220	0.00695	1	07/11/2020 18:31	WG1507172
1,3,5-Trimethylbenzene	U		0.00278	0.00695	1	07/11/2020 18:31	WG1507172
Vinyl acetate	U	UJ J0	0.00353	0.0174	1	07/11/2020 18:31	WG1507172
Vinyl chloride	U		0.00161	0.00348	1	07/11/2020 18:31	WG1507172
Xylenes, Total	0.0259		0.00122	0.00904	1	07/11/2020 18:31	WG1507172
(S) Toluene-d8	*104*			*75.0-131*		*07/11/2020 18:31*	WG1507172
(S) 4-Bromofluorobenzene	*93.0*			*67.0-138*		*07/11/2020 18:31*	WG1507172
(S) 1,2-Dichloroethane-d4	*96.1*			*70.0-130*		*07/11/2020 18:31*	WG1507172

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Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	86.4		1	07/11/2020 22:43	WG1507277

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch	
Acetone	U		0.0517	0.0709	1	07/12/2020 00:29	WG1507499	
Acrylonitrile	U		0.00512	0.0177	1	07/12/2020 00:29	WG1507499	
Benzene	U		0.000662	0.00142	1	07/12/2020 00:29	WG1507499	
Bromobenzene	U		0.00128	0.0177	1	07/12/2020 00:29	WG1507499	
Bromodichloromethane	U		0.00103	0.00354	1	07/12/2020 00:29	WG1507499	
Bromochloromethane	U		0.000799	0.00709	1	07/12/2020 00:29	WG1507499	
Bromoform	U		0.00166	0.0354	1	07/12/2020 00:29	WG1507499	
Bromomethane	U		0.00279	0.0177	1	07/12/2020 00:29	WG1507499	
n-Butylbenzene	U		0.00744	0.0177	1	07/12/2020 00:29	WG1507499	
sec-Butylbenzene	U		0.00408	0.0177	1	07/12/2020 00:29	WG1507499	
tert-Butylbenzene	U		0.00276	0.00709	1	07/12/2020 00:29	WG1507499	
Carbon disulfide	U		0.000992	0.0177	1	07/12/2020 00:29	WG1507499	
Carbon tetrachloride	U		0.00127	0.00709	1	07/12/2020 00:29	WG1507499	
Chlorobenzene	U		0.000298	0.00354	1	07/12/2020 00:29	WG1507499	
Chlorodibromomethane	U		0.000867	0.00354	1	07/12/2020 00:29	WG1507499	
Chloroethane	U		0.00241	0.00709	1	07/12/2020 00:29	WG1507499	
Chloroform	U		0.00146	0.00354	1	07/12/2020 00:29	WG1507499	
Chloromethane	U		0.00617	0.0177	1	07/12/2020 00:29	WG1507499	
2-Chlorotoluene	U		0.00123	0.00354	1	07/12/2020 00:29	WG1507499	
4-Chlorotoluene	U		0.000638	0.00709	1	07/12/2020 00:29	WG1507499	
1,2-Dibromo-3-Chloropropane	U	UJ J0	0.00553	0.0354	1	07/12/2020 00:29	WG1507499	
1,2-Dibromoethane	U		0.000918	0.00354	1	07/12/2020 00:29	WG1507499	
Dibromomethane	U		0.00106	0.00709	1	07/12/2020 00:29	WG1507499	
1,2-Dichlorobenzene	U		0.000602	0.00709	1	07/12/2020 00:29	WG1507499	
1,3-Dichlorobenzene	U		0.000850	0.00709	1	07/12/2020 00:29	WG1507499	
1,4-Dichlorobenzene	U		0.000992	0.00709	1	07/12/2020 00:29	WG1507499	
Dichlorodifluoromethane	U		0.00228	0.00354	1	07/12/2020 00:29	WG1507499	
1,1-Dichloroethane	U		0.000696	0.00354	1	07/12/2020 00:29	WG1507499	
1,2-Dichloroethane	U		0.000920	0.00354	1	07/12/2020 00:29	WG1507499	
1,1-Dichloroethene	U		0.000859	0.00354	1	07/12/2020 00:29	WG1507499	
cis-1,2-Dichloroethene	U		0.00104	0.00354	1	07/12/2020 00:29	WG1507499	
trans-1,2-Dichloroethene	U	~~J4~~	0.00147	0.00709	1	07/12/2020 00:29	WG1507499	
1,2-Dichloropropane	U		0.00201	0.00709	1	07/12/2020 00:29	WG1507499	
1,1-Dichloropropene	U		0.00115	0.00354	1	07/12/2020 00:29	WG1507499	
1,3-Dichloropropane	U		0.000710	0.00709	1	07/12/2020 00:29	WG1507499	
cis-1,3-Dichloropropene	U		0.00107	0.00354	1	07/12/2020 00:29	WG1507499	
trans-1,3-Dichloropropene	U		0.00162	0.00709	1	07/12/2020 00:29	WG1507499	
trans-1,4-Dichloro-2-butene	U	UJ J0	0.00264	0.00709	1	07/12/2020 00:29	WG1507499	
2,2-Dichloropropane	U		0.00196	0.00354	1	07/12/2020 00:29	WG1507499	
Di-isopropyl ether	U		0.000581	0.00142	1	07/12/2020 00:29	WG1507499	
Ethylbenzene	U		0.00104	0.00354	1	07/12/2020 00:29	WG1507499	
Hexachloro-1,3-butadiene	U		0.00850	0.0354	1	07/12/2020 00:29	WG1507499	
2-Hexanone	U		0.00476	0.0354	1	07/12/2020 00:29	WG1507499	
n-Hexane	0.00398	J	0.00320	0.00709	1	07/12/2020 00:29	WG1507499	
Iodomethane	U		0.00329	0.0177	1	07/12/2020 00:29	WG1507499	
Isopropylbenzene	U		0.000602	0.00354	1	07/12/2020 00:29	WG1507499	
p-Isopropyltoluene	U		0.00361	0.00709	1	07/12/2020 00:29	WG1507499	
2-Butanone (MEK)	U		0.0900	0.142	1	07/12/2020 00:29	WG1507499	JC 8/3/2020
Methylene Chloride	U		0.00941	0.0354	1	07/12/2020 00:29	WG1507499	
4-Methyl-2-pentanone (MIBK)	U		0.00323	0.0354	1	07/12/2020 00:29	WG1507499	

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.000496	0.00142	1	07/12/2020 00:29	WG1507499
Naphthalene	U		0.00692	0.0177	1	07/12/2020 00:29	WG1507499
n-Propylbenzene	U		0.00135	0.00709	1	07/12/2020 00:29	WG1507499
Styrene	U		0.000325	0.0177	1	07/12/2020 00:29	WG1507499
1,1,1,2-Tetrachloroethane	U		0.00134	0.00354	1	07/12/2020 00:29	WG1507499
1,1,2,2-Tetrachloroethane	U		0.000985	0.00354	1	07/12/2020 00:29	WG1507499
1,1,2-Trichlorotrifluoroethane	U		0.00107	0.00354	1	07/12/2020 00:29	WG1507499
Tetrachloroethene	U		0.00127	0.00354	1	07/12/2020 00:29	WG1507499
Toluene	U		0.00184	0.00709	1	07/12/2020 00:29	WG1507499
1,2,3-Trichlorobenzene	U		0.0104	0.0177	1	07/12/2020 00:29	WG1507499
1,2,4-Trichlorobenzene	U		0.00624	0.0177	1	07/12/2020 00:29	WG1507499
1,1,1-Trichloroethane	U		0.00131	0.00354	1	07/12/2020 00:29	WG1507499
1,1,2-Trichloroethane	U		0.000846	0.00354	1	07/12/2020 00:29	WG1507499
Trichloroethene	U		0.000828	0.00142	1	07/12/2020 00:29	WG1507499
Trichlorofluoromethane	U		0.00117	0.00354	1	07/12/2020 00:29	WG1507499
1,2,3-Trichloropropane	U		0.00230	0.0177	1	07/12/2020 00:29	WG1507499
1,2,4-Trimethylbenzene	U		0.00224	0.00709	1	07/12/2020 00:29	WG1507499
1,2,3-Trimethylbenzene	U		0.00224	0.00709	1	07/12/2020 00:29	WG1507499
1,3,5-Trimethylbenzene	U		0.00283	0.00709	1	07/12/2020 00:29	WG1507499
Vinyl acetate	U		0.00360	0.0177	1	07/12/2020 00:29	WG1507499
Vinyl chloride	U		0.00164	0.00354	1	07/12/2020 00:29	WG1507499
Xylenes, Total	0.00276	J	0.00125	0.00921	1	07/12/2020 00:29	WG1507499
(S) Toluene-d8	*103*			*75.0-131*		*07/12/2020 00:29*	WG1507499
(S) 4-Bromofluorobenzene	*90.4*			*67.0-138*		*07/12/2020 00:29*	WG1507499
(S) 1,2-Dichloroethane-d4	*99.9*			*70.0-130*		*07/12/2020 00:29*	WG1507499

JC 8/3/2020

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	88.2		1	07/11/2020 22:43	WG1507277

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	U		0.0481	0.0659	1	07/12/2020 00:48	WG1507499
Acrylonitrile	U		0.00476	0.0165	1	07/12/2020 00:48	WG1507499
Benzene	U		0.000616	0.00132	1	07/12/2020 00:48	WG1507499
Bromobenzene	U		0.00119	0.0165	1	07/12/2020 00:48	WG1507499
Bromodichloromethane	U		0.000956	0.00330	1	07/12/2020 00:48	WG1507499
Bromochloromethane	U		0.000743	0.00659	1	07/12/2020 00:48	WG1507499
Bromoform	U		0.00154	0.0330	1	07/12/2020 00:48	WG1507499
Bromomethane	U		0.00260	0.0165	1	07/12/2020 00:48	WG1507499
n-Butylbenzene	U		0.00692	0.0165	1	07/12/2020 00:48	WG1507499
sec-Butylbenzene	U		0.00380	0.0165	1	07/12/2020 00:48	WG1507499
tert-Butylbenzene	U		0.00257	0.00659	1	07/12/2020 00:48	WG1507499
Carbon disulfide	U		0.000923	0.0165	1	07/12/2020 00:48	WG1507499
Carbon tetrachloride	U		0.00118	0.00659	1	07/12/2020 00:48	WG1507499
Chlorobenzene	U		0.000277	0.00330	1	07/12/2020 00:48	WG1507499
Chlorodibromomethane	U		0.000807	0.00330	1	07/12/2020 00:48	WG1507499
Chloroethane	U		0.00224	0.00659	1	07/12/2020 00:48	WG1507499
Chloroform	U		0.00136	0.00330	1	07/12/2020 00:48	WG1507499
Chloromethane	U		0.00573	0.0165	1	07/12/2020 00:48	WG1507499
2-Chlorotoluene	U		0.00114	0.00330	1	07/12/2020 00:48	WG1507499
4-Chlorotoluene	U		0.000593	0.00659	1	07/12/2020 00:48	WG1507499
1,2-Dibromo-3-Chloropropane	U	UJ J0	0.00514	0.0330	1	07/12/2020 00:48	WG1507499
1,2-Dibromoethane	U		0.000854	0.00330	1	07/12/2020 00:48	WG1507499
Dibromomethane	U		0.000989	0.00659	1	07/12/2020 00:48	WG1507499
1,2-Dichlorobenzene	U		0.000560	0.00659	1	07/12/2020 00:48	WG1507499
1,3-Dichlorobenzene	U		0.000791	0.00659	1	07/12/2020 00:48	WG1507499
1,4-Dichlorobenzene	U		0.000923	0.00659	1	07/12/2020 00:48	WG1507499
Dichlorodifluoromethane	U		0.00212	0.00330	1	07/12/2020 00:48	WG1507499
1,1-Dichloroethane	U		0.000647	0.00330	1	07/12/2020 00:48	WG1507499
1,2-Dichloroethane	U		0.000856	0.00330	1	07/12/2020 00:48	WG1507499
1,1-Dichloroethene	U		0.000799	0.00330	1	07/12/2020 00:48	WG1507499
cis-1,2-Dichloroethene	U		0.000968	0.00330	1	07/12/2020 00:48	WG1507499
trans-1,2-Dichloroethene	U	~~J4~~	0.00137	0.00659	1	07/12/2020 00:48	WG1507499
1,2-Dichloropropane	U		0.00187	0.00659	1	07/12/2020 00:48	WG1507499
1,1-Dichloropropene	U		0.00107	0.00330	1	07/12/2020 00:48	WG1507499
1,3-Dichloropropane	U		0.000660	0.00659	1	07/12/2020 00:48	WG1507499
cis-1,3-Dichloropropene	U		0.000998	0.00330	1	07/12/2020 00:48	WG1507499
trans-1,3-Dichloropropene	U		0.00150	0.00659	1	07/12/2020 00:48	WG1507499
trans-1,4-Dichloro-2-butene	U	UJ J0	0.00245	0.00659	1	07/12/2020 00:48	WG1507499
2,2-Dichloropropane	U		0.00182	0.00330	1	07/12/2020 00:48	WG1507499
Di-isopropyl ether	U		0.000540	0.00132	1	07/12/2020 00:48	WG1507499
Ethylbenzene	U		0.000972	0.00330	1	07/12/2020 00:48	WG1507499
Hexachloro-1,3-butadiene	U		0.00791	0.0330	1	07/12/2020 00:48	WG1507499
2-Hexanone	U		0.00443	0.0330	1	07/12/2020 00:48	WG1507499
n-Hexane	U		0.00298	0.00659	1	07/12/2020 00:48	WG1507499
Iodomethane	U		0.00306	0.0165	1	07/12/2020 00:48	WG1507499
Isopropylbenzene	U		0.000560	0.00330	1	07/12/2020 00:48	WG1507499
p-Isopropyltoluene	U		0.00336	0.00659	1	07/12/2020 00:48	WG1507499
2-Butanone (MEK)	U		0.0837	0.132	1	07/12/2020 00:48	WG1507499
Methylene Chloride	U		0.00875	0.0330	1	07/12/2020 00:48	WG1507499
4-Methyl-2-pentanone (MIBK)	U		0.00301	0.0330	1	07/12/2020 00:48	WG1507499

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Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.000461	0.00132	1	07/12/2020 00:48	WG1507499
Naphthalene	U		0.00643	0.0165	1	07/12/2020 00:48	WG1507499
n-Propylbenzene	U		0.00125	0.00659	1	07/12/2020 00:48	WG1507499
Styrene	U		0.000302	0.0165	1	07/12/2020 00:48	WG1507499
1,1,1,2-Tetrachloroethane	U		0.00125	0.00330	1	07/12/2020 00:48	WG1507499
1,1,2,2-Tetrachloroethane	U		0.000916	0.00330	1	07/12/2020 00:48	WG1507499
1,1,2-Trichlorotrifluoroethane	U		0.000994	0.00330	1	07/12/2020 00:48	WG1507499
Tetrachloroethene	U		0.00118	0.00330	1	07/12/2020 00:48	WG1507499
Toluene	U		0.00171	0.00659	1	07/12/2020 00:48	WG1507499
1,2,3-Trichlorobenzene	U		0.00966	0.0165	1	07/12/2020 00:48	WG1507499
1,2,4-Trichlorobenzene	U		0.00580	0.0165	1	07/12/2020 00:48	WG1507499
1,1,1-Trichloroethane	U		0.00122	0.00330	1	07/12/2020 00:48	WG1507499
1,1,2-Trichloroethane	U		0.000787	0.00330	1	07/12/2020 00:48	WG1507499
Trichloroethene	U		0.000770	0.00132	1	07/12/2020 00:48	WG1507499
Trichlorofluoromethane	U		0.00109	0.00330	1	07/12/2020 00:48	WG1507499
1,2,3-Trichloropropane	U		0.00214	0.0165	1	07/12/2020 00:48	WG1507499
1,2,4-Trimethylbenzene	U		0.00208	0.00659	1	07/12/2020 00:48	WG1507499
1,2,3-Trimethylbenzene	U		0.00208	0.00659	1	07/12/2020 00:48	WG1507499
1,3,5-Trimethylbenzene	U		0.00264	0.00659	1	07/12/2020 00:48	WG1507499
Vinyl acetate	U		0.00335	0.0165	1	07/12/2020 00:48	WG1507499
Vinyl chloride	U		0.00153	0.00330	1	07/12/2020 00:48	WG1507499
Xylenes, Total	U		0.00116	0.00857	1	07/12/2020 00:48	WG1507499
(S) Toluene-d8	*105*			*75.0-131*		*07/12/2020 00:48*	WG1507499
(S) 4-Bromofluorobenzene	*90.8*			*67.0-138*		*07/12/2020 00:48*	WG1507499
(S) 1,2-Dichloroethane-d4	*97.3*			*70.0-130*		*07/12/2020 00:48*	WG1507499

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

JC 8/3/2020

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	88.0		1	07/11/2020 22:43	WG1507277

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	U		0.0488	0.0669	1	07/12/2020 01:07	WG1507499
Acrylonitrile	U		0.00483	0.0167	1	07/12/2020 01:07	WG1507499
Benzene	0.000864	J	0.000624	0.00134	1	07/12/2020 01:07	WG1507499
Bromobenzene	U		0.00120	0.0167	1	07/12/2020 01:07	WG1507499
Bromodichloromethane	U		0.000969	0.00334	1	07/12/2020 01:07	WG1507499
Bromochloromethane	U		0.000754	0.00669	1	07/12/2020 01:07	WG1507499
Bromoform	U		0.00156	0.0334	1	07/12/2020 01:07	WG1507499
Bromomethane	U		0.00263	0.0167	1	07/12/2020 01:07	WG1507499
n-Butylbenzene	U		0.00702	0.0167	1	07/12/2020 01:07	WG1507499
sec-Butylbenzene	U		0.00385	0.0167	1	07/12/2020 01:07	WG1507499
tert-Butylbenzene	U		0.00261	0.00669	1	07/12/2020 01:07	WG1507499
Carbon disulfide	U		0.000936	0.0167	1	07/12/2020 01:07	WG1507499
Carbon tetrachloride	U		0.00120	0.00669	1	07/12/2020 01:07	WG1507499
Chlorobenzene	U		0.000281	0.00334	1	07/12/2020 01:07	WG1507499
Chlorodibromomethane	U		0.000818	0.00334	1	07/12/2020 01:07	WG1507499
Chloroethane	U		0.00227	0.00669	1	07/12/2020 01:07	WG1507499
Chloroform	U		0.00138	0.00334	1	07/12/2020 01:07	WG1507499
Chloromethane	U		0.00582	0.0167	1	07/12/2020 01:07	WG1507499
2-Chlorotoluene	U		0.00116	0.00334	1	07/12/2020 01:07	WG1507499
4-Chlorotoluene	U		0.000602	0.00669	1	07/12/2020 01:07	WG1507499
1,2-Dibromo-3-Chloropropane	U	UJ J0	0.00521	0.0334	1	07/12/2020 01:07	WG1507499
1,2-Dibromoethane	U		0.000866	0.00334	1	07/12/2020 01:07	WG1507499
Dibromomethane	U		0.00100	0.00669	1	07/12/2020 01:07	WG1507499
1,2-Dichlorobenzene	U		0.000568	0.00669	1	07/12/2020 01:07	WG1507499
1,3-Dichlorobenzene	U		0.000802	0.00669	1	07/12/2020 01:07	WG1507499
1,4-Dichlorobenzene	U		0.000936	0.00669	1	07/12/2020 01:07	WG1507499
Dichlorodifluoromethane	U		0.00215	0.00334	1	07/12/2020 01:07	WG1507499
1,1-Dichloroethane	U		0.000656	0.00334	1	07/12/2020 01:07	WG1507499
1,2-Dichloroethane	U		0.000868	0.00334	1	07/12/2020 01:07	WG1507499
1,1-Dichloroethene	U		0.000810	0.00334	1	07/12/2020 01:07	WG1507499
cis-1,2-Dichloroethene	U		0.000981	0.00334	1	07/12/2020 01:07	WG1507499
trans-1,2-Dichloroethene	U	~~J4~~	0.00139	0.00669	1	07/12/2020 01:07	WG1507499
1,2-Dichloropropane	U		0.00190	0.00669	1	07/12/2020 01:07	WG1507499
1,1-Dichloropropene	U		0.00108	0.00334	1	07/12/2020 01:07	WG1507499
1,3-Dichloropropane	U		0.000670	0.00669	1	07/12/2020 01:07	WG1507499
cis-1,3-Dichloropropene	U		0.00101	0.00334	1	07/12/2020 01:07	WG1507499
trans-1,3-Dichloropropene	U		0.00152	0.00669	1	07/12/2020 01:07	WG1507499
trans-1,4-Dichloro-2-butene	U	UJ J0	0.00249	0.00669	1	07/12/2020 01:07	WG1507499
2,2-Dichloropropane	U		0.00185	0.00334	1	07/12/2020 01:07	WG1507499
Di-isopropyl ether	U		0.000548	0.00134	1	07/12/2020 01:07	WG1507499
Ethylbenzene	U		0.000985	0.00334	1	07/12/2020 01:07	WG1507499
Hexachloro-1,3-butadiene	U		0.00802	0.0334	1	07/12/2020 01:07	WG1507499
2-Hexanone	U		0.00449	0.0334	1	07/12/2020 01:07	WG1507499
n-Hexane	U		0.00302	0.00669	1	07/12/2020 01:07	WG1507499
Iodomethane	U		0.00310	0.0167	1	07/12/2020 01:07	WG1507499
Isopropylbenzene	U		0.000568	0.00334	1	07/12/2020 01:07	WG1507499
p-Isopropyltoluene	U		0.00341	0.00669	1	07/12/2020 01:07	WG1507499
2-Butanone (MEK)	U		0.0849	0.134	1	07/12/2020 01:07	WG1507499
Methylene Chloride	U		0.00888	0.0334	1	07/12/2020 01:07	WG1507499
4-Methyl-2-pentanone (MIBK)	U		0.00305	0.0334	1	07/12/2020 01:07	WG1507499

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Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.000468	0.00134	1	07/12/2020 01:07	WG1507499
Naphthalene	U		0.00652	0.0167	1	07/12/2020 01:07	WG1507499
n-Propylbenzene	U		0.00127	0.00669	1	07/12/2020 01:07	WG1507499
Styrene	U		0.000306	0.0167	1	07/12/2020 01:07	WG1507499
1,1,1,2-Tetrachloroethane	U		0.00127	0.00334	1	07/12/2020 01:07	WG1507499
1,1,2,2-Tetrachloroethane	U		0.000929	0.00334	1	07/12/2020 01:07	WG1507499
1,1,2-Trichlorotrifluoroethane	U		0.00101	0.00334	1	07/12/2020 01:07	WG1507499
Tetrachloroethene	U		0.00120	0.00334	1	07/12/2020 01:07	WG1507499
Toluene	U		0.00174	0.00669	1	07/12/2020 01:07	WG1507499
1,2,3-Trichlorobenzene	U		0.00980	0.0167	1	07/12/2020 01:07	WG1507499
1,2,4-Trichlorobenzene	U		0.00588	0.0167	1	07/12/2020 01:07	WG1507499
1,1,1-Trichloroethane	U		0.00123	0.00334	1	07/12/2020 01:07	WG1507499
1,1,2-Trichloroethane	U		0.000798	0.00334	1	07/12/2020 01:07	WG1507499
Trichloroethene	U		0.000781	0.00134	1	07/12/2020 01:07	WG1507499
Trichlorofluoromethane	U		0.00111	0.00334	1	07/12/2020 01:07	WG1507499
1,2,3-Trichloropropane	U		0.00217	0.0167	1	07/12/2020 01:07	WG1507499
1,2,4-Trimethylbenzene	U		0.00211	0.00669	1	07/12/2020 01:07	WG1507499
1,2,3-Trimethylbenzene	U		0.00211	0.00669	1	07/12/2020 01:07	WG1507499
1,3,5-Trimethylbenzene	U		0.00267	0.00669	1	07/12/2020 01:07	WG1507499
Vinyl acetate	U		0.00340	0.0167	1	07/12/2020 01:07	WG1507499
Vinyl chloride	U		0.00155	0.00334	1	07/12/2020 01:07	WG1507499
Xylenes, Total	U		0.00118	0.00869	1	07/12/2020 01:07	WG1507499
(S) Toluene-d8	*106*			*75.0-131*		*07/12/2020 01:07*	WG1507499
(S) 4-Bromofluorobenzene	*91.3*			*67.0-138*		*07/12/2020 01:07*	WG1507499
(S) 1,2-Dichloroethane-d4	*91.4*			*70.0-130*		*07/12/2020 01:07*	WG1507499

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Total Solids by Method 2540 G-2011

	Result	Qualifier	Dilution	Analysis	Batch
Analyte	%			date / time	
Total Solids	88.8		1	07/11/2020 22:43	WG1507277

Volatile Organic Compounds (GC/MS) by Method 8260D

	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg		date / time	
Acetone	U		0.0483	0.0662	1	07/12/2020 01:26	WG1507499
Acrylonitrile	U		0.00478	0.0165	1	07/12/2020 01:26	WG1507499
Benzene	U		0.000618	0.00132	1	07/12/2020 01:26	WG1507499
Bromobenzene	U		0.00119	0.0165	1	07/12/2020 01:26	WG1507499
Bromodichloromethane	U		0.000960	0.00331	1	07/12/2020 01:26	WG1507499
Bromochloromethane	U		0.000746	0.00662	1	07/12/2020 01:26	WG1507499
Bromoform	U		0.00155	0.0331	1	07/12/2020 01:26	WG1507499
Bromomethane	U		0.00261	0.0165	1	07/12/2020 01:26	WG1507499
n-Butylbenzene	U		0.00695	0.0165	1	07/12/2020 01:26	WG1507499
sec-Butylbenzene	U		0.00381	0.0165	1	07/12/2020 01:26	WG1507499
tert-Butylbenzene	U		0.00258	0.00662	1	07/12/2020 01:26	WG1507499
Carbon disulfide	U		0.000926	0.0165	1	07/12/2020 01:26	WG1507499
Carbon tetrachloride	U		0.00119	0.00662	1	07/12/2020 01:26	WG1507499
Chlorobenzene	U		0.000278	0.00331	1	07/12/2020 01:26	WG1507499
Chlorodibromomethane	U		0.000810	0.00331	1	07/12/2020 01:26	WG1507499
Chloroethane	U		0.00225	0.00662	1	07/12/2020 01:26	WG1507499
Chloroform	U		0.00136	0.00331	1	07/12/2020 01:26	WG1507499
Chloromethane	U		0.00576	0.0165	1	07/12/2020 01:26	WG1507499
2-Chlorotoluene	U		0.00114	0.00331	1	07/12/2020 01:26	WG1507499
4-Chlorotoluene	U		0.000596	0.00662	1	07/12/2020 01:26	WG1507499
1,2-Dibromo-3-Chloropropane	U	UJ J0	0.00516	0.0331	1	07/12/2020 01:26	WG1507499
1,2-Dibromoethane	U		0.000858	0.00331	1	07/12/2020 01:26	WG1507499
Dibromomethane	U		0.000993	0.00662	1	07/12/2020 01:26	WG1507499
1,2-Dichlorobenzene	U		0.000563	0.00662	1	07/12/2020 01:26	WG1507499
1,3-Dichlorobenzene	U		0.000794	0.00662	1	07/12/2020 01:26	WG1507499
1,4-Dichlorobenzene	U		0.000926	0.00662	1	07/12/2020 01:26	WG1507499
Dichlorodifluoromethane	U		0.00213	0.00331	1	07/12/2020 01:26	WG1507499
1,1-Dichloroethane	U		0.000650	0.00331	1	07/12/2020 01:26	WG1507499
1,2-Dichloroethane	U		0.000859	0.00331	1	07/12/2020 01:26	WG1507499
1,1-Dichloroethene	U		0.000802	0.00331	1	07/12/2020 01:26	WG1507499
cis-1,2-Dichloroethene	U		0.000971	0.00331	1	07/12/2020 01:26	WG1507499
trans-1,2-Dichloroethene	U	~~J4~~	0.00138	0.00662	1	07/12/2020 01:26	WG1507499
1,2-Dichloropropane	U		0.00188	0.00662	1	07/12/2020 01:26	WG1507499
1,1-Dichloropropene	U		0.00107	0.00331	1	07/12/2020 01:26	WG1507499
1,3-Dichloropropane	U		0.000663	0.00662	1	07/12/2020 01:26	WG1507499
cis-1,3-Dichloropropene	U		0.00100	0.00331	1	07/12/2020 01:26	WG1507499
trans-1,3-Dichloropropene	U		0.00151	0.00662	1	07/12/2020 01:26	WG1507499
trans-1,4-Dichloro-2-butene	U	UJ J0	0.00246	0.00662	1	07/12/2020 01:26	WG1507499
2,2-Dichloropropane	U		0.00183	0.00331	1	07/12/2020 01:26	WG1507499
Di-isopropyl ether	U		0.000543	0.00132	1	07/12/2020 01:26	WG1507499
Ethylbenzene	U		0.000975	0.00331	1	07/12/2020 01:26	WG1507499
Hexachloro-1,3-butadiene	U		0.00794	0.0331	1	07/12/2020 01:26	WG1507499
2-Hexanone	U		0.00445	0.0331	1	07/12/2020 01:26	WG1507499
n-Hexane	U		0.00299	0.00662	1	07/12/2020 01:26	WG1507499
Iodomethane	U		0.00307	0.0165	1	07/12/2020 01:26	WG1507499
Isopropylbenzene	U		0.000563	0.00331	1	07/12/2020 01:26	WG1507499
p-Isopropyltoluene	U		0.00338	0.00662	1	07/12/2020 01:26	WG1507499
2-Butanone (MEK)	U		0.0840	0.132	1	07/12/2020 01:26	WG1507499
Methylene Chloride	U		0.00879	0.0331	1	07/12/2020 01:26	WG1507499
4-Methyl-2-pentanone (MIBK)	U		0.00302	0.0331	1	07/12/2020 01:26	WG1507499

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Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.000463	0.00132	1	07/12/2020 01:26	WG1507499
Naphthalene	U		0.00646	0.0165	1	07/12/2020 01:26	WG1507499
n-Propylbenzene	U		0.00126	0.00662	1	07/12/2020 01:26	WG1507499
Styrene	U		0.000303	0.0165	1	07/12/2020 01:26	WG1507499
1,1,1,2-Tetrachloroethane	U		0.00125	0.00331	1	07/12/2020 01:26	WG1507499
1,1,2,2-Tetrachloroethane	U		0.000920	0.00331	1	07/12/2020 01:26	WG1507499
1,1,2-Trichlorotrifluoroethane	U		0.000998	0.00331	1	07/12/2020 01:26	WG1507499
Tetrachloroethene	U		0.00119	0.00331	1	07/12/2020 01:26	WG1507499
Toluene	U		0.00172	0.00662	1	07/12/2020 01:26	WG1507499
1,2,3-Trichlorobenzene	U		0.00970	0.0165	1	07/12/2020 01:26	WG1507499
1,2,4-Trichlorobenzene	U		0.00582	0.0165	1	07/12/2020 01:26	WG1507499
1,1,1-Trichloroethane	U		0.00122	0.00331	1	07/12/2020 01:26	WG1507499
1,1,2-Trichloroethane	U		0.000790	0.00331	1	07/12/2020 01:26	WG1507499
Trichloroethene	U		0.000773	0.00132	1	07/12/2020 01:26	WG1507499
Trichlorofluoromethane	U		0.00109	0.00331	1	07/12/2020 01:26	WG1507499
1,2,3-Trichloropropane	U		0.00214	0.0165	1	07/12/2020 01:26	WG1507499
1,2,4-Trimethylbenzene	U		0.00209	0.00662	1	07/12/2020 01:26	WG1507499
1,2,3-Trimethylbenzene	U		0.00209	0.00662	1	07/12/2020 01:26	WG1507499
1,3,5-Trimethylbenzene	U		0.00265	0.00662	1	07/12/2020 01:26	WG1507499
Vinyl acetate	U		0.00336	0.0165	1	07/12/2020 01:26	WG1507499
Vinyl chloride	U		0.00154	0.00331	1	07/12/2020 01:26	WG1507499
Xylenes, Total	U		0.00116	0.00860	1	07/12/2020 01:26	WG1507499
(S) Toluene-d8	*105*			*75.0-131*		*07/12/2020 01:26*	WG1507499
(S) 4-Bromofluorobenzene	*90.8*			*67.0-138*		*07/12/2020 01:26*	WG1507499
(S) 1,2-Dichloroethane-d4	*98.6*			*70.0-130*		*07/12/2020 01:26*	WG1507499

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Total Solids by Method 2540 G-2011

	Result	Qualifier	Dilution	Analysis	Batch
Analyte	%			date / time	
Total Solids	91.5		1	07/11/2020 22:43	WG1507277

Volatile Organic Compounds (GC/MS) by Method 8260D

	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg		date / time	
Acetone	U		0.0399	0.0547	1	07/12/2020 01:45	WG1507499
Acrylonitrile	U		0.00395	0.0137	1	07/12/2020 01:45	WG1507499
Benzene	0.0781		0.000511	0.00109	1	07/12/2020 01:45	WG1507499
Bromobenzene	U		0.000984	0.0137	1	07/12/2020 01:45	WG1507499
Bromodichloromethane	U		0.000793	0.00273	1	07/12/2020 01:45	WG1507499
Bromochloromethane	U		0.000617	0.00547	1	07/12/2020 01:45	WG1507499
Bromoform	U		0.00128	0.0273	1	07/12/2020 01:45	WG1507499
Bromomethane	U		0.00215	0.0137	1	07/12/2020 01:45	WG1507499
n-Butylbenzene	U		0.00574	0.0137	1	07/12/2020 01:45	WG1507499
sec-Butylbenzene	U		0.00315	0.0137	1	07/12/2020 01:45	WG1507499
tert-Butylbenzene	U		0.00213	0.00547	1	07/12/2020 01:45	WG1507499
Carbon disulfide	U		0.000765	0.0137	1	07/12/2020 01:45	WG1507499
Carbon tetrachloride	U		0.000982	0.00547	1	07/12/2020 01:45	WG1507499
Chlorobenzene	U		0.000230	0.00273	1	07/12/2020 01:45	WG1507499
Chlorodibromomethane	U		0.000669	0.00273	1	07/12/2020 01:45	WG1507499
Chloroethane	U		0.00186	0.00547	1	07/12/2020 01:45	WG1507499
Chloroform	U		0.00113	0.00273	1	07/12/2020 01:45	WG1507499
Chloromethane	U		0.00476	0.0137	1	07/12/2020 01:45	WG1507499
2-Chlorotoluene	U		0.000946	0.00273	1	07/12/2020 01:45	WG1507499
4-Chlorotoluene	U		0.000492	0.00547	1	07/12/2020 01:45	WG1507499
1,2-Dibromo-3-Chloropropane	U	UJ J0	0.00426	0.0273	1	07/12/2020 01:45	WG1507499
1,2-Dibromoethane	U		0.000708	0.00273	1	07/12/2020 01:45	WG1507499
Dibromomethane	U		0.000820	0.00547	1	07/12/2020 01:45	WG1507499
1,2-Dichlorobenzene	U		0.000465	0.00547	1	07/12/2020 01:45	WG1507499
1,3-Dichlorobenzene	U		0.000656	0.00547	1	07/12/2020 01:45	WG1507499
1,4-Dichlorobenzene	U		0.000765	0.00547	1	07/12/2020 01:45	WG1507499
Dichlorodifluoromethane	U		0.00176	0.00273	1	07/12/2020 01:45	WG1507499
1,1-Dichloroethane	U		0.000537	0.00273	1	07/12/2020 01:45	WG1507499
1,2-Dichloroethane	U		0.000710	0.00273	1	07/12/2020 01:45	WG1507499
1,1-Dichloroethene	U		0.000663	0.00273	1	07/12/2020 01:45	WG1507499
cis-1,2-Dichloroethene	U		0.000802	0.00273	1	07/12/2020 01:45	WG1507499
trans-1,2-Dichloroethene	U	~~J4~~	0.00114	0.00547	1	07/12/2020 01:45	WG1507499
1,2-Dichloropropane	U		0.00155	0.00547	1	07/12/2020 01:45	WG1507499
1,1-Dichloropropene	U		0.000884	0.00273	1	07/12/2020 01:45	WG1507499
1,3-Dichloropropane	U		0.000548	0.00547	1	07/12/2020 01:45	WG1507499
cis-1,3-Dichloropropene	U		0.000828	0.00273	1	07/12/2020 01:45	WG1507499
trans-1,3-Dichloropropene	U		0.00125	0.00547	1	07/12/2020 01:45	WG1507499
trans-1,4-Dichloro-2-butene	U	UJ J0	0.00203	0.00547	1	07/12/2020 01:45	WG1507499
2,2-Dichloropropane	U		0.00151	0.00273	1	07/12/2020 01:45	WG1507499
Di-isopropyl ether	U		0.000448	0.00109	1	07/12/2020 01:45	WG1507499
Ethylbenzene	0.00223	J	0.000806	0.00273	1	07/12/2020 01:45	WG1507499
Hexachloro-1,3-butadiene	U		0.00656	0.0273	1	07/12/2020 01:45	WG1507499
2-Hexanone	U		0.00367	0.0273	1	07/12/2020 01:45	WG1507499
n-Hexane	0.00980		0.00247	0.00547	1	07/12/2020 01:45	WG1507499
Iodomethane	U		0.00254	0.0137	1	07/12/2020 01:45	WG1507499
Isopropylbenzene	U		0.000465	0.00273	1	07/12/2020 01:45	WG1507499
p-Isopropyltoluene	U		0.00279	0.00547	1	07/12/2020 01:45	WG1507499
2-Butanone (MEK)	U		0.0694	0.109	1	07/12/2020 01:45	WG1507499
Methylene Chloride	U		0.00726	0.0273	1	07/12/2020 01:45	WG1507499
4-Methyl-2-pentanone (MIBK)	U		0.00249	0.0273	1	07/12/2020 01:45	WG1507499

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SV-12-5.5

Collected date/time: 07/01/20 12:00

SAMPLE RESULTS - 10

L1237982

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.000383	0.00109	1	07/12/2020 01:45	WG1507499
Naphthalene	U		0.00534	0.0137	1	07/12/2020 01:45	WG1507499
n-Propylbenzene	U		0.00104	0.00547	1	07/12/2020 01:45	WG1507499
Styrene	U		0.000250	0.0137	1	07/12/2020 01:45	WG1507499
1,1,1,2-Tetrachloroethane	U		0.00104	0.00273	1	07/12/2020 01:45	WG1507499
1,1,2,2-Tetrachloroethane	U		0.000760	0.00273	1	07/12/2020 01:45	WG1507499
1,1,2-Trichlorotrifluoroethane	U		0.000824	0.00273	1	07/12/2020 01:45	WG1507499
Tetrachloroethene	U		0.000980	0.00273	1	07/12/2020 01:45	WG1507499
Toluene	0.0160		0.00142	0.00547	1	07/12/2020 01:45	WG1507499
1,2,3-Trichlorobenzene	U		0.00801	0.0137	1	07/12/2020 01:45	WG1507499
1,2,4-Trichlorobenzene	U		0.00481	0.0137	1	07/12/2020 01:45	WG1507499
1,1,1-Trichloroethane	U		0.00101	0.00273	1	07/12/2020 01:45	WG1507499
1,1,2-Trichloroethane	U		0.000653	0.00273	1	07/12/2020 01:45	WG1507499
Trichloroethene	U		0.000638	0.00109	1	07/12/2020 01:45	WG1507499
Trichlorofluoromethane	U		0.000904	0.00273	1	07/12/2020 01:45	WG1507499
1,2,3-Trichloropropane	U		0.00177	0.0137	1	07/12/2020 01:45	WG1507499
1,2,4-Trimethylbenzene	U		0.00173	0.00547	1	07/12/2020 01:45	WG1507499
1,2,3-Trimethylbenzene	U		0.00173	0.00547	1	07/12/2020 01:45	WG1507499
1,3,5-Trimethylbenzene	U		0.00219	0.00547	1	07/12/2020 01:45	WG1507499
Vinyl acetate	U		0.00278	0.0137	1	07/12/2020 01:45	WG1507499
Vinyl chloride	U		0.00127	0.00273	1	07/12/2020 01:45	WG1507499
Xylenes, Total	0.00542	J	0.000962	0.00711	1	07/12/2020 01:45	WG1507499
(S) Toluene-d8	*106*			*75.0-131*		*07/12/2020 01:45*	WG1507499
(S) 4-Bromofluorobenzene	*90.4*			*67.0-138*		*07/12/2020 01:45*	WG1507499
(S) 1,2-Dichloroethane-d4	*98.2*			*70.0-130*		*07/12/2020 01:45*	WG1507499

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

JC 8/3/2020

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	89.7		1	07/11/2020 22:43	WG1507277

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	U		0.0468	0.0641	1	07/12/2020 02:04	WG1507499
Acrylonitrile	U		0.00463	0.0160	1	07/12/2020 02:04	WG1507499
Benzene	0.000828	J	0.000599	0.00128	1	07/12/2020 02:04	WG1507499
Bromobenzene	U		0.00115	0.0160	1	07/12/2020 02:04	WG1507499
Bromodichloromethane	U		0.000930	0.00321	1	07/12/2020 02:04	WG1507499
Bromochloromethane	U		0.000723	0.00641	1	07/12/2020 02:04	WG1507499
Bromoform	U		0.00150	0.0321	1	07/12/2020 02:04	WG1507499
Bromomethane	U		0.00253	0.0160	1	07/12/2020 02:04	WG1507499
n-Butylbenzene	U		0.00673	0.0160	1	07/12/2020 02:04	WG1507499
sec-Butylbenzene	U		0.00369	0.0160	1	07/12/2020 02:04	WG1507499
tert-Butylbenzene	U		0.00250	0.00641	1	07/12/2020 02:04	WG1507499
Carbon disulfide	U		0.000898	0.0160	1	07/12/2020 02:04	WG1507499
Carbon tetrachloride	U		0.00115	0.00641	1	07/12/2020 02:04	WG1507499
Chlorobenzene	U		0.000269	0.00321	1	07/12/2020 02:04	WG1507499
Chlorodibromomethane	U		0.000785	0.00321	1	07/12/2020 02:04	WG1507499
Chloroethane	U		0.00218	0.00641	1	07/12/2020 02:04	WG1507499
Chloroform	U		0.00132	0.00321	1	07/12/2020 02:04	WG1507499
Chloromethane	U		0.00558	0.0160	1	07/12/2020 02:04	WG1507499
2-Chlorotoluene	U		0.00111	0.00321	1	07/12/2020 02:04	WG1507499
4-Chlorotoluene	U		0.000577	0.00641	1	07/12/2020 02:04	WG1507499
1,2-Dibromo-3-Chloropropane	U	UJ J0	0.00500	0.0321	1	07/12/2020 02:04	WG1507499
1,2-Dibromoethane	U		0.000831	0.00321	1	07/12/2020 02:04	WG1507499
Dibromomethane	U		0.000962	0.00641	1	07/12/2020 02:04	WG1507499
1,2-Dichlorobenzene	U		0.000545	0.00641	1	07/12/2020 02:04	WG1507499
1,3-Dichlorobenzene	U		0.000769	0.00641	1	07/12/2020 02:04	WG1507499
1,4-Dichlorobenzene	U		0.000898	0.00641	1	07/12/2020 02:04	WG1507499
Dichlorodifluoromethane	U		0.00206	0.00321	1	07/12/2020 02:04	WG1507499
1,1-Dichloroethane	U		0.000630	0.00321	1	07/12/2020 02:04	WG1507499
1,2-Dichloroethane	U		0.000832	0.00321	1	07/12/2020 02:04	WG1507499
1,1-Dichloroethene	U		0.000777	0.00321	1	07/12/2020 02:04	WG1507499
cis-1,2-Dichloroethene	U		0.000941	0.00321	1	07/12/2020 02:04	WG1507499
trans-1,2-Dichloroethene	U	~~J4~~	0.00133	0.00641	1	07/12/2020 02:04	WG1507499
1,2-Dichloropropane	U		0.00182	0.00641	1	07/12/2020 02:04	WG1507499
1,1-Dichloropropene	U		0.00104	0.00321	1	07/12/2020 02:04	WG1507499
1,3-Dichloropropane	U		0.000643	0.00641	1	07/12/2020 02:04	WG1507499
cis-1,3-Dichloropropene	U		0.000971	0.00321	1	07/12/2020 02:04	WG1507499
trans-1,3-Dichloropropene	U		0.00146	0.00641	1	07/12/2020 02:04	WG1507499
trans-1,4-Dichloro-2-butene	U	UJ J0	0.00239	0.00641	1	07/12/2020 02:04	WG1507499
2,2-Dichloropropane	U		0.00177	0.00321	1	07/12/2020 02:04	WG1507499
Di-isopropyl ether	U		0.000526	0.00128	1	07/12/2020 02:04	WG1507499
Ethylbenzene	U		0.000945	0.00321	1	07/12/2020 02:04	WG1507499
Hexachloro-1,3-butadiene	U		0.00769	0.0321	1	07/12/2020 02:04	WG1507499
2-Hexanone	U		0.00431	0.0321	1	07/12/2020 02:04	WG1507499
n-Hexane	U		0.00290	0.00641	1	07/12/2020 02:04	WG1507499
Iodomethane	U		0.00298	0.0160	1	07/12/2020 02:04	WG1507499
Isopropylbenzene	U		0.000545	0.00321	1	07/12/2020 02:04	WG1507499
p-Isopropyltoluene	U		0.00327	0.00641	1	07/12/2020 02:04	WG1507499
2-Butanone (MEK)	U		0.0814	0.128	1	07/12/2020 02:04	WG1507499
Methylene Chloride	U		0.00852	0.0321	1	07/12/2020 02:04	WG1507499
4-Methyl-2-pentanone (MIBK)	U		0.00292	0.0321	1	07/12/2020 02:04	WG1507499

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SV-13-10.5
Collected date/time: 07/01/20 12:30

SAMPLE RESULTS - 11

L1237982

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.000449	0.00128	1	07/12/2020 02:04	WG1507499
Naphthalene	U		0.00626	0.0160	1	07/12/2020 02:04	WG1507499
n-Propylbenzene	U		0.00122	0.00641	1	07/12/2020 02:04	WG1507499
Styrene	U		0.000294	0.0160	1	07/12/2020 02:04	WG1507499
1,1,1,2-Tetrachloroethane	U		0.00122	0.00321	1	07/12/2020 02:04	WG1507499
1,1,2,2-Tetrachloroethane	U		0.000891	0.00321	1	07/12/2020 02:04	WG1507499
1,1,2-Trichlorotrifluoroethane	U		0.000967	0.00321	1	07/12/2020 02:04	WG1507499
Tetrachloroethene	U		0.00115	0.00321	1	07/12/2020 02:04	WG1507499
Toluene	U		0.00167	0.00641	1	07/12/2020 02:04	WG1507499
1,2,3-Trichlorobenzene	U		0.00940	0.0160	1	07/12/2020 02:04	WG1507499
1,2,4-Trichlorobenzene	U		0.00564	0.0160	1	07/12/2020 02:04	WG1507499
1,1,1-Trichloroethane	U		0.00118	0.00321	1	07/12/2020 02:04	WG1507499
1,1,2-Trichloroethane	U		0.000766	0.00321	1	07/12/2020 02:04	WG1507499
Trichloroethene	U		0.000749	0.00128	1	07/12/2020 02:04	WG1507499
Trichlorofluoromethane	U		0.00106	0.00321	1	07/12/2020 02:04	WG1507499
1,2,3-Trichloropropane	U		0.00208	0.0160	1	07/12/2020 02:04	WG1507499
1,2,4-Trimethylbenzene	U		0.00203	0.00641	1	07/12/2020 02:04	WG1507499
1,2,3-Trimethylbenzene	U		0.00203	0.00641	1	07/12/2020 02:04	WG1507499
1,3,5-Trimethylbenzene	U		0.00256	0.00641	1	07/12/2020 02:04	WG1507499
Vinyl acetate	U		0.00326	0.0160	1	07/12/2020 02:04	WG1507499
Vinyl chloride	U		0.00149	0.00321	1	07/12/2020 02:04	WG1507499
Xylenes, Total	U		0.00113	0.00834	1	07/12/2020 02:04	WG1507499
(S) Toluene-d8	*102*			*75.0-131*		*07/12/2020 02:04*	WG1507499
(S) 4-Bromofluorobenzene	*90.7*			*67.0-138*		*07/12/2020 02:04*	WG1507499
(S) 1,2-Dichloroethane-d4	*101*			*70.0-130*		*07/12/2020 02:04*	WG1507499

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Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	86.9		1	07/11/2020 22:43	WG1507277

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	U		0.0488	0.0668	1	07/12/2020 02:23	WG1507499
Acrylonitrile	U		0.00483	0.0167	1	07/12/2020 02:23	WG1507499
Benzene	U		0.000624	0.00134	1	07/12/2020 02:23	WG1507499
Bromobenzene	U		0.00120	0.0167	1	07/12/2020 02:23	WG1507499
Bromodichloromethane	U		0.000969	0.00334	1	07/12/2020 02:23	WG1507499
Bromochloromethane	U		0.000754	0.00668	1	07/12/2020 02:23	WG1507499
Bromoform	U		0.00156	0.0334	1	07/12/2020 02:23	WG1507499
Bromomethane	U		0.00263	0.0167	1	07/12/2020 02:23	WG1507499
n-Butylbenzene	U		0.00702	0.0167	1	07/12/2020 02:23	WG1507499
sec-Butylbenzene	U		0.00385	0.0167	1	07/12/2020 02:23	WG1507499
tert-Butylbenzene	U		0.00261	0.00668	1	07/12/2020 02:23	WG1507499
Carbon disulfide	U		0.000936	0.0167	1	07/12/2020 02:23	WG1507499
Carbon tetrachloride	U		0.00120	0.00668	1	07/12/2020 02:23	WG1507499
Chlorobenzene	U		0.000281	0.00334	1	07/12/2020 02:23	WG1507499
Chlorodibromomethane	U		0.000818	0.00334	1	07/12/2020 02:23	WG1507499
Chloroethane	U		0.00227	0.00668	1	07/12/2020 02:23	WG1507499
Chloroform	U		0.00138	0.00334	1	07/12/2020 02:23	WG1507499
Chloromethane	U		0.00582	0.0167	1	07/12/2020 02:23	WG1507499
2-Chlorotoluene	U		0.00116	0.00334	1	07/12/2020 02:23	WG1507499
4-Chlorotoluene	U		0.000602	0.00668	1	07/12/2020 02:23	WG1507499
1,2-Dibromo-3-Chloropropane	U	UJ J0	0.00521	0.0334	1	07/12/2020 02:23	WG1507499
1,2-Dibromoethane	U		0.000866	0.00334	1	07/12/2020 02:23	WG1507499
Dibromomethane	U		0.00100	0.00668	1	07/12/2020 02:23	WG1507499
1,2-Dichlorobenzene	U		0.000568	0.00668	1	07/12/2020 02:23	WG1507499
1,3-Dichlorobenzene	U		0.000802	0.00668	1	07/12/2020 02:23	WG1507499
1,4-Dichlorobenzene	U		0.000936	0.00668	1	07/12/2020 02:23	WG1507499
Dichlorodifluoromethane	U		0.00215	0.00334	1	07/12/2020 02:23	WG1507499
1,1-Dichloroethane	U		0.000656	0.00334	1	07/12/2020 02:23	WG1507499
1,2-Dichloroethane	U		0.000868	0.00334	1	07/12/2020 02:23	WG1507499
1,1-Dichloroethene	U		0.000810	0.00334	1	07/12/2020 02:23	WG1507499
cis-1,2-Dichloroethene	U		0.000981	0.00334	1	07/12/2020 02:23	WG1507499
trans-1,2-Dichloroethene	U	~~J4~~	0.00139	0.00668	1	07/12/2020 02:23	WG1507499
1,2-Dichloropropane	U		0.00190	0.00668	1	07/12/2020 02:23	WG1507499
1,1-Dichloropropene	U		0.00108	0.00334	1	07/12/2020 02:23	WG1507499
1,3-Dichloropropane	U		0.000670	0.00668	1	07/12/2020 02:23	WG1507499
cis-1,3-Dichloropropene	U		0.00101	0.00334	1	07/12/2020 02:23	WG1507499
trans-1,3-Dichloropropene	U		0.00152	0.00668	1	07/12/2020 02:23	WG1507499
trans-1,4-Dichloro-2-butene	U	UJ J0	0.00249	0.00668	1	07/12/2020 02:23	WG1507499
2,2-Dichloropropane	U		0.00184	0.00334	1	07/12/2020 02:23	WG1507499
Di-isopropyl ether	U		0.000548	0.00134	1	07/12/2020 02:23	WG1507499
Ethylbenzene	U		0.000985	0.00334	1	07/12/2020 02:23	WG1507499
Hexachloro-1,3-butadiene	U		0.00802	0.0334	1	07/12/2020 02:23	WG1507499
2-Hexanone	U		0.00449	0.0334	1	07/12/2020 02:23	WG1507499
n-Hexane	U		0.00302	0.00668	1	07/12/2020 02:23	WG1507499
Iodomethane	U		0.00310	0.0167	1	07/12/2020 02:23	WG1507499
Isopropylbenzene	U		0.000568	0.00334	1	07/12/2020 02:23	WG1507499
p-Isopropyltoluene	U		0.00341	0.00668	1	07/12/2020 02:23	WG1507499
2-Butanone (MEK)	U		0.0849	0.134	1	07/12/2020 02:23	WG1507499
Methylene Chloride	U		0.00888	0.0334	1	07/12/2020 02:23	WG1507499
4-Methyl-2-pentanone (MIBK)	U		0.00305	0.0334	1	07/12/2020 02:23	WG1507499

JC 8/3/2020

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.000468	0.00134	1	07/12/2020 02:23	WG1507499
Naphthalene	U		0.00652	0.0167	1	07/12/2020 02:23	WG1507499
n-Propylbenzene	U		0.00127	0.00668	1	07/12/2020 02:23	WG1507499
Styrene	U		0.000306	0.0167	1	07/12/2020 02:23	WG1507499
1,1,1,2-Tetrachloroethane	U		0.00127	0.00334	1	07/12/2020 02:23	WG1507499
1,1,2,2-Tetrachloroethane	U		0.000929	0.00334	1	07/12/2020 02:23	WG1507499
1,1,2-Trichlorotrifluoroethane	U		0.00101	0.00334	1	07/12/2020 02:23	WG1507499
Tetrachloroethene	U		0.00120	0.00334	1	07/12/2020 02:23	WG1507499
Toluene	U		0.00174	0.00668	1	07/12/2020 02:23	WG1507499
1,2,3-Trichlorobenzene	U		0.00980	0.0167	1	07/12/2020 02:23	WG1507499
1,2,4-Trichlorobenzene	U		0.00588	0.0167	1	07/12/2020 02:23	WG1507499
1,1,1-Trichloroethane	U		0.00123	0.00334	1	07/12/2020 02:23	WG1507499
1,1,2-Trichloroethane	U		0.000798	0.00334	1	07/12/2020 02:23	WG1507499
Trichloroethene	U		0.000781	0.00134	1	07/12/2020 02:23	WG1507499
Trichlorofluoromethane	U		0.00111	0.00334	1	07/12/2020 02:23	WG1507499
1,2,3-Trichloropropane	U		0.00217	0.0167	1	07/12/2020 02:23	WG1507499
1,2,4-Trimethylbenzene	U		0.00211	0.00668	1	07/12/2020 02:23	WG1507499
1,2,3-Trimethylbenzene	U		0.00211	0.00668	1	07/12/2020 02:23	WG1507499
1,3,5-Trimethylbenzene	U		0.00267	0.00668	1	07/12/2020 02:23	WG1507499
Vinyl acetate	U		0.00340	0.0167	1	07/12/2020 02:23	WG1507499
Vinyl chloride	U		0.00155	0.00334	1	07/12/2020 02:23	WG1507499
Xylenes, Total	U		0.00118	0.00869	1	07/12/2020 02:23	WG1507499
(S) Toluene-d8	*103*			*75.0-131*		*07/12/2020 02:23*	WG1507499
(S) 4-Bromofluorobenzene	*91.5*			*67.0-138*		*07/12/2020 02:23*	WG1507499
(S) 1,2-Dichloroethane-d4	*101*			*70.0-130*		*07/12/2020 02:23*	WG1507499

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

JC 8/3/2020

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	89.5		1	07/11/2020 22:30	WG1507398

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	U		0.0474	0.0649	1	07/12/2020 02:42	WG1507499
Acrylonitrile	U		0.00468	0.0162	1	07/12/2020 02:42	WG1507499
Benzene	U		0.000606	0.00130	1	07/12/2020 02:42	WG1507499
Bromobenzene	U		0.00117	0.0162	1	07/12/2020 02:42	WG1507499
Bromodichloromethane	U		0.000941	0.00324	1	07/12/2020 02:42	WG1507499
Bromochloromethane	U		0.000732	0.00649	1	07/12/2020 02:42	WG1507499
Bromoform	U		0.00152	0.0324	1	07/12/2020 02:42	WG1507499
Bromomethane	U		0.00256	0.0162	1	07/12/2020 02:42	WG1507499
n-Butylbenzene	U		0.00681	0.0162	1	07/12/2020 02:42	WG1507499
sec-Butylbenzene	U		0.00374	0.0162	1	07/12/2020 02:42	WG1507499
tert-Butylbenzene	U		0.00253	0.00649	1	07/12/2020 02:42	WG1507499
Carbon disulfide	U		0.000908	0.0162	1	07/12/2020 02:42	WG1507499
Carbon tetrachloride	U		0.00117	0.00649	1	07/12/2020 02:42	WG1507499
Chlorobenzene	U		0.000273	0.00324	1	07/12/2020 02:42	WG1507499
Chlorodibromomethane	U		0.000794	0.00324	1	07/12/2020 02:42	WG1507499
Chloroethane	U		0.00221	0.00649	1	07/12/2020 02:42	WG1507499
Chloroform	U		0.00134	0.00324	1	07/12/2020 02:42	WG1507499
Chloromethane	U		0.00565	0.0162	1	07/12/2020 02:42	WG1507499
2-Chlorotoluene	U		0.00112	0.00324	1	07/12/2020 02:42	WG1507499
4-Chlorotoluene	U		0.000584	0.00649	1	07/12/2020 02:42	WG1507499
1,2-Dibromo-3-Chloropropane	U	UJ J0	0.00506	0.0324	1	07/12/2020 02:42	WG1507499
1,2-Dibromoethane	U		0.000841	0.00324	1	07/12/2020 02:42	WG1507499
Dibromomethane	U		0.000973	0.00649	1	07/12/2020 02:42	WG1507499
1,2-Dichlorobenzene	U		0.000552	0.00649	1	07/12/2020 02:42	WG1507499
1,3-Dichlorobenzene	U		0.000779	0.00649	1	07/12/2020 02:42	WG1507499
1,4-Dichlorobenzene	U		0.000908	0.00649	1	07/12/2020 02:42	WG1507499
Dichlorodifluoromethane	U		0.00209	0.00324	1	07/12/2020 02:42	WG1507499
1,1-Dichloroethane	U		0.000637	0.00324	1	07/12/2020 02:42	WG1507499
1,2-Dichloroethane	U		0.000842	0.00324	1	07/12/2020 02:42	WG1507499
1,1-Dichloroethene	U		0.000786	0.00324	1	07/12/2020 02:42	WG1507499
cis-1,2-Dichloroethene	U		0.000953	0.00324	1	07/12/2020 02:42	WG1507499
trans-1,2-Dichloroethene	U	~~J4~~	0.00135	0.00649	1	07/12/2020 02:42	WG1507499
1,2-Dichloropropane	U		0.00184	0.00649	1	07/12/2020 02:42	WG1507499
1,1-Dichloropropene	U		0.00105	0.00324	1	07/12/2020 02:42	WG1507499
1,3-Dichloropropane	U		0.000650	0.00649	1	07/12/2020 02:42	WG1507499
cis-1,3-Dichloropropene	U		0.000982	0.00324	1	07/12/2020 02:42	WG1507499
trans-1,3-Dichloropropene	U		0.00148	0.00649	1	07/12/2020 02:42	WG1507499
trans-1,4-Dichloro-2-butene	U	UJ J0	0.00241	0.00649	1	07/12/2020 02:42	WG1507499
2,2-Dichloropropane	U		0.00179	0.00324	1	07/12/2020 02:42	WG1507499
Di-isopropyl ether	U		0.000532	0.00130	1	07/12/2020 02:42	WG1507499
Ethylbenzene	U		0.000956	0.00324	1	07/12/2020 02:42	WG1507499
Hexachloro-1,3-butadiene	U		0.00779	0.0324	1	07/12/2020 02:42	WG1507499
2-Hexanone	U		0.00436	0.0324	1	07/12/2020 02:42	WG1507499
n-Hexane	U		0.00293	0.00649	1	07/12/2020 02:42	WG1507499
Iodomethane	U		0.00301	0.0162	1	07/12/2020 02:42	WG1507499
Isopropylbenzene	U		0.000552	0.00324	1	07/12/2020 02:42	WG1507499
p-Isopropyltoluene	U		0.00331	0.00649	1	07/12/2020 02:42	WG1507499
2-Butanone (MEK)	U		0.0824	0.130	1	07/12/2020 02:42	WG1507499
Methylene Chloride	U		0.00862	0.0324	1	07/12/2020 02:42	WG1507499
4-Methyl-2-pentanone (MIBK)	U		0.00296	0.0324	1	07/12/2020 02:42	WG1507499

JC 8/3/2020

Volatile Organic Compounds (GC/MS) by Method 8260D

	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg		date / time	
Methyl tert-butyl ether	U		0.000454	0.00130	1	07/12/2020 02:42	WG1507499
Naphthalene	U		0.00633	0.0162	1	07/12/2020 02:42	WG1507499
n-Propylbenzene	U		0.00123	0.00649	1	07/12/2020 02:42	WG1507499
Styrene	U		0.000297	0.0162	1	07/12/2020 02:42	WG1507499
1,1,1,2-Tetrachloroethane	U		0.00123	0.00324	1	07/12/2020 02:42	WG1507499
1,1,2,2-Tetrachloroethane	U		0.000902	0.00324	1	07/12/2020 02:42	WG1507499
1,1,2-Trichlorotrifluoroethane	U		0.000979	0.00324	1	07/12/2020 02:42	WG1507499
Tetrachloroethene	U		0.00116	0.00324	1	07/12/2020 02:42	WG1507499
Toluene	U		0.00169	0.00649	1	07/12/2020 02:42	WG1507499
1,2,3-Trichlorobenzene	U		0.00951	0.0162	1	07/12/2020 02:42	WG1507499
1,2,4-Trichlorobenzene	U		0.00571	0.0162	1	07/12/2020 02:42	WG1507499
1,1,1-Trichloroethane	U		0.00120	0.00324	1	07/12/2020 02:42	WG1507499
1,1,2-Trichloroethane	U		0.000775	0.00324	1	07/12/2020 02:42	WG1507499
Trichloroethene	U		0.000758	0.00130	1	07/12/2020 02:42	WG1507499
Trichlorofluoromethane	U		0.00107	0.00324	1	07/12/2020 02:42	WG1507499
1,2,3-Trichloropropane	U		0.00210	0.0162	1	07/12/2020 02:42	WG1507499
1,2,4-Trimethylbenzene	U		0.00205	0.00649	1	07/12/2020 02:42	WG1507499
1,2,3-Trimethylbenzene	U		0.00205	0.00649	1	07/12/2020 02:42	WG1507499
1,3,5-Trimethylbenzene	U		0.00260	0.00649	1	07/12/2020 02:42	WG1507499
Vinyl acetate	U		0.00330	0.0162	1	07/12/2020 02:42	WG1507499
Vinyl chloride	U		0.00151	0.00324	1	07/12/2020 02:42	WG1507499
Xylenes, Total	U		0.00114	0.00844	1	07/12/2020 02:42	WG1507499
(S) Toluene-d8	*104*			*75.0-131*		*07/12/2020 02:42*	WG1507499
(S) 4-Bromofluorobenzene	*91.0*			*67.0-138*		*07/12/2020 02:42*	WG1507499
(S) 1,2-Dichloroethane-d4	*101*			*70.0-130*		*07/12/2020 02:42*	WG1507499

JC 8/3/2020

SV-100-5

Collected date/time: 07/02/20 09:00

SAMPLE RESULTS - 14

L1237982

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	61.0		1	07/11/2020 22:30	WG1507398

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	U		0.0867	0.119	1.06	07/12/2020 03:01	WG1507499
Acrylonitrile	U		0.00858	0.0298	1.06	07/12/2020 03:01	WG1507499
Benzene	0.0271		0.00111	0.00238	1.06	07/12/2020 03:01	WG1507499
Bromobenzene	U		0.00214	0.0298	1.06	07/12/2020 03:01	WG1507499
Bromodichloromethane	U		0.00172	0.00594	1.06	07/12/2020 03:01	WG1507499
Bromochloromethane	U		0.00134	0.0119	1.06	07/12/2020 03:01	WG1507499
Bromoform	U		0.00278	0.0594	1.06	07/12/2020 03:01	WG1507499
Bromomethane	U		0.00468	0.0298	1.06	07/12/2020 03:01	WG1507499
n-Butylbenzene	U		0.0125	0.0298	1.06	07/12/2020 03:01	WG1507499
sec-Butylbenzene	U		0.00683	0.0298	1.06	07/12/2020 03:01	WG1507499
tert-Butylbenzene	U		0.00464	0.0119	1.06	07/12/2020 03:01	WG1507499
Carbon disulfide	U		0.00166	0.0298	1.06	07/12/2020 03:01	WG1507499
Carbon tetrachloride	U		0.00213	0.0119	1.06	07/12/2020 03:01	WG1507499
Chlorobenzene	U		0.000500	0.00594	1.06	07/12/2020 03:01	WG1507499
Chlorodibromomethane	U		0.00145	0.00594	1.06	07/12/2020 03:01	WG1507499
Chloroethane	U		0.00403	0.0119	1.06	07/12/2020 03:01	WG1507499
Chloroform	U		0.00244	0.00594	1.06	07/12/2020 03:01	WG1507499
Chloromethane	U		0.0103	0.0298	1.06	07/12/2020 03:01	WG1507499
2-Chlorotoluene	U		0.00205	0.00594	1.06	07/12/2020 03:01	WG1507499
4-Chlorotoluene	U		0.00107	0.0119	1.06	07/12/2020 03:01	WG1507499
1,2-Dibromo-3-Chloropropane	U	UJ J0	0.00925	0.0594	1.06	07/12/2020 03:01	WG1507499
1,2-Dibromoethane	U		0.00154	0.00594	1.06	07/12/2020 03:01	WG1507499
Dibromomethane	U		0.00178	0.0119	1.06	07/12/2020 03:01	WG1507499
1,2-Dichlorobenzene	U		0.00101	0.0119	1.06	07/12/2020 03:01	WG1507499
1,3-Dichlorobenzene	U		0.00143	0.0119	1.06	07/12/2020 03:01	WG1507499
1,4-Dichlorobenzene	U		0.00166	0.0119	1.06	07/12/2020 03:01	WG1507499
Dichlorodifluoromethane	U		0.00383	0.00594	1.06	07/12/2020 03:01	WG1507499
1,1-Dichloroethane	U		0.00117	0.00594	1.06	07/12/2020 03:01	WG1507499
1,2-Dichloroethane	U		0.00154	0.00594	1.06	07/12/2020 03:01	WG1507499
1,1-Dichloroethene	U		0.00144	0.00594	1.06	07/12/2020 03:01	WG1507499
cis-1,2-Dichloroethene	U		0.00174	0.00594	1.06	07/12/2020 03:01	WG1507499
trans-1,2-Dichloroethene	U	~~J4~~	0.00246	0.0119	1.06	07/12/2020 03:01	WG1507499
1,2-Dichloropropane	U		0.00338	0.0119	1.06	07/12/2020 03:01	WG1507499
1,1-Dichloropropene	U		0.00192	0.00594	1.06	07/12/2020 03:01	WG1507499
1,3-Dichloropropane	U		0.00119	0.0119	1.06	07/12/2020 03:01	WG1507499
cis-1,3-Dichloropropene	U		0.00180	0.00594	1.06	07/12/2020 03:01	WG1507499
trans-1,3-Dichloropropene	U		0.00271	0.0119	1.06	07/12/2020 03:01	WG1507499
trans-1,4-Dichloro-2-butene	U	UJ J0	0.00441	0.0119	1.06	07/12/2020 03:01	WG1507499
2,2-Dichloropropane	U		0.00327	0.00594	1.06	07/12/2020 03:01	WG1507499
Di-isopropyl ether	U		0.000975	0.00238	1.06	07/12/2020 03:01	WG1507499
Ethylbenzene	0.00350	J J	0.00175	0.00594	1.06	07/12/2020 03:01	WG1507499
Hexachloro-1,3-butadiene	U		0.0143	0.0594	1.06	07/12/2020 03:01	WG1507499
2-Hexanone	U		0.00798	0.0594	1.06	07/12/2020 03:01	WG1507499
n-Hexane	0.0235	J	0.00538	0.0119	1.06	07/12/2020 03:01	WG1507499
Iodomethane	U		0.00551	0.0298	1.06	07/12/2020 03:01	WG1507499
Isopropylbenzene	0.00500	J	0.00101	0.00594	1.06	07/12/2020 03:01	WG1507499
p-Isopropyltoluene	1.34	J	0.00605	0.0119	1.06	07/12/2020 03:01	WG1507499
2-Butanone (MEK)	U		0.151	0.238	1.06	07/12/2020 03:01	WG1507499
Methylene Chloride	U		0.0158	0.0594	1.06	07/12/2020 03:01	WG1507499
4-Methyl-2-pentanone (MIBK)	U		0.00542	0.0594	1.06	07/12/2020 03:01	WG1507499

JC 8/3/2020

SV-100-5

Collected date/time: 07/02/20 09:00

SAMPLE RESULTS - 14

L1237982

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.000831	0.00238	1.06	07/12/2020 03:01	WG1507499
Naphthalene	0.0120	J	0.0116	0.0298	1.06	07/12/2020 03:01	WG1507499
n-Propylbenzene	0.00350	J	0.00226	0.0119	1.06	07/12/2020 03:01	WG1507499
Styrene	U		0.000545	0.0298	1.06	07/12/2020 03:01	WG1507499
1,1,1,2-Tetrachloroethane	U		0.00224	0.00594	1.06	07/12/2020 03:01	WG1507499
1,1,2,2-Tetrachloroethane	U		0.00165	0.00594	1.06	07/12/2020 03:01	WG1507499
1,1,2-Trichlorotrifluoroethane	U		0.00179	0.00594	1.06	07/12/2020 03:01	WG1507499
Tetrachloroethene	0.0175	J	0.00213	0.00594	1.06	07/12/2020 03:01	WG1507499
Toluene	0.0381	J	0.00309	0.0119	1.06	07/12/2020 03:01	WG1507499
1,2,3-Trichlorobenzene	U		0.0174	0.0298	1.06	07/12/2020 03:01	WG1507499
1,2,4-Trichlorobenzene	U		0.0104	0.0298	1.06	07/12/2020 03:01	WG1507499
1,1,1-Trichloroethane	U		0.00219	0.00594	1.06	07/12/2020 03:01	WG1507499
1,1,2-Trichloroethane	U		0.00142	0.00594	1.06	07/12/2020 03:01	WG1507499
Trichloroethene	U		0.00139	0.00238	1.06	07/12/2020 03:01	WG1507499
Trichlorofluoromethane	U		0.00197	0.00594	1.06	07/12/2020 03:01	WG1507499
1,2,3-Trichloropropane	U		0.00385	0.0298	1.06	07/12/2020 03:01	WG1507499
1,2,4-Trimethylbenzene	0.0166	J	0.00374	0.0119	1.06	07/12/2020 03:01	WG1507499
1,2,3-Trimethylbenzene	0.0137	J	0.00374	0.0119	1.06	07/12/2020 03:01	WG1507499
1,3,5-Trimethylbenzene	0.0160		0.00475	0.0119	1.06	07/12/2020 03:01	WG1507499
Vinyl acetate	U		0.00603	0.0298	1.06	07/12/2020 03:01	WG1507499
Vinyl chloride	U		0.00276	0.00594	1.06	07/12/2020 03:01	WG1507499
Xylenes, Total	0.0441		0.00209	0.0154	1.06	07/12/2020 03:01	WG1507499
(S) Toluene-d8	*105*			*75.0-131*		*07/12/2020 03:01*	WG1507499
(S) 4-Bromofluorobenzene	*90.6*			*67.0-138*		*07/12/2020 03:01*	WG1507499
(S) 1,2-Dichloroethane-d4	*97.8*			*70.0-130*		*07/12/2020 03:01*	WG1507499

JC 8/3/2020

SV-16-5

Collected date/time: 07/02/20 10:05

SAMPLE RESULTS - 15

L1237982

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	58.6		1	07/11/2020 22:30	WG1507398

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	U		0.0969	0.133	1.14	07/12/2020 03:19	WG1507499
Acrylonitrile	U		0.00959	0.0333	1.14	07/12/2020 03:19	WG1507499
Benzene	0.0310		0.00124	0.00265	1.14	07/12/2020 03:19	WG1507499
Bromobenzene	U		0.00240	0.0333	1.14	07/12/2020 03:19	WG1507499
Bromodichloromethane	U		0.00193	0.00664	1.14	07/12/2020 03:19	WG1507499
Bromochloromethane	U		0.00150	0.0133	1.14	07/12/2020 03:19	WG1507499
Bromoform	U		0.00310	0.0664	1.14	07/12/2020 03:19	WG1507499
Bromomethane	U		0.00524	0.0333	1.14	07/12/2020 03:19	WG1507499
n-Butylbenzene	U		0.0139	0.0333	1.14	07/12/2020 03:19	WG1507499
sec-Butylbenzene	0.00850	J	0.00764	0.0333	1.14	07/12/2020 03:19	WG1507499
tert-Butylbenzene	U		0.00517	0.0133	1.14	07/12/2020 03:19	WG1507499
Carbon disulfide	U		0.00186	0.0333	1.14	07/12/2020 03:19	WG1507499
Carbon tetrachloride	U		0.00237	0.0133	1.14	07/12/2020 03:19	WG1507499
Chlorobenzene	U		0.000556	0.00664	1.14	07/12/2020 03:19	WG1507499
Chlorodibromomethane	U		0.00163	0.00664	1.14	07/12/2020 03:19	WG1507499
Chloroethane	U		0.00452	0.0133	1.14	07/12/2020 03:19	WG1507499
Chloroform	U		0.00272	0.00664	1.14	07/12/2020 03:19	WG1507499
Chloromethane	U		0.0115	0.0333	1.14	07/12/2020 03:19	WG1507499
2-Chlorotoluene	U		0.00230	0.00664	1.14	07/12/2020 03:19	WG1507499
4-Chlorotoluene	U		0.00119	0.0133	1.14	07/12/2020 03:19	WG1507499
1,2-Dibromo-3-Chloropropane	U UJ	J0	0.0104	0.0664	1.14	07/12/2020 03:19	WG1507499
1,2-Dibromoethane	U		0.00172	0.00664	1.14	07/12/2020 03:19	WG1507499
Dibromomethane	U		0.00199	0.0133	1.14	07/12/2020 03:19	WG1507499
1,2-Dichlorobenzene	U		0.00113	0.0133	1.14	07/12/2020 03:19	WG1507499
1,3-Dichlorobenzene	U		0.00159	0.0133	1.14	07/12/2020 03:19	WG1507499
1,4-Dichlorobenzene	U		0.00186	0.0133	1.14	07/12/2020 03:19	WG1507499
Dichlorodifluoromethane	U		0.00428	0.00664	1.14	07/12/2020 03:19	WG1507499
1,1-Dichloroethane	U		0.00130	0.00664	1.14	07/12/2020 03:19	WG1507499
1,2-Dichloroethane	U		0.00172	0.00664	1.14	07/12/2020 03:19	WG1507499
1,1-Dichloroethene	U		0.00161	0.00664	1.14	07/12/2020 03:19	WG1507499
cis-1,2-Dichloroethene	U		0.00195	0.00664	1.14	07/12/2020 03:19	WG1507499
trans-1,2-Dichloroethene	U	~~J4~~	0.00277	0.0133	1.14	07/12/2020 03:19	WG1507499
1,2-Dichloropropane	U		0.00377	0.0133	1.14	07/12/2020 03:19	WG1507499
1,1-Dichloropropene	U		0.00215	0.00664	1.14	07/12/2020 03:19	WG1507499
1,3-Dichloropropane	U		0.00133	0.0133	1.14	07/12/2020 03:19	WG1507499
cis-1,3-Dichloropropene	U		0.00201	0.00664	1.14	07/12/2020 03:19	WG1507499
trans-1,3-Dichloropropene	U		0.00303	0.0133	1.14	07/12/2020 03:19	WG1507499
trans-1,4-Dichloro-2-butene	U UJ	J0	0.00494	0.0133	1.14	07/12/2020 03:19	WG1507499
2,2-Dichloropropane	U		0.00366	0.00664	1.14	07/12/2020 03:19	WG1507499
Di-isopropyl ether	U		0.00109	0.00265	1.14	07/12/2020 03:19	WG1507499
Ethylbenzene	0.0102 J		0.00196	0.00664	1.14	07/12/2020 03:19	WG1507499
Hexachloro-1,3-butadiene	U		0.0159	0.0664	1.14	07/12/2020 03:19	WG1507499
2-Hexanone	U		0.00892	0.0664	1.14	07/12/2020 03:19	WG1507499
n-Hexane	0.0373 J		0.00601	0.0133	1.14	07/12/2020 03:19	WG1507499
Iodomethane	U		0.00615	0.0333	1.14	07/12/2020 03:19	WG1507499
Isopropylbenzene	0.00843		0.00113	0.00664	1.14	07/12/2020 03:19	WG1507499
p-Isopropyltoluene	0.950 J		0.00678	0.0133	1.14	07/12/2020 03:19	WG1507499
2-Butanone (MEK)	0.254	J	0.169	0.265	1.14	07/12/2020 03:19	WG1507499
Methylene Chloride	U		0.0176	0.0664	1.14	07/12/2020 03:19	WG1507499
4-Methyl-2-pentanone (MIBK)	U		0.00605	0.0664	1.14	07/12/2020 03:19	WG1507499

JC 8/3/2020

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.000929	0.00265	1.14	07/12/2020 03:19	WG1507499
Naphthalene	0.0190	J	0.0129	0.0333	1.14	07/12/2020 03:19	WG1507499
n-Propylbenzene	0.00782	J	0.00251	0.0133	1.14	07/12/2020 03:19	WG1507499
Styrene	U		0.000608	0.0333	1.14	07/12/2020 03:19	WG1507499
1,1,1,2-Tetrachloroethane	U		0.00251	0.00664	1.14	07/12/2020 03:19	WG1507499
1,1,2,2-Tetrachloroethane	U		0.00184	0.00664	1.14	07/12/2020 03:19	WG1507499
1,1,2-Trichlorotrifluoroethane	U		0.00200	0.00664	1.14	07/12/2020 03:19	WG1507499
Tetrachloroethene	0.0237	J	0.00237	0.00664	1.14	07/12/2020 03:19	WG1507499
Toluene	0.0538	J	0.00345	0.0133	1.14	07/12/2020 03:19	WG1507499
1,2,3-Trichlorobenzene	U		0.0195	0.0333	1.14	07/12/2020 03:19	WG1507499
1,2,4-Trichlorobenzene	U		0.0117	0.0333	1.14	07/12/2020 03:19	WG1507499
1,1,1-Trichloroethane	U		0.00244	0.00664	1.14	07/12/2020 03:19	WG1507499
1,1,2-Trichloroethane	U		0.00159	0.00664	1.14	07/12/2020 03:19	WG1507499
Trichloroethene	U		0.00155	0.00265	1.14	07/12/2020 03:19	WG1507499
Trichlorofluoromethane	U		0.00220	0.00664	1.14	07/12/2020 03:19	WG1507499
1,2,3-Trichloropropane	U		0.00431	0.0333	1.14	07/12/2020 03:19	WG1507499
1,2,4-Trimethylbenzene	0.0356	J	0.00419	0.0133	1.14	07/12/2020 03:19	WG1507499
1,2,3-Trimethylbenzene	0.0321	J	0.00419	0.0133	1.14	07/12/2020 03:19	WG1507499
1,3,5-Trimethylbenzene	0.0206		0.00531	0.0133	1.14	07/12/2020 03:19	WG1507499
Vinyl acetate	U		0.00675	0.0333	1.14	07/12/2020 03:19	WG1507499
Vinyl chloride	U		0.00307	0.00664	1.14	07/12/2020 03:19	WG1507499
Xylenes, Total	0.0743		0.00233	0.0173	1.14	07/12/2020 03:19	WG1507499
(S) Toluene-d8	*102*			*75.0-131*		*07/12/2020 03:19*	WG1507499
(S) 4-Bromofluorobenzene	*90.5*			*67.0-138*		*07/12/2020 03:19*	WG1507499
(S) 1,2-Dichloroethane-d4	*100*			*70.0-130*		*07/12/2020 03:19*	WG1507499

JC 8/3/2020

SV-17-4.5

Collected date/time: 07/02/20 11:47

SAMPLE RESULTS - 16

L1237982

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	67.7		1	07/11/2020 22:30	WG1507398

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	U		0.0719	0.0983	1.01	07/12/2020 03:38	WG1507499
Acrylonitrile	U		0.00711	0.0245	1.01	07/12/2020 03:38	WG1507499
Benzene	0.0148		0.000919	0.00197	1.01	07/12/2020 03:38	WG1507499
Bromobenzene	U		0.00177	0.0245	1.01	07/12/2020 03:38	WG1507499
Bromodichloromethane	U		0.00143	0.00493	1.01	07/12/2020 03:38	WG1507499
Bromochloromethane	U		0.00111	0.00983	1.01	07/12/2020 03:38	WG1507499
Bromoform	U		0.00230	0.0493	1.01	07/12/2020 03:38	WG1507499
Bromomethane	U		0.00388	0.0245	1.01	07/12/2020 03:38	WG1507499
n-Butylbenzene	U		0.0103	0.0245	1.01	07/12/2020 03:38	WG1507499
sec-Butylbenzene	0.00606	J	0.00567	0.0245	1.01	07/12/2020 03:38	WG1507499
tert-Butylbenzene	U		0.00384	0.00983	1.01	07/12/2020 03:38	WG1507499
Carbon disulfide	U		0.00138	0.0245	1.01	07/12/2020 03:38	WG1507499
Carbon tetrachloride	U		0.00177	0.00983	1.01	07/12/2020 03:38	WG1507499
Chlorobenzene	U		0.000413	0.00493	1.01	07/12/2020 03:38	WG1507499
Chlorodibromomethane	U		0.00120	0.00493	1.01	07/12/2020 03:38	WG1507499
Chloroethane	U		0.00335	0.00983	1.01	07/12/2020 03:38	WG1507499
Chloroform	U		0.00203	0.00493	1.01	07/12/2020 03:38	WG1507499
Chloromethane	U		0.00855	0.0245	1.01	07/12/2020 03:38	WG1507499
2-Chlorotoluene	U		0.00170	0.00493	1.01	07/12/2020 03:38	WG1507499
4-Chlorotoluene	U		0.000886	0.00983	1.01	07/12/2020 03:38	WG1507499
1,2-Dibromo-3-Chloropropane	U UJ	J0	0.00767	0.0493	1.01	07/12/2020 03:38	WG1507499
1,2-Dibromoethane	U		0.00127	0.00493	1.01	07/12/2020 03:38	WG1507499
Dibromomethane	U		0.00147	0.00983	1.01	07/12/2020 03:38	WG1507499
1,2-Dichlorobenzene	U		0.000835	0.00983	1.01	07/12/2020 03:38	WG1507499
1,3-Dichlorobenzene	U		0.00118	0.00983	1.01	07/12/2020 03:38	WG1507499
1,4-Dichlorobenzene	U		0.00138	0.00983	1.01	07/12/2020 03:38	WG1507499
Dichlorodifluoromethane	U		0.00317	0.00493	1.01	07/12/2020 03:38	WG1507499
1,1-Dichloroethane	U		0.000966	0.00493	1.01	07/12/2020 03:38	WG1507499
1,2-Dichloroethane	U		0.00128	0.00493	1.01	07/12/2020 03:38	WG1507499
1,1-Dichloroethene	U		0.00119	0.00493	1.01	07/12/2020 03:38	WG1507499
cis-1,2-Dichloroethene	U		0.00144	0.00493	1.01	07/12/2020 03:38	WG1507499
trans-1,2-Dichloroethene	U	~~J4~~	0.00204	0.00983	1.01	07/12/2020 03:38	WG1507499
1,2-Dichloropropane	U		0.00278	0.00983	1.01	07/12/2020 03:38	WG1507499
1,1-Dichloropropene	U		0.00159	0.00493	1.01	07/12/2020 03:38	WG1507499
1,3-Dichloropropane	U		0.000985	0.00983	1.01	07/12/2020 03:38	WG1507499
cis-1,3-Dichloropropene	U		0.00149	0.00493	1.01	07/12/2020 03:38	WG1507499
trans-1,3-Dichloropropene	U		0.00224	0.00983	1.01	07/12/2020 03:38	WG1507499
trans-1,4-Dichloro-2-butene	U UJ	J0	0.00366	0.00983	1.01	07/12/2020 03:38	WG1507499
2,2-Dichloropropane	U		0.00271	0.00493	1.01	07/12/2020 03:38	WG1507499
Di-isopropyl ether	U		0.000806	0.00197	1.01	07/12/2020 03:38	WG1507499
Ethylbenzene	0.0104		0.00145	0.00493	1.01	07/12/2020 03:38	WG1507499
Hexachloro-1,3-butadiene	U		0.0118	0.0493	1.01	07/12/2020 03:38	WG1507499
2-Hexanone	U		0.00660	0.0493	1.01	07/12/2020 03:38	WG1507499
n-Hexane	0.0539		0.00444	0.00983	1.01	07/12/2020 03:38	WG1507499
Iodomethane	U		0.00456	0.0245	1.01	07/12/2020 03:38	WG1507499
Isopropylbenzene	0.00654		0.000835	0.00493	1.01	07/12/2020 03:38	WG1507499
p-Isopropyltoluene	0.0428		0.00502	0.00983	1.01	07/12/2020 03:38	WG1507499
2-Butanone (MEK)	U		0.125	0.197	1.01	07/12/2020 03:38	WG1507499
Methylene Chloride	U		0.0131	0.0493	1.01	07/12/2020 03:38	WG1507499
4-Methyl-2-pentanone (MIBK)	U		0.00448	0.0493	1.01	07/12/2020 03:38	WG1507499

JC 8/3/2020

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.000687	0.00197	1.01	07/12/2020 03:38	WG1507499
Naphthalene	0.0724		0.00960	0.0245	1.01	07/12/2020 03:38	WG1507499
n-Propylbenzene	0.00906	J	0.00187	0.00983	1.01	07/12/2020 03:38	WG1507499
Styrene	U		0.000450	0.0245	1.01	07/12/2020 03:38	WG1507499
1,1,1,2-Tetrachloroethane	U		0.00186	0.00493	1.01	07/12/2020 03:38	WG1507499
1,1,2,2-Tetrachloroethane	U		0.00137	0.00493	1.01	07/12/2020 03:38	WG1507499
1,1,2-Trichlorotrifluoroethane	U		0.00148	0.00493	1.01	07/12/2020 03:38	WG1507499
Tetrachloroethene	0.00584		0.00176	0.00493	1.01	07/12/2020 03:38	WG1507499
Toluene	0.0678		0.00255	0.00983	1.01	07/12/2020 03:38	WG1507499
1,2,3-Trichlorobenzene	U		0.0144	0.0245	1.01	07/12/2020 03:38	WG1507499
1,2,4-Trichlorobenzene	U		0.00865	0.0245	1.01	07/12/2020 03:38	WG1507499
1,1,1-Trichloroethane	U		0.00182	0.00493	1.01	07/12/2020 03:38	WG1507499
1,1,2-Trichloroethane	U		0.00117	0.00493	1.01	07/12/2020 03:38	WG1507499
Trichloroethene	U		0.00115	0.00197	1.01	07/12/2020 03:38	WG1507499
Trichlorofluoromethane	U		0.00163	0.00493	1.01	07/12/2020 03:38	WG1507499
1,2,3-Trichloropropane	U		0.00319	0.0245	1.01	07/12/2020 03:38	WG1507499
1,2,4-Trimethylbenzene	0.0586		0.00312	0.00983	1.01	07/12/2020 03:38	WG1507499
1,2,3-Trimethylbenzene	0.0567		0.00312	0.00983	1.01	07/12/2020 03:38	WG1507499
1,3,5-Trimethylbenzene	0.0278		0.00393	0.00983	1.01	07/12/2020 03:38	WG1507499
Vinyl acetate	U		0.00500	0.0245	1.01	07/12/2020 03:38	WG1507499
Vinyl chloride	U		0.00228	0.00493	1.01	07/12/2020 03:38	WG1507499
Xylenes, Total	0.126		0.00173	0.0128	1.01	07/12/2020 03:38	WG1507499
(S) Toluene-d8	*104*			*75.0-131*		*07/12/2020 03:38*	WG1507499
(S) 4-Bromofluorobenzene	*91.6*			*67.0-138*		*07/12/2020 03:38*	WG1507499
(S) 1,2-Dichloroethane-d4	*100*			*70.0-130*		*07/12/2020 03:38*	WG1507499

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Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	92.8		1	07/11/2020 20:35	WG1507399

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	U		0.0393	0.0539	1	07/12/2020 03:57	WG1507499
Acrylonitrile	U		0.00389	0.0135	1	07/12/2020 03:57	WG1507499
Benzene	U		0.000503	0.00108	1	07/12/2020 03:57	WG1507499
Bromobenzene	U		0.000970	0.0135	1	07/12/2020 03:57	WG1507499
Bromodichloromethane	U		0.000781	0.00269	1	07/12/2020 03:57	WG1507499
Bromochloromethane	U		0.000608	0.00539	1	07/12/2020 03:57	WG1507499
Bromoform	U		0.00126	0.0269	1	07/12/2020 03:57	WG1507499
Bromomethane	U		0.00212	0.0135	1	07/12/2020 03:57	WG1507499
n-Butylbenzene	U		0.00566	0.0135	1	07/12/2020 03:57	WG1507499
sec-Butylbenzene	U		0.00310	0.0135	1	07/12/2020 03:57	WG1507499
tert-Butylbenzene	U		0.00210	0.00539	1	07/12/2020 03:57	WG1507499
Carbon disulfide	U		0.000754	0.0135	1	07/12/2020 03:57	WG1507499
Carbon tetrachloride	U		0.000968	0.00539	1	07/12/2020 03:57	WG1507499
Chlorobenzene	U		0.000226	0.00269	1	07/12/2020 03:57	WG1507499
Chlorodibromomethane	U		0.000660	0.00269	1	07/12/2020 03:57	WG1507499
Chloroethane	U		0.00183	0.00539	1	07/12/2020 03:57	WG1507499
Chloroform	U		0.00111	0.00269	1	07/12/2020 03:57	WG1507499
Chloromethane	U		0.00469	0.0135	1	07/12/2020 03:57	WG1507499
2-Chlorotoluene	U		0.000932	0.00269	1	07/12/2020 03:57	WG1507499
4-Chlorotoluene	U		0.000485	0.00539	1	07/12/2020 03:57	WG1507499
1,2-Dibromo-3-Chloropropane	U	UJ J0	0.00420	0.0269	1	07/12/2020 03:57	WG1507499
1,2-Dibromoethane	U		0.000698	0.00269	1	07/12/2020 03:57	WG1507499
Dibromomethane	U		0.000808	0.00539	1	07/12/2020 03:57	WG1507499
1,2-Dichlorobenzene	U		0.000458	0.00539	1	07/12/2020 03:57	WG1507499
1,3-Dichlorobenzene	U		0.000647	0.00539	1	07/12/2020 03:57	WG1507499
1,4-Dichlorobenzene	U		0.000754	0.00539	1	07/12/2020 03:57	WG1507499
Dichlorodifluoromethane	U		0.00173	0.00269	1	07/12/2020 03:57	WG1507499
1,1-Dichloroethane	U		0.000529	0.00269	1	07/12/2020 03:57	WG1507499
1,2-Dichloroethane	U		0.000699	0.00269	1	07/12/2020 03:57	WG1507499
1,1-Dichloroethene	U		0.000653	0.00269	1	07/12/2020 03:57	WG1507499
cis-1,2-Dichloroethene	U		0.000791	0.00269	1	07/12/2020 03:57	WG1507499
trans-1,2-Dichloroethene	U	~~J4~~	0.00112	0.00539	1	07/12/2020 03:57	WG1507499
1,2-Dichloropropane	U		0.00153	0.00539	1	07/12/2020 03:57	WG1507499
1,1-Dichloropropene	U		0.000872	0.00269	1	07/12/2020 03:57	WG1507499
1,3-Dichloropropane	U		0.000540	0.00539	1	07/12/2020 03:57	WG1507499
cis-1,3-Dichloropropene	U		0.000816	0.00269	1	07/12/2020 03:57	WG1507499
trans-1,3-Dichloropropene	U		0.00123	0.00539	1	07/12/2020 03:57	WG1507499
trans-1,4-Dichloro-2-butene	U	UJ J0	0.00200	0.00539	1	07/12/2020 03:57	WG1507499
2,2-Dichloropropane	U		0.00149	0.00269	1	07/12/2020 03:57	WG1507499
Di-isopropyl ether	U		0.000442	0.00108	1	07/12/2020 03:57	WG1507499
Ethylbenzene	U		0.000794	0.00269	1	07/12/2020 03:57	WG1507499
Hexachloro-1,3-butadiene	U		0.00647	0.0269	1	07/12/2020 03:57	WG1507499
2-Hexanone	U		0.00362	0.0269	1	07/12/2020 03:57	WG1507499
n-Hexane	0.00345	J	0.00244	0.00539	1	07/12/2020 03:57	WG1507499
Iodomethane	U		0.00250	0.0135	1	07/12/2020 03:57	WG1507499
Isopropylbenzene	U		0.000458	0.00269	1	07/12/2020 03:57	WG1507499
p-Isopropyltoluene	U		0.00275	0.00539	1	07/12/2020 03:57	WG1507499
2-Butanone (MEK)	U		0.0684	0.108	1	07/12/2020 03:57	WG1507499
Methylene Chloride	U		0.00716	0.0269	1	07/12/2020 03:57	WG1507499
4-Methyl-2-pentanone (MIBK)	U		0.00246	0.0269	1	07/12/2020 03:57	WG1507499

JC 8/3/2020

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.000377	0.00108	1	07/12/2020 03:57	WG1507499
Naphthalene	U		0.00526	0.0135	1	07/12/2020 03:57	WG1507499
n-Propylbenzene	U		0.00102	0.00539	1	07/12/2020 03:57	WG1507499
Styrene	U		0.000247	0.0135	1	07/12/2020 03:57	WG1507499
1,1,1,2-Tetrachloroethane	U		0.00102	0.00269	1	07/12/2020 03:57	WG1507499
1,1,2,2-Tetrachloroethane	U		0.000749	0.00269	1	07/12/2020 03:57	WG1507499
1,1,2-Trichlorotrifluoroethane	U		0.000813	0.00269	1	07/12/2020 03:57	WG1507499
Tetrachloroethene	U		0.000966	0.00269	1	07/12/2020 03:57	WG1507499
Toluene	U		0.00140	0.00539	1	07/12/2020 03:57	WG1507499
1,2,3-Trichlorobenzene	U		0.00790	0.0135	1	07/12/2020 03:57	WG1507499
1,2,4-Trichlorobenzene	U		0.00474	0.0135	1	07/12/2020 03:57	WG1507499
1,1,1-Trichloroethane	U		0.000995	0.00269	1	07/12/2020 03:57	WG1507499
1,1,2-Trichloroethane	U		0.000643	0.00269	1	07/12/2020 03:57	WG1507499
Trichloroethene	U		0.000629	0.00108	1	07/12/2020 03:57	WG1507499
Trichlorofluoromethane	U		0.000891	0.00269	1	07/12/2020 03:57	WG1507499
1,2,3-Trichloropropane	U		0.00175	0.0135	1	07/12/2020 03:57	WG1507499
1,2,4-Trimethylbenzene	U		0.00170	0.00539	1	07/12/2020 03:57	WG1507499
1,2,3-Trimethylbenzene	U		0.00170	0.00539	1	07/12/2020 03:57	WG1507499
1,3,5-Trimethylbenzene	U		0.00216	0.00539	1	07/12/2020 03:57	WG1507499
Vinyl acetate	U		0.00274	0.0135	1	07/12/2020 03:57	WG1507499
Vinyl chloride	U		0.00125	0.00269	1	07/12/2020 03:57	WG1507499
Xylenes, Total	U		0.000948	0.00700	1	07/12/2020 03:57	WG1507499
(S) Toluene-d8	*103*			*75.0-131*		*07/12/2020 03:57*	WG1507499
(S) 4-Bromofluorobenzene	*89.7*			*67.0-138*		*07/12/2020 03:57*	WG1507499
(S) 1,2-Dichloroethane-d4	*99.7*			*70.0-130*		*07/12/2020 03:57*	WG1507499

JC 8/3/2020

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	92.9		1	07/15/2020 21:57	WG1509520

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	U	~~J3~~	0.0393	0.0538	1	07/17/2020 00:52	WG1510393
Acrylonitrile	U		0.00389	0.0135	1	07/17/2020 00:52	WG1510393
Benzene	0.00338		0.000503	0.00108	1	07/17/2020 00:52	WG1510393
Bromobenzene	U		0.000969	0.0135	1	07/17/2020 00:52	WG1510393
Bromodichloromethane	U		0.000781	0.00269	1	07/17/2020 00:52	WG1510393
Bromochloromethane	U		0.000607	0.00538	1	07/17/2020 00:52	WG1510393
Bromoform	U		0.00126	0.0269	1	07/17/2020 00:52	WG1510393
Bromomethane	U		0.00212	0.0135	1	07/17/2020 00:52	WG1510393
n-Butylbenzene	U		0.00565	0.0135	1	07/17/2020 00:52	WG1510393
sec-Butylbenzene	U		0.00310	0.0135	1	07/17/2020 00:52	WG1510393
tert-Butylbenzene	U		0.00210	0.00538	1	07/17/2020 00:52	WG1510393
Carbon disulfide	U	~~J3~~	0.000754	0.0135	1	07/17/2020 00:52	WG1510393
Carbon tetrachloride	U		0.000967	0.00538	1	07/17/2020 00:52	WG1510393
Chlorobenzene	U		0.000226	0.00269	1	07/17/2020 00:52	WG1510393
Chlorodibromomethane	U		0.000659	0.00269	1	07/17/2020 00:52	WG1510393
Chloroethane	U		0.00183	0.00538	1	07/17/2020 00:52	WG1510393
Chloroform	U		0.00111	0.00269	1	07/17/2020 00:52	WG1510393
Chloromethane	U		0.00468	0.0135	1	07/17/2020 00:52	WG1510393
2-Chlorotoluene	U		0.000932	0.00269	1	07/17/2020 00:52	WG1510393
4-Chlorotoluene	U		0.000485	0.00538	1	07/17/2020 00:52	WG1510393
1,2-Dibromo-3-Chloropropane	U		0.00420	0.0269	1	07/17/2020 00:52	WG1510393
1,2-Dibromoethane	U		0.000698	0.00269	1	07/17/2020 00:52	WG1510393
Dibromomethane	U		0.000808	0.00538	1	07/17/2020 00:52	WG1510393
1,2-Dichlorobenzene	U		0.000458	0.00538	1	07/17/2020 00:52	WG1510393
1,3-Dichlorobenzene	U		0.000646	0.00538	1	07/17/2020 00:52	WG1510393
1,4-Dichlorobenzene	U		0.000754	0.00538	1	07/17/2020 00:52	WG1510393
Dichlorodifluoromethane	U		0.00173	0.00269	1	07/17/2020 00:52	WG1510393
1,1-Dichloroethane	U		0.000529	0.00269	1	07/17/2020 00:52	WG1510393
1,2-Dichloroethane	U		0.000699	0.00269	1	07/17/2020 00:52	WG1510393
1,1-Dichloroethene	U		0.000653	0.00269	1	07/17/2020 00:52	WG1510393
cis-1,2-Dichloroethene	U		0.000790	0.00269	1	07/17/2020 00:52	WG1510393
trans-1,2-Dichloroethene	U		0.00112	0.00538	1	07/17/2020 00:52	WG1510393
1,2-Dichloropropane	U		0.00153	0.00538	1	07/17/2020 00:52	WG1510393
1,1-Dichloropropene	U		0.000871	0.00269	1	07/17/2020 00:52	WG1510393
1,3-Dichloropropane	U		0.000540	0.00538	1	07/17/2020 00:52	WG1510393
cis-1,3-Dichloropropene	U		0.000815	0.00269	1	07/17/2020 00:52	WG1510393
trans-1,3-Dichloropropene	U		0.00123	0.00538	1	07/17/2020 00:52	WG1510393
trans-1,4-Dichloro-2-butene	U		0.00200	0.00538	1	07/17/2020 00:52	WG1510393
2,2-Dichloropropane	U		0.00149	0.00269	1	07/17/2020 00:52	WG1510393
Di-isopropyl ether	U		0.000442	0.00108	1	07/17/2020 00:52	WG1510393
Ethylbenzene	U		0.000794	0.00269	1	07/17/2020 00:52	WG1510393
Hexachloro-1,3-butadiene	U		0.00646	0.0269	1	07/17/2020 00:52	WG1510393
2-Hexanone	U		0.00362	0.0269	1	07/17/2020 00:52	WG1510393
n-Hexane	U	~~J4~~	0.00243	0.00538	1	07/17/2020 00:52	WG1510393
Iodomethane	U		0.00250	0.0135	1	07/17/2020 00:52	WG1510393
Isopropylbenzene	U		0.000458	0.00269	1	07/17/2020 00:52	WG1510393
p-Isopropyltoluene	U		0.00275	0.00538	1	07/17/2020 00:52	WG1510393
2-Butanone (MEK)	U		0.0684	0.108	1	07/17/2020 00:52	WG1510393
Methylene Chloride	U		0.00715	0.0269	1	07/17/2020 00:52	WG1510393
4-Methyl-2-pentanone (MIBK)	U		0.00246	0.0269	1	07/17/2020 00:52	WG1510393

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Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.000377	0.00108	1	07/17/2020 00:52	WG1510393
Naphthalene	U		0.00526	0.0135	1	07/17/2020 00:52	WG1510393
n-Propylbenzene	U		0.00102	0.00538	1	07/17/2020 00:52	WG1510393
Styrene	U		0.000247	0.0135	1	07/17/2020 00:52	WG1510393
1,1,1,2-Tetrachloroethane	U		0.00102	0.00269	1	07/17/2020 00:52	WG1510393
1,1,2,2-Tetrachloroethane	U		0.000748	0.00269	1	07/17/2020 00:52	WG1510393
1,1,2-Trichlorotrifluoroethane	U		0.000812	0.00269	1	07/17/2020 00:52	WG1510393
Tetrachloroethene	0.00169	J	0.000965	0.00269	1	07/17/2020 00:52	WG1510393
Toluene	U		0.00140	0.00538	1	07/17/2020 00:52	WG1510393
1,2,3-Trichlorobenzene	U		0.00789	0.0135	1	07/17/2020 00:52	WG1510393
1,2,4-Trichlorobenzene	U		0.00474	0.0135	1	07/17/2020 00:52	WG1510393
1,1,1-Trichloroethane	U		0.000994	0.00269	1	07/17/2020 00:52	WG1510393
1,1,2-Trichloroethane	U		0.000643	0.00269	1	07/17/2020 00:52	WG1510393
Trichloroethene	U		0.000629	0.00108	1	07/17/2020 00:52	WG1510393
Trichlorofluoromethane	U		0.000891	0.00269	1	07/17/2020 00:52	WG1510393
1,2,3-Trichloropropane	U		0.00174	0.0135	1	07/17/2020 00:52	WG1510393
1,2,4-Trimethylbenzene	U		0.00170	0.00538	1	07/17/2020 00:52	WG1510393
1,2,3-Trimethylbenzene	U		0.00170	0.00538	1	07/17/2020 00:52	WG1510393
1,3,5-Trimethylbenzene	U		0.00215	0.00538	1	07/17/2020 00:52	WG1510393
Vinyl acetate	U		0.00274	0.0135	1	07/17/2020 00:52	WG1510393
Vinyl chloride	U		0.00125	0.00269	1	07/17/2020 00:52	WG1510393
Xylenes, Total	U		0.000948	0.00700	1	07/17/2020 00:52	WG1510393
(S) Toluene-d8	*108*			*75.0-131*		*07/17/2020 00:52*	WG1510393
(S) 4-Bromofluorobenzene	*105*			*67.0-138*		*07/17/2020 00:52*	WG1510393
(S) 1,2-Dichloroethane-d4	*107*			*70.0-130*		*07/17/2020 00:52*	WG1510393

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SV-20-9

Collected date/time: 07/09/20 09:55

SAMPLE RESULTS - 02

L1238798

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	84.8		1	07/15/2020 21:57	WG1509520

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	U	~~J3~~	0.0517	0.0708	1	07/17/2020 01:12	WG1510393
Acrylonitrile	U		0.00511	0.0177	1	07/17/2020 01:12	WG1510393
Benzene	U		0.000661	0.00142	1	07/17/2020 01:12	WG1510393
Bromobenzene	U		0.00127	0.0177	1	07/17/2020 01:12	WG1510393
Bromodichloromethane	U		0.00103	0.00354	1	07/17/2020 01:12	WG1510393
Bromochloromethane	U		0.000798	0.00708	1	07/17/2020 01:12	WG1510393
Bromoform	U		0.00166	0.0354	1	07/17/2020 01:12	WG1510393
Bromomethane	U		0.00279	0.0177	1	07/17/2020 01:12	WG1510393
n-Butylbenzene	U		0.00743	0.0177	1	07/17/2020 01:12	WG1510393
sec-Butylbenzene	U		0.00408	0.0177	1	07/17/2020 01:12	WG1510393
tert-Butylbenzene	U		0.00276	0.00708	1	07/17/2020 01:12	WG1510393
Carbon disulfide	U	~~J3~~	0.000991	0.0177	1	07/17/2020 01:12	WG1510393
Carbon tetrachloride	U		0.00127	0.00708	1	07/17/2020 01:12	WG1510393
Chlorobenzene	U		0.000297	0.00354	1	07/17/2020 01:12	WG1510393
Chlorodibromomethane	U		0.000866	0.00354	1	07/17/2020 01:12	WG1510393
Chloroethane	U		0.00241	0.00708	1	07/17/2020 01:12	WG1510393
Chloroform	U		0.00146	0.00354	1	07/17/2020 01:12	WG1510393
Chloromethane	U		0.00616	0.0177	1	07/17/2020 01:12	WG1510393
2-Chlorotoluene	U		0.00122	0.00354	1	07/17/2020 01:12	WG1510393
4-Chlorotoluene	U		0.000637	0.00708	1	07/17/2020 01:12	WG1510393
1,2-Dibromo-3-Chloropropane	U		0.00552	0.0354	1	07/17/2020 01:12	WG1510393
1,2-Dibromoethane	U		0.000917	0.00354	1	07/17/2020 01:12	WG1510393
Dibromomethane	U		0.00106	0.00708	1	07/17/2020 01:12	WG1510393
1,2-Dichlorobenzene	U		0.000602	0.00708	1	07/17/2020 01:12	WG1510393
1,3-Dichlorobenzene	U		0.000849	0.00708	1	07/17/2020 01:12	WG1510393
1,4-Dichlorobenzene	U		0.000991	0.00708	1	07/17/2020 01:12	WG1510393
Dichlorodifluoromethane	U		0.00228	0.00354	1	07/17/2020 01:12	WG1510393
1,1-Dichloroethane	U		0.000695	0.00354	1	07/17/2020 01:12	WG1510393
1,2-Dichloroethane	U		0.000919	0.00354	1	07/17/2020 01:12	WG1510393
1,1-Dichloroethene	U		0.000858	0.00354	1	07/17/2020 01:12	WG1510393
cis-1,2-Dichloroethene	U		0.00104	0.00354	1	07/17/2020 01:12	WG1510393
trans-1,2-Dichloroethene	U		0.00147	0.00708	1	07/17/2020 01:12	WG1510393
1,2-Dichloropropane	U		0.00201	0.00708	1	07/17/2020 01:12	WG1510393
1,1-Dichloropropene	U		0.00115	0.00354	1	07/17/2020 01:12	WG1510393
1,3-Dichloropropane	U		0.000709	0.00708	1	07/17/2020 01:12	WG1510393
cis-1,3-Dichloropropene	U		0.00107	0.00354	1	07/17/2020 01:12	WG1510393
trans-1,3-Dichloropropene	U		0.00161	0.00708	1	07/17/2020 01:12	WG1510393
trans-1,4-Dichloro-2-butene	U		0.00263	0.00708	1	07/17/2020 01:12	WG1510393
2,2-Dichloropropane	U		0.00195	0.00354	1	07/17/2020 01:12	WG1510393
Di-isopropyl ether	U		0.000580	0.00142	1	07/17/2020 01:12	WG1510393
Ethylbenzene	U		0.00104	0.00354	1	07/17/2020 01:12	WG1510393
Hexachloro-1,3-butadiene	U		0.00849	0.0354	1	07/17/2020 01:12	WG1510393
2-Hexanone	U		0.00476	0.0354	1	07/17/2020 01:12	WG1510393
n-Hexane	U	~~J4~~	0.00320	0.00708	1	07/17/2020 01:12	WG1510393
Iodomethane	U		0.00328	0.0177	1	07/17/2020 01:12	WG1510393
Isopropylbenzene	U		0.000602	0.00354	1	07/17/2020 01:12	WG1510393
p-Isopropyltoluene	U		0.00361	0.00708	1	07/17/2020 01:12	WG1510393
2-Butanone (MEK)	U		0.0899	0.142	1	07/17/2020 01:12	WG1510393
Methylene Chloride	U		0.00940	0.0354	1	07/17/2020 01:12	WG1510393
4-Methyl-2-pentanone (MIBK)	U		0.00323	0.0354	1	07/17/2020 01:12	WG1510393

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Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.000495	0.00142	1	07/17/2020 01:12	WG1510393
Naphthalene	U		0.00691	0.0177	1	07/17/2020 01:12	WG1510393
n-Propylbenzene	U		0.00134	0.00708	1	07/17/2020 01:12	WG1510393
Styrene	U		0.000324	0.0177	1	07/17/2020 01:12	WG1510393
1,1,1,2-Tetrachloroethane	U		0.00134	0.00354	1	07/17/2020 01:12	WG1510393
1,1,2,2-Tetrachloroethane	U		0.000984	0.00354	1	07/17/2020 01:12	WG1510393
1,1,2-Trichlorotrifluoroethane	U		0.00107	0.00354	1	07/17/2020 01:12	WG1510393
Tetrachloroethene	0.00275	J	0.00127	0.00354	1	07/17/2020 01:12	WG1510393
Toluene	U		0.00184	0.00708	1	07/17/2020 01:12	WG1510393
1,2,3-Trichlorobenzene	U		0.0104	0.0177	1	07/17/2020 01:12	WG1510393
1,2,4-Trichlorobenzene	U		0.00623	0.0177	1	07/17/2020 01:12	WG1510393
1,1,1-Trichloroethane	U		0.00131	0.00354	1	07/17/2020 01:12	WG1510393
1,1,2-Trichloroethane	U		0.000845	0.00354	1	07/17/2020 01:12	WG1510393
Trichloroethene	U		0.000827	0.00142	1	07/17/2020 01:12	WG1510393
Trichlorofluoromethane	U		0.00117	0.00354	1	07/17/2020 01:12	WG1510393
1,2,3-Trichloropropane	U		0.00229	0.0177	1	07/17/2020 01:12	WG1510393
1,2,4-Trimethylbenzene	U		0.00224	0.00708	1	07/17/2020 01:12	WG1510393
1,2,3-Trimethylbenzene	U		0.00224	0.00708	1	07/17/2020 01:12	WG1510393
1,3,5-Trimethylbenzene	U		0.00283	0.00708	1	07/17/2020 01:12	WG1510393
Vinyl acetate	U		0.00360	0.0177	1	07/17/2020 01:12	WG1510393
Vinyl chloride	U		0.00164	0.00354	1	07/17/2020 01:12	WG1510393
Xylenes, Total	U		0.00125	0.00920	1	07/17/2020 01:12	WG1510393
(S) Toluene-d8	*108*			*75.0-131*		*07/17/2020 01:12*	WG1510393
(S) 4-Bromofluorobenzene	*104*			*67.0-138*		*07/17/2020 01:12*	WG1510393
(S) 1,2-Dichloroethane-d4	*103*			*70.0-130*		*07/17/2020 01:12*	WG1510393

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

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Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	91.3		1	07/15/2020 21:57	WG1509520

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	U	~~J3~~	0.0400	0.0548	1	07/17/2020 01:32	WG1510393
Acrylonitrile	U		0.00396	0.0137	1	07/17/2020 01:32	WG1510393
Benzene	U		0.000512	0.00110	1	07/17/2020 01:32	WG1510393
Bromobenzene	U		0.000986	0.0137	1	07/17/2020 01:32	WG1510393
Bromodichloromethane	U		0.000795	0.00274	1	07/17/2020 01:32	WG1510393
Bromochloromethane	U		0.000618	0.00548	1	07/17/2020 01:32	WG1510393
Bromoform	U		0.00128	0.0274	1	07/17/2020 01:32	WG1510393
Bromomethane	U		0.00216	0.0137	1	07/17/2020 01:32	WG1510393
n-Butylbenzene	U		0.00575	0.0137	1	07/17/2020 01:32	WG1510393
sec-Butylbenzene	U		0.00316	0.0137	1	07/17/2020 01:32	WG1510393
tert-Butylbenzene	U		0.00214	0.00548	1	07/17/2020 01:32	WG1510393
Carbon disulfide	U	~~J3~~	0.000767	0.0137	1	07/17/2020 01:32	WG1510393
Carbon tetrachloride	U		0.000984	0.00548	1	07/17/2020 01:32	WG1510393
Chlorobenzene	U		0.000230	0.00274	1	07/17/2020 01:32	WG1510393
Chlorodibromomethane	U		0.000671	0.00274	1	07/17/2020 01:32	WG1510393
Chloroethane	U		0.00186	0.00548	1	07/17/2020 01:32	WG1510393
Chloroform	U		0.00113	0.00274	1	07/17/2020 01:32	WG1510393
Chloromethane	U		0.00477	0.0137	1	07/17/2020 01:32	WG1510393
2-Chlorotoluene	U		0.000948	0.00274	1	07/17/2020 01:32	WG1510393
4-Chlorotoluene	U		0.000493	0.00548	1	07/17/2020 01:32	WG1510393
1,2-Dibromo-3-Chloropropane	U		0.00427	0.0274	1	07/17/2020 01:32	WG1510393
1,2-Dibromoethane	U		0.000710	0.00274	1	07/17/2020 01:32	WG1510393
Dibromomethane	U		0.000822	0.00548	1	07/17/2020 01:32	WG1510393
1,2-Dichlorobenzene	U		0.000466	0.00548	1	07/17/2020 01:32	WG1510393
1,3-Dichlorobenzene	U		0.000658	0.00548	1	07/17/2020 01:32	WG1510393
1,4-Dichlorobenzene	U		0.000767	0.00548	1	07/17/2020 01:32	WG1510393
Dichlorodifluoromethane	U		0.00176	0.00274	1	07/17/2020 01:32	WG1510393
1,1-Dichloroethane	U		0.000538	0.00274	1	07/17/2020 01:32	WG1510393
1,2-Dichloroethane	U		0.000711	0.00274	1	07/17/2020 01:32	WG1510393
1,1-Dichloroethene	U		0.000664	0.00274	1	07/17/2020 01:32	WG1510393
cis-1,2-Dichloroethene	U		0.000804	0.00274	1	07/17/2020 01:32	WG1510393
trans-1,2-Dichloroethene	U		0.00114	0.00548	1	07/17/2020 01:32	WG1510393
1,2-Dichloropropane	U		0.00156	0.00548	1	07/17/2020 01:32	WG1510393
1,1-Dichloropropene	U		0.000887	0.00274	1	07/17/2020 01:32	WG1510393
1,3-Dichloropropane	U		0.000549	0.00548	1	07/17/2020 01:32	WG1510393
cis-1,3-Dichloropropene	U		0.000830	0.00274	1	07/17/2020 01:32	WG1510393
trans-1,3-Dichloropropene	U		0.00125	0.00548	1	07/17/2020 01:32	WG1510393
trans-1,4-Dichloro-2-butene	U		0.00204	0.00548	1	07/17/2020 01:32	WG1510393
2,2-Dichloropropane	U		0.00151	0.00274	1	07/17/2020 01:32	WG1510393
Di-isopropyl ether	U		0.000449	0.00110	1	07/17/2020 01:32	WG1510393
Ethylbenzene	U		0.000808	0.00274	1	07/17/2020 01:32	WG1510393
Hexachloro-1,3-butadiene	U		0.00658	0.0274	1	07/17/2020 01:32	WG1510393
2-Hexanone	U		0.00368	0.0274	1	07/17/2020 01:32	WG1510393
n-Hexane	U	~~J4~~	0.00248	0.00548	1	07/17/2020 01:32	WG1510393
Iodomethane	U		0.00254	0.0137	1	07/17/2020 01:32	WG1510393
Isopropylbenzene	U		0.000466	0.00274	1	07/17/2020 01:32	WG1510393
p-Isopropyltoluene	U		0.00279	0.00548	1	07/17/2020 01:32	WG1510393
2-Butanone (MEK)	U		0.0696	0.110	1	07/17/2020 01:32	WG1510393
Methylene Chloride	U		0.00728	0.0274	1	07/17/2020 01:32	WG1510393
4-Methyl-2-pentanone (MIBK)	U		0.00250	0.0274	1	07/17/2020 01:32	WG1510393

JC 8/3/2020

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.000384	0.00110	1	07/17/2020 01:32	WG1510393
Naphthalene	U		0.00535	0.0137	1	07/17/2020 01:32	WG1510393
n-Propylbenzene	U		0.00104	0.00548	1	07/17/2020 01:32	WG1510393
Styrene	U		0.000251	0.0137	1	07/17/2020 01:32	WG1510393
1,1,1,2-Tetrachloroethane	U		0.00104	0.00274	1	07/17/2020 01:32	WG1510393
1,1,2,2-Tetrachloroethane	U		0.000762	0.00274	1	07/17/2020 01:32	WG1510393
1,1,2-Trichlorotrifluoroethane	U		0.000826	0.00274	1	07/17/2020 01:32	WG1510393
Tetrachloroethene	0.00117	J	0.000982	0.00274	1	07/17/2020 01:32	WG1510393
Toluene	U		0.00142	0.00548	1	07/17/2020 01:32	WG1510393
1,2,3-Trichlorobenzene	U		0.00803	0.0137	1	07/17/2020 01:32	WG1510393
1,2,4-Trichlorobenzene	U		0.00482	0.0137	1	07/17/2020 01:32	WG1510393
1,1,1-Trichloroethane	U		0.00101	0.00274	1	07/17/2020 01:32	WG1510393
1,1,2-Trichloroethane	U		0.000654	0.00274	1	07/17/2020 01:32	WG1510393
Trichloroethene	U		0.000640	0.00110	1	07/17/2020 01:32	WG1510393
Trichlorofluoromethane	U		0.000906	0.00274	1	07/17/2020 01:32	WG1510393
1,2,3-Trichloropropane	U		0.00178	0.0137	1	07/17/2020 01:32	WG1510393
1,2,4-Trimethylbenzene	U		0.00173	0.00548	1	07/17/2020 01:32	WG1510393
1,2,3-Trimethylbenzene	U		0.00173	0.00548	1	07/17/2020 01:32	WG1510393
1,3,5-Trimethylbenzene	U		0.00219	0.00548	1	07/17/2020 01:32	WG1510393
Vinyl acetate	U		0.00278	0.0137	1	07/17/2020 01:32	WG1510393
Vinyl chloride	U		0.00127	0.00274	1	07/17/2020 01:32	WG1510393
Xylenes, Total	U		0.000964	0.00712	1	07/17/2020 01:32	WG1510393
(S) Toluene-d8	*105*			*75.0-131*		*07/17/2020 01:32*	WG1510393
(S) 4-Bromofluorobenzene	*102*			*67.0-138*		*07/17/2020 01:32*	WG1510393
(S) 1,2-Dichloroethane-d4	*97.7*			*70.0-130*		*07/17/2020 01:32*	WG1510393

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

JC 8/3/2020

SV-22-8.5

Collected date/time: 07/09/20 11:20

SAMPLE RESULTS - 04

L1238798

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	67.7		1	07/15/2020 21:43	WG1509525

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	U	~~J3~~	0.0746	0.102	1.06	07/17/2020 01:52	WG1510393
Acrylonitrile	U		0.00738	0.0256	1.06	07/17/2020 01:52	WG1510393
Benzene	0.00128	J	0.000954	0.00204	1.06	07/17/2020 01:52	WG1510393
Bromobenzene	U		0.00184	0.0256	1.06	07/17/2020 01:52	WG1510393
Bromodichloromethane	U		0.00148	0.00511	1.06	07/17/2020 01:52	WG1510393
Bromochloromethane	U		0.00115	0.0102	1.06	07/17/2020 01:52	WG1510393
Bromoform	U		0.00239	0.0511	1.06	07/17/2020 01:52	WG1510393
Bromomethane	U		0.00403	0.0256	1.06	07/17/2020 01:52	WG1510393
n-Butylbenzene	U		0.0107	0.0256	1.06	07/17/2020 01:52	WG1510393
sec-Butylbenzene	U		0.00588	0.0256	1.06	07/17/2020 01:52	WG1510393
tert-Butylbenzene	U		0.00399	0.0102	1.06	07/17/2020 01:52	WG1510393
Carbon disulfide	U	~~J3~~	0.00143	0.0256	1.06	07/17/2020 01:52	WG1510393
Carbon tetrachloride	U		0.00183	0.0102	1.06	07/17/2020 01:52	WG1510393
Chlorobenzene	U		0.000430	0.00511	1.06	07/17/2020 01:52	WG1510393
Chlorodibromomethane	U		0.00125	0.00511	1.06	07/17/2020 01:52	WG1510393
Chloroethane	U		0.00347	0.0102	1.06	07/17/2020 01:52	WG1510393
Chloroform	U		0.00210	0.00511	1.06	07/17/2020 01:52	WG1510393
Chloromethane	U		0.00888	0.0256	1.06	07/17/2020 01:52	WG1510393
2-Chlorotoluene	U		0.00177	0.00511	1.06	07/17/2020 01:52	WG1510393
4-Chlorotoluene	U		0.000919	0.0102	1.06	07/17/2020 01:52	WG1510393
1,2-Dibromo-3-Chloropropane	U		0.00796	0.0511	1.06	07/17/2020 01:52	WG1510393
1,2-Dibromoethane	U		0.00132	0.00511	1.06	07/17/2020 01:52	WG1510393
Dibromomethane	U		0.00153	0.0102	1.06	07/17/2020 01:52	WG1510393
1,2-Dichlorobenzene	U		0.000869	0.0102	1.06	07/17/2020 01:52	WG1510393
1,3-Dichlorobenzene	U		0.00123	0.0102	1.06	07/17/2020 01:52	WG1510393
1,4-Dichlorobenzene	U		0.00143	0.0102	1.06	07/17/2020 01:52	WG1510393
Dichlorodifluoromethane	U		0.00330	0.00511	1.06	07/17/2020 01:52	WG1510393
1,1-Dichloroethane	U		0.00100	0.00511	1.06	07/17/2020 01:52	WG1510393
1,2-Dichloroethane	U		0.00133	0.00511	1.06	07/17/2020 01:52	WG1510393
1,1-Dichloroethene	U		0.00124	0.00511	1.06	07/17/2020 01:52	WG1510393
cis-1,2-Dichloroethene	U		0.00150	0.00511	1.06	07/17/2020 01:52	WG1510393
trans-1,2-Dichloroethene	U		0.00212	0.0102	1.06	07/17/2020 01:52	WG1510393
1,2-Dichloropropane	U		0.00291	0.0102	1.06	07/17/2020 01:52	WG1510393
1,1-Dichloropropene	U		0.00165	0.00511	1.06	07/17/2020 01:52	WG1510393
1,3-Dichloropropane	U		0.00102	0.0102	1.06	07/17/2020 01:52	WG1510393
cis-1,3-Dichloropropene	U		0.00155	0.00511	1.06	07/17/2020 01:52	WG1510393
trans-1,3-Dichloropropene	U		0.00233	0.0102	1.06	07/17/2020 01:52	WG1510393
trans-1,4-Dichloro-2-butene	U		0.00380	0.0102	1.06	07/17/2020 01:52	WG1510393
2,2-Dichloropropane	U		0.00281	0.00511	1.06	07/17/2020 01:52	WG1510393
Di-isopropyl ether	U		0.000838	0.00204	1.06	07/17/2020 01:52	WG1510393
Ethylbenzene	U		0.00151	0.00511	1.06	07/17/2020 01:52	WG1510393
Hexachloro-1,3-butadiene	U		0.0123	0.0511	1.06	07/17/2020 01:52	WG1510393
2-Hexanone	U		0.00686	0.0511	1.06	07/17/2020 01:52	WG1510393
n-Hexane	0.00516 J	J ~~J4~~	0.00462	0.0102	1.06	07/17/2020 01:52	WG1510393
Iodomethane	U		0.00474	0.0256	1.06	07/17/2020 01:52	WG1510393
Isopropylbenzene	U		0.000869	0.00511	1.06	07/17/2020 01:52	WG1510393
p-Isopropyltoluene	0.0157		0.00520	0.0102	1.06	07/17/2020 01:52	WG1510393
2-Butanone (MEK)	U		0.130	0.204	1.06	07/17/2020 01:52	WG1510393
Methylene Chloride	U		0.0136	0.0511	1.06	07/17/2020 01:52	WG1510393
4-Methyl-2-pentanone (MIBK)	U		0.00466	0.0511	1.06	07/17/2020 01:52	WG1510393

JC 8/3/2020

SV-22-8.5

Collected date/time: 07/09/20 11:20

SAMPLE RESULTS - 04

L1238798

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.000715	0.00204	1.06	07/17/2020 01:52	WG1510393
Naphthalene	U		0.00996	0.0256	1.06	07/17/2020 01:52	WG1510393
n-Propylbenzene	U		0.00195	0.0102	1.06	07/17/2020 01:52	WG1510393
Styrene	U		0.000468	0.0256	1.06	07/17/2020 01:52	WG1510393
1,1,1,2-Tetrachloroethane	U		0.00193	0.00511	1.06	07/17/2020 01:52	WG1510393
1,1,2,2-Tetrachloroethane	U		0.00142	0.00511	1.06	07/17/2020 01:52	WG1510393
1,1,2-Trichlorotrifluoroethane	U		0.00154	0.00511	1.06	07/17/2020 01:52	WG1510393
Tetrachloroethene	0.00705		0.00183	0.00511	1.06	07/17/2020 01:52	WG1510393
Toluene	0.00520	J	0.00266	0.0102	1.06	07/17/2020 01:52	WG1510393
1,2,3-Trichlorobenzene	U		0.0150	0.0256	1.06	07/17/2020 01:52	WG1510393
1,2,4-Trichlorobenzene	U		0.00898	0.0256	1.06	07/17/2020 01:52	WG1510393
1,1,1-Trichloroethane	U		0.00188	0.00511	1.06	07/17/2020 01:52	WG1510393
1,1,2-Trichloroethane	U		0.00122	0.00511	1.06	07/17/2020 01:52	WG1510393
Trichloroethene	U		0.00119	0.00204	1.06	07/17/2020 01:52	WG1510393
Trichlorofluoromethane	U		0.00169	0.00511	1.06	07/17/2020 01:52	WG1510393
1,2,3-Trichloropropane	U		0.00331	0.0256	1.06	07/17/2020 01:52	WG1510393
1,2,4-Trimethylbenzene	0.00495	J	0.00322	0.0102	1.06	07/17/2020 01:52	WG1510393
1,2,3-Trimethylbenzene	0.00489	J	0.00322	0.0102	1.06	07/17/2020 01:52	WG1510393
1,3,5-Trimethylbenzene	U		0.00409	0.0102	1.06	07/17/2020 01:52	WG1510393
Vinyl acetate	U		0.00518	0.0256	1.06	07/17/2020 01:52	WG1510393
Vinyl chloride	U		0.00237	0.00511	1.06	07/17/2020 01:52	WG1510393
Xylenes, Total	0.0113	J	0.00180	0.0133	1.06	07/17/2020 01:52	WG1510393
(S) Toluene-d8	*109*			*75.0-131*		*07/17/2020 01:52*	WG1510393
(S) 4-Bromofluorobenzene	*102*			*67.0-138*		*07/17/2020 01:52*	WG1510393
(S) 1,2-Dichloroethane-d4	*99.7*			*70.0-130*		*07/17/2020 01:52*	WG1510393

JC 8/3/2020

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	82.5		1	07/15/2020 21:43	WG1509525

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	U	~~J3~~	0.0552	0.0756	1	07/17/2020 02:12	WG1510393
Acrylonitrile	U		0.00546	0.0189	1	07/17/2020 02:12	WG1510393
Benzene	U		0.000706	0.00151	1	07/17/2020 02:12	WG1510393
Bromobenzene	U		0.00136	0.0189	1	07/17/2020 02:12	WG1510393
Bromodichloromethane	U		0.00110	0.00378	1	07/17/2020 02:12	WG1510393
Bromochloromethane	U		0.000853	0.00756	1	07/17/2020 02:12	WG1510393
Bromoform	U		0.00177	0.0378	1	07/17/2020 02:12	WG1510393
Bromomethane	U		0.00298	0.0189	1	07/17/2020 02:12	WG1510393
n-Butylbenzene	U		0.00794	0.0189	1	07/17/2020 02:12	WG1510393
sec-Butylbenzene	U		0.00435	0.0189	1	07/17/2020 02:12	WG1510393
tert-Butylbenzene	U		0.00295	0.00756	1	07/17/2020 02:12	WG1510393
Carbon disulfide	0.00177	J ~~J3~~	0.00106	0.0189	1	07/17/2020 02:12	WG1510393
Carbon tetrachloride	U		0.00136	0.00756	1	07/17/2020 02:12	WG1510393
Chlorobenzene	U		0.000318	0.00378	1	07/17/2020 02:12	WG1510393
Chlorodibromomethane	U		0.000925	0.00378	1	07/17/2020 02:12	WG1510393
Chloroethane	U		0.00257	0.00756	1	07/17/2020 02:12	WG1510393
Chloroform	U		0.00156	0.00378	1	07/17/2020 02:12	WG1510393
Chloromethane	U		0.00658	0.0189	1	07/17/2020 02:12	WG1510393
2-Chlorotoluene	U		0.00131	0.00378	1	07/17/2020 02:12	WG1510393
4-Chlorotoluene	U		0.000680	0.00756	1	07/17/2020 02:12	WG1510393
1,2-Dibromo-3-Chloropropane	U		0.00590	0.0378	1	07/17/2020 02:12	WG1510393
1,2-Dibromoethane	U		0.000980	0.00378	1	07/17/2020 02:12	WG1510393
Dibromomethane	U		0.00113	0.00756	1	07/17/2020 02:12	WG1510393
1,2-Dichlorobenzene	U		0.000643	0.00756	1	07/17/2020 02:12	WG1510393
1,3-Dichlorobenzene	U		0.000907	0.00756	1	07/17/2020 02:12	WG1510393
1,4-Dichlorobenzene	U		0.00106	0.00756	1	07/17/2020 02:12	WG1510393
Dichlorodifluoromethane	U		0.00243	0.00378	1	07/17/2020 02:12	WG1510393
1,1-Dichloroethane	U		0.000742	0.00378	1	07/17/2020 02:12	WG1510393
1,2-Dichloroethane	U		0.000981	0.00378	1	07/17/2020 02:12	WG1510393
1,1-Dichloroethene	U		0.000916	0.00378	1	07/17/2020 02:12	WG1510393
cis-1,2-Dichloroethene	U		0.00111	0.00378	1	07/17/2020 02:12	WG1510393
trans-1,2-Dichloroethene	U		0.00157	0.00756	1	07/17/2020 02:12	WG1510393
1,2-Dichloropropane	U		0.00215	0.00756	1	07/17/2020 02:12	WG1510393
1,1-Dichloropropene	U		0.00122	0.00378	1	07/17/2020 02:12	WG1510393
1,3-Dichloropropane	U		0.000757	0.00756	1	07/17/2020 02:12	WG1510393
cis-1,3-Dichloropropene	U		0.00114	0.00378	1	07/17/2020 02:12	WG1510393
trans-1,3-Dichloropropene	U		0.00172	0.00756	1	07/17/2020 02:12	WG1510393
trans-1,4-Dichloro-2-butene	U		0.00281	0.00756	1	07/17/2020 02:12	WG1510393
2,2-Dichloropropane	U		0.00209	0.00378	1	07/17/2020 02:12	WG1510393
Di-isopropyl ether	U		0.000620	0.00151	1	07/17/2020 02:12	WG1510393
Ethylbenzene	U		0.00111	0.00378	1	07/17/2020 02:12	WG1510393
Hexachloro-1,3-butadiene	U		0.00907	0.0378	1	07/17/2020 02:12	WG1510393
2-Hexanone	U		0.00508	0.0378	1	07/17/2020 02:12	WG1510393
n-Hexane	U	~~J4~~	0.00342	0.00756	1	07/17/2020 02:12	WG1510393
Iodomethane	U		0.00351	0.0189	1	07/17/2020 02:12	WG1510393
Isopropylbenzene	U		0.000643	0.00378	1	07/17/2020 02:12	WG1510393
p-Isopropyltoluene	U		0.00386	0.00756	1	07/17/2020 02:12	WG1510393
2-Butanone (MEK)	U		0.0960	0.151	1	07/17/2020 02:12	WG1510393
Methylene Chloride	U		0.0100	0.0378	1	07/17/2020 02:12	WG1510393
4-Methyl-2-pentanone (MIBK)	U		0.00345	0.0378	1	07/17/2020 02:12	WG1510393

JC 8/3/2020

SV-23-4.5

Collected date/time: 07/09/20 14:10

SAMPLE RESULTS - 05

L1238798

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.000529	0.00151	1	07/17/2020 02:12	WG1510393
Naphthalene	U		0.00738	0.0189	1	07/17/2020 02:12	WG1510393
n-Propylbenzene	U		0.00144	0.00756	1	07/17/2020 02:12	WG1510393
Styrene	U		0.000346	0.0189	1	07/17/2020 02:12	WG1510393
1,1,1,2-Tetrachloroethane	U		0.00143	0.00378	1	07/17/2020 02:12	WG1510393
1,1,2,2-Tetrachloroethane	U		0.00105	0.00378	1	07/17/2020 02:12	WG1510393
1,1,2-Trichlorotrifluoroethane	U		0.00114	0.00378	1	07/17/2020 02:12	WG1510393
Tetrachloroethene	U		0.00135	0.00378	1	07/17/2020 02:12	WG1510393
Toluene	U		0.00197	0.00756	1	07/17/2020 02:12	WG1510393
1,2,3-Trichlorobenzene	U		0.0111	0.0189	1	07/17/2020 02:12	WG1510393
1,2,4-Trichlorobenzene	U		0.00665	0.0189	1	07/17/2020 02:12	WG1510393
1,1,1-Trichloroethane	U		0.00140	0.00378	1	07/17/2020 02:12	WG1510393
1,1,2-Trichloroethane	U		0.000903	0.00378	1	07/17/2020 02:12	WG1510393
Trichloroethene	U		0.000883	0.00151	1	07/17/2020 02:12	WG1510393
Trichlorofluoromethane	U		0.00125	0.00378	1	07/17/2020 02:12	WG1510393
1,2,3-Trichloropropane	U		0.00245	0.0189	1	07/17/2020 02:12	WG1510393
1,2,4-Trimethylbenzene	U		0.00239	0.00756	1	07/17/2020 02:12	WG1510393
1,2,3-Trimethylbenzene	U		0.00239	0.00756	1	07/17/2020 02:12	WG1510393
1,3,5-Trimethylbenzene	U		0.00302	0.00756	1	07/17/2020 02:12	WG1510393
Vinyl acetate	U		0.00384	0.0189	1	07/17/2020 02:12	WG1510393
Vinyl chloride	U		0.00175	0.00378	1	07/17/2020 02:12	WG1510393
Xylenes, Total	U		0.00133	0.00983	1	07/17/2020 02:12	WG1510393
(S) Toluene-d8	*106*			*75.0-131*		*07/17/2020 02:12*	WG1510393
(S) 4-Bromofluorobenzene	*105*			*67.0-138*		*07/17/2020 02:12*	WG1510393
(S) 1,2-Dichloroethane-d4	*105*			*70.0-130*		*07/17/2020 02:12*	WG1510393

JC 8/3/2020

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	92.1		1	07/15/2020 21:43	WG1509525

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	U	~~J3~~	0.0396	0.0543	1	07/17/2020 02:32	WG1510393
Acrylonitrile	U		0.00392	0.0136	1	07/17/2020 02:32	WG1510393
Benzene	U		0.000507	0.00109	1	07/17/2020 02:32	WG1510393
Bromobenzene	U		0.000977	0.0136	1	07/17/2020 02:32	WG1510393
Bromodichloromethane	U		0.000787	0.00271	1	07/17/2020 02:32	WG1510393
Bromochloromethane	U		0.000612	0.00543	1	07/17/2020 02:32	WG1510393
Bromoform	U		0.00127	0.0271	1	07/17/2020 02:32	WG1510393
Bromomethane	U		0.00214	0.0136	1	07/17/2020 02:32	WG1510393
n-Butylbenzene	U		0.00570	0.0136	1	07/17/2020 02:32	WG1510393
sec-Butylbenzene	U		0.00313	0.0136	1	07/17/2020 02:32	WG1510393
tert-Butylbenzene	U		0.00212	0.00543	1	07/17/2020 02:32	WG1510393
Carbon disulfide	U	~~J3~~	0.000760	0.0136	1	07/17/2020 02:32	WG1510393
Carbon tetrachloride	U		0.000975	0.00543	1	07/17/2020 02:32	WG1510393
Chlorobenzene	U		0.000228	0.00271	1	07/17/2020 02:32	WG1510393
Chlorodibromomethane	U		0.000664	0.00271	1	07/17/2020 02:32	WG1510393
Chloroethane	U		0.00185	0.00543	1	07/17/2020 02:32	WG1510393
Chloroform	U		0.00112	0.00271	1	07/17/2020 02:32	WG1510393
Chloromethane	U		0.00472	0.0136	1	07/17/2020 02:32	WG1510393
2-Chlorotoluene	U		0.000939	0.00271	1	07/17/2020 02:32	WG1510393
4-Chlorotoluene	U		0.000488	0.00543	1	07/17/2020 02:32	WG1510393
1,2-Dibromo-3-Chloropropane	U		0.00423	0.0271	1	07/17/2020 02:32	WG1510393
1,2-Dibromoethane	U		0.000703	0.00271	1	07/17/2020 02:32	WG1510393
Dibromomethane	U		0.000814	0.00543	1	07/17/2020 02:32	WG1510393
1,2-Dichlorobenzene	U		0.000461	0.00543	1	07/17/2020 02:32	WG1510393
1,3-Dichlorobenzene	U		0.000651	0.00543	1	07/17/2020 02:32	WG1510393
1,4-Dichlorobenzene	U		0.000760	0.00543	1	07/17/2020 02:32	WG1510393
Dichlorodifluoromethane	U		0.00175	0.00271	1	07/17/2020 02:32	WG1510393
1,1-Dichloroethane	U		0.000533	0.00271	1	07/17/2020 02:32	WG1510393
1,2-Dichloroethane	U		0.000705	0.00271	1	07/17/2020 02:32	WG1510393
1,1-Dichloroethene	U		0.000658	0.00271	1	07/17/2020 02:32	WG1510393
cis-1,2-Dichloroethene	U		0.000797	0.00271	1	07/17/2020 02:32	WG1510393
trans-1,2-Dichloroethene	U		0.00113	0.00543	1	07/17/2020 02:32	WG1510393
1,2-Dichloropropane	U		0.00154	0.00543	1	07/17/2020 02:32	WG1510393
1,1-Dichloropropene	U		0.000878	0.00271	1	07/17/2020 02:32	WG1510393
1,3-Dichloropropane	U		0.000544	0.00543	1	07/17/2020 02:32	WG1510393
cis-1,3-Dichloropropene	U		0.000822	0.00271	1	07/17/2020 02:32	WG1510393
trans-1,3-Dichloropropene	U		0.00124	0.00543	1	07/17/2020 02:32	WG1510393
trans-1,4-Dichloro-2-butene	U		0.00202	0.00543	1	07/17/2020 02:32	WG1510393
2,2-Dichloropropane	U		0.00150	0.00271	1	07/17/2020 02:32	WG1510393
Di-isopropyl ether	U		0.000445	0.00109	1	07/17/2020 02:32	WG1510393
Ethylbenzene	U		0.000800	0.00271	1	07/17/2020 02:32	WG1510393
Hexachloro-1,3-butadiene	U		0.00651	0.0271	1	07/17/2020 02:32	WG1510393
2-Hexanone	U		0.00365	0.0271	1	07/17/2020 02:32	WG1510393
n-Hexane	U	~~J4~~	0.00245	0.00543	1	07/17/2020 02:32	WG1510393
Iodomethane	U		0.00252	0.0136	1	07/17/2020 02:32	WG1510393
Isopropylbenzene	U		0.000461	0.00271	1	07/17/2020 02:32	WG1510393
p-Isopropyltoluene	U		0.00277	0.00543	1	07/17/2020 02:32	WG1510393
2-Butanone (MEK)	U		0.0689	0.109	1	07/17/2020 02:32	WG1510393
Methylene Chloride	U		0.00721	0.0271	1	07/17/2020 02:32	WG1510393
4-Methyl-2-pentanone (MIBK)	U		0.00248	0.0271	1	07/17/2020 02:32	WG1510393

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Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.000380	0.00109	1	07/17/2020 02:32	WG1510393
Naphthalene	U		0.00530	0.0136	1	07/17/2020 02:32	WG1510393
n-Propylbenzene	U		0.00103	0.00543	1	07/17/2020 02:32	WG1510393
Styrene	U		0.000249	0.0136	1	07/17/2020 02:32	WG1510393
1,1,1,2-Tetrachloroethane	U		0.00103	0.00271	1	07/17/2020 02:32	WG1510393
1,1,2,2-Tetrachloroethane	U		0.000754	0.00271	1	07/17/2020 02:32	WG1510393
1,1,2-Trichlorotrifluoroethane	U		0.000819	0.00271	1	07/17/2020 02:32	WG1510393
Tetrachloroethene	U		0.000973	0.00271	1	07/17/2020 02:32	WG1510393
Toluene	U		0.00141	0.00543	1	07/17/2020 02:32	WG1510393
1,2,3-Trichlorobenzene	U		0.00796	0.0136	1	07/17/2020 02:32	WG1510393
1,2,4-Trichlorobenzene	U		0.00478	0.0136	1	07/17/2020 02:32	WG1510393
1,1,1-Trichloroethane	U		0.00100	0.00271	1	07/17/2020 02:32	WG1510393
1,1,2-Trichloroethane	U		0.000648	0.00271	1	07/17/2020 02:32	WG1510393
Trichloroethene	U		0.000634	0.00109	1	07/17/2020 02:32	WG1510393
Trichlorofluoromethane	U		0.000898	0.00271	1	07/17/2020 02:32	WG1510393
1,2,3-Trichloropropane	U		0.00176	0.0136	1	07/17/2020 02:32	WG1510393
1,2,4-Trimethylbenzene	U		0.00172	0.00543	1	07/17/2020 02:32	WG1510393
1,2,3-Trimethylbenzene	U		0.00172	0.00543	1	07/17/2020 02:32	WG1510393
1,3,5-Trimethylbenzene	U		0.00217	0.00543	1	07/17/2020 02:32	WG1510393
Vinyl acetate	U		0.00276	0.0136	1	07/17/2020 02:32	WG1510393
Vinyl chloride	U		0.00126	0.00271	1	07/17/2020 02:32	WG1510393
Xylenes, Total	U		0.000955	0.00706	1	07/17/2020 02:32	WG1510393
(S) Toluene-d8	*110*			*75.0-131*		*07/17/2020 02:32*	WG1510393
(S) 4-Bromofluorobenzene	*106*			*67.0-138*		*07/17/2020 02:32*	WG1510393
(S) 1,2-Dichloroethane-d4	*102*			*70.0-130*		*07/17/2020 02:32*	WG1510393

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Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	89.0		1	07/15/2020 21:43	WG1509525

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	U	~~J3~~	0.0481	0.0659	1	07/17/2020 02:52	WG1510393
Acrylonitrile	U		0.00475	0.0165	1	07/17/2020 02:52	WG1510393
Benzene	U		0.000615	0.00132	1	07/17/2020 02:52	WG1510393
Bromobenzene	U		0.00119	0.0165	1	07/17/2020 02:52	WG1510393
Bromodichloromethane	U		0.000955	0.00329	1	07/17/2020 02:52	WG1510393
Bromochloromethane	U		0.000743	0.00659	1	07/17/2020 02:52	WG1510393
Bromoform	U		0.00154	0.0329	1	07/17/2020 02:52	WG1510393
Bromomethane	U		0.00259	0.0165	1	07/17/2020 02:52	WG1510393
n-Butylbenzene	U		0.00691	0.0165	1	07/17/2020 02:52	WG1510393
sec-Butylbenzene	U		0.00379	0.0165	1	07/17/2020 02:52	WG1510393
tert-Butylbenzene	U		0.00257	0.00659	1	07/17/2020 02:52	WG1510393
Carbon disulfide	U	~~J3~~	0.000922	0.0165	1	07/17/2020 02:52	WG1510393
Carbon tetrachloride	U		0.00118	0.00659	1	07/17/2020 02:52	WG1510393
Chlorobenzene	U		0.000277	0.00329	1	07/17/2020 02:52	WG1510393
Chlorodibromomethane	U		0.000806	0.00329	1	07/17/2020 02:52	WG1510393
Chloroethane	U		0.00224	0.00659	1	07/17/2020 02:52	WG1510393
Chloroform	U		0.00136	0.00329	1	07/17/2020 02:52	WG1510393
Chloromethane	U		0.00573	0.0165	1	07/17/2020 02:52	WG1510393
2-Chlorotoluene	U		0.00114	0.00329	1	07/17/2020 02:52	WG1510393
4-Chlorotoluene	U		0.000593	0.00659	1	07/17/2020 02:52	WG1510393
1,2-Dibromo-3-Chloropropane	U		0.00514	0.0329	1	07/17/2020 02:52	WG1510393
1,2-Dibromoethane	U		0.000853	0.00329	1	07/17/2020 02:52	WG1510393
Dibromomethane	U		0.000988	0.00659	1	07/17/2020 02:52	WG1510393
1,2-Dichlorobenzene	U		0.000560	0.00659	1	07/17/2020 02:52	WG1510393
1,3-Dichlorobenzene	U		0.000790	0.00659	1	07/17/2020 02:52	WG1510393
1,4-Dichlorobenzene	U		0.000922	0.00659	1	07/17/2020 02:52	WG1510393
Dichlorodifluoromethane	U		0.00212	0.00329	1	07/17/2020 02:52	WG1510393
1,1-Dichloroethane	U		0.000647	0.00329	1	07/17/2020 02:52	WG1510393
1,2-Dichloroethane	U		0.000855	0.00329	1	07/17/2020 02:52	WG1510393
1,1-Dichloroethene	U		0.000798	0.00329	1	07/17/2020 02:52	WG1510393
cis-1,2-Dichloroethene	U		0.000967	0.00329	1	07/17/2020 02:52	WG1510393
trans-1,2-Dichloroethene	U		0.00137	0.00659	1	07/17/2020 02:52	WG1510393
1,2-Dichloropropane	U		0.00187	0.00659	1	07/17/2020 02:52	WG1510393
1,1-Dichloropropene	U		0.00107	0.00329	1	07/17/2020 02:52	WG1510393
1,3-Dichloropropane	U		0.000660	0.00659	1	07/17/2020 02:52	WG1510393
cis-1,3-Dichloropropene	U		0.000997	0.00329	1	07/17/2020 02:52	WG1510393
trans-1,3-Dichloropropene	U		0.00150	0.00659	1	07/17/2020 02:52	WG1510393
trans-1,4-Dichloro-2-butene	U		0.00245	0.00659	1	07/17/2020 02:52	WG1510393
2,2-Dichloropropane	U		0.00182	0.00329	1	07/17/2020 02:52	WG1510393
Di-isopropyl ether	U		0.000540	0.00132	1	07/17/2020 02:52	WG1510393
Ethylbenzene	U		0.000971	0.00329	1	07/17/2020 02:52	WG1510393
Hexachloro-1,3-butadiene	U		0.00790	0.0329	1	07/17/2020 02:52	WG1510393
2-Hexanone	U		0.00443	0.0329	1	07/17/2020 02:52	WG1510393
n-Hexane	U	~~J4~~	0.00298	0.00659	1	07/17/2020 02:52	WG1510393
Iodomethane	U		0.00306	0.0165	1	07/17/2020 02:52	WG1510393
Isopropylbenzene	U		0.000560	0.00329	1	07/17/2020 02:52	WG1510393
p-Isopropyltoluene	U		0.00336	0.00659	1	07/17/2020 02:52	WG1510393
2-Butanone (MEK)	U		0.0836	0.132	1	07/17/2020 02:52	WG1510393
Methylene Chloride	U		0.00875	0.0329	1	07/17/2020 02:52	WG1510393
4-Methyl-2-pentanone (MIBK)	U		0.00300	0.0329	1	07/17/2020 02:52	WG1510393

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1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.000461	0.00132	1	07/17/2020 02:52	WG1510393
Naphthalene	U		0.00643	0.0165	1	07/17/2020 02:52	WG1510393
n-Propylbenzene	U		0.00125	0.00659	1	07/17/2020 02:52	WG1510393
Styrene	U		0.000302	0.0165	1	07/17/2020 02:52	WG1510393
1,1,1,2-Tetrachloroethane	U		0.00125	0.00329	1	07/17/2020 02:52	WG1510393
1,1,2,2-Tetrachloroethane	U		0.000915	0.00329	1	07/17/2020 02:52	WG1510393
1,1,2-Trichlorotrifluoroethane	U		0.000993	0.00329	1	07/17/2020 02:52	WG1510393
Tetrachloroethene	0.0100		0.00118	0.00329	1	07/17/2020 02:52	WG1510393
Toluene	U		0.00171	0.00659	1	07/17/2020 02:52	WG1510393
1,2,3-Trichlorobenzene	U		0.00965	0.0165	1	07/17/2020 02:52	WG1510393
1,2,4-Trichlorobenzene	U		0.00580	0.0165	1	07/17/2020 02:52	WG1510393
1,1,1-Trichloroethane	U		0.00122	0.00329	1	07/17/2020 02:52	WG1510393
1,1,2-Trichloroethane	U		0.000786	0.00329	1	07/17/2020 02:52	WG1510393
Trichloroethene	U		0.000769	0.00132	1	07/17/2020 02:52	WG1510393
Trichlorofluoromethane	U		0.00109	0.00329	1	07/17/2020 02:52	WG1510393
1,2,3-Trichloropropane	U		0.00213	0.0165	1	07/17/2020 02:52	WG1510393
1,2,4-Trimethylbenzene	U		0.00208	0.00659	1	07/17/2020 02:52	WG1510393
1,2,3-Trimethylbenzene	U		0.00208	0.00659	1	07/17/2020 02:52	WG1510393
1,3,5-Trimethylbenzene	U		0.00263	0.00659	1	07/17/2020 02:52	WG1510393
Vinyl acetate	U		0.00335	0.0165	1	07/17/2020 02:52	WG1510393
Vinyl chloride	U		0.00153	0.00329	1	07/17/2020 02:52	WG1510393
Xylenes, Total	U		0.00116	0.00856	1	07/17/2020 02:52	WG1510393
(S) Toluene-d8	*107*			*75.0-131*		*07/17/2020 02:52*	WG1510393
(S) 4-Bromofluorobenzene	*106*			*67.0-138*		*07/17/2020 02:52*	WG1510393
(S) 1,2-Dichloroethane-d4	*101*			*70.0-130*		*07/17/2020 02:52*	WG1510393

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Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	85.4		1	07/15/2020 21:43	WG1509525

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	U		0.0534	0.0732	1	07/17/2020 05:45	WG1510584
Acrylonitrile	U		0.00528	0.0183	1	07/17/2020 05:45	WG1510584
Benzene	U		0.000684	0.00146	1	07/17/2020 05:45	WG1510584
Bromobenzene	U		0.00132	0.0183	1	07/17/2020 05:45	WG1510584
Bromodichloromethane	U		0.00106	0.00366	1	07/17/2020 05:45	WG1510584
Bromochloromethane	U		0.000825	0.00732	1	07/17/2020 05:45	WG1510584
Bromoform	U		0.00171	0.0366	1	07/17/2020 05:45	WG1510584
Bromomethane	U		0.00288	0.0183	1	07/17/2020 05:45	WG1510584
n-Butylbenzene	U		0.00768	0.0183	1	07/17/2020 05:45	WG1510584
sec-Butylbenzene	U		0.00422	0.0183	1	07/17/2020 05:45	WG1510584
tert-Butylbenzene	U		0.00285	0.00732	1	07/17/2020 05:45	WG1510584
Carbon disulfide	U		0.00102	0.0183	1	07/17/2020 05:45	WG1510584
Carbon tetrachloride	U		0.00131	0.00732	1	07/17/2020 05:45	WG1510584
Chlorobenzene	U		0.000307	0.00366	1	07/17/2020 05:45	WG1510584
Chlorodibromomethane	U		0.000896	0.00366	1	07/17/2020 05:45	WG1510584
Chloroethane	U		0.00249	0.00732	1	07/17/2020 05:45	WG1510584
Chloroform	U	~~J4~~	0.00151	0.00366	1	07/17/2020 05:45	WG1510584
Chloromethane	U		0.00637	0.0183	1	07/17/2020 05:45	WG1510584
2-Chlorotoluene	U		0.00127	0.00366	1	07/17/2020 05:45	WG1510584
4-Chlorotoluene	U		0.000659	0.00732	1	07/17/2020 05:45	WG1510584
1,2-Dibromo-3-Chloropropane	U		0.00571	0.0366	1	07/17/2020 05:45	WG1510584
1,2-Dibromoethane	U		0.000948	0.00366	1	07/17/2020 05:45	WG1510584
Dibromomethane	U		0.00110	0.00732	1	07/17/2020 05:45	WG1510584
1,2-Dichlorobenzene	U		0.000622	0.00732	1	07/17/2020 05:45	WG1510584
1,3-Dichlorobenzene	U		0.000878	0.00732	1	07/17/2020 05:45	WG1510584
1,4-Dichlorobenzene	U		0.00102	0.00732	1	07/17/2020 05:45	WG1510584
Dichlorodifluoromethane	U		0.00236	0.00366	1	07/17/2020 05:45	WG1510584
1,1-Dichloroethane	U		0.000719	0.00366	1	07/17/2020 05:45	WG1510584
1,2-Dichloroethane	U		0.000950	0.00366	1	07/17/2020 05:45	WG1510584
1,1-Dichloroethene	U		0.000887	0.00366	1	07/17/2020 05:45	WG1510584
cis-1,2-Dichloroethene	U		0.00107	0.00366	1	07/17/2020 05:45	WG1510584
trans-1,2-Dichloroethene	U		0.00152	0.00732	1	07/17/2020 05:45	WG1510584
1,2-Dichloropropane	U		0.00208	0.00732	1	07/17/2020 05:45	WG1510584
1,1-Dichloropropene	U		0.00118	0.00366	1	07/17/2020 05:45	WG1510584
1,3-Dichloropropane	U		0.000733	0.00732	1	07/17/2020 05:45	WG1510584
cis-1,3-Dichloropropene	U		0.00111	0.00366	1	07/17/2020 05:45	WG1510584
trans-1,3-Dichloropropene	U		0.00167	0.00732	1	07/17/2020 05:45	WG1510584
trans-1,4-Dichloro-2-butene	U		0.00272	0.00732	1	07/17/2020 05:45	WG1510584
2,2-Dichloropropane	U		0.00202	0.00366	1	07/17/2020 05:45	WG1510584
Di-isopropyl ether	U		0.000600	0.00146	1	07/17/2020 05:45	WG1510584
Ethylbenzene	U		0.00108	0.00366	1	07/17/2020 05:45	WG1510584
Hexachloro-1,3-butadiene	U		0.00878	0.0366	1	07/17/2020 05:45	WG1510584
2-Hexanone	U		0.00492	0.0366	1	07/17/2020 05:45	WG1510584
n-Hexane	U	~~J4~~	0.00331	0.00732	1	07/17/2020 05:45	WG1510584
Iodomethane	U		0.00340	0.0183	1	07/17/2020 05:45	WG1510584
Isopropylbenzene	U		0.000622	0.00366	1	07/17/2020 05:45	WG1510584
p-Isopropyltoluene	U		0.00373	0.00732	1	07/17/2020 05:45	WG1510584
2-Butanone (MEK)	U		0.0929	0.146	1	07/17/2020 05:45	WG1510584
Methylene Chloride	U		0.00972	0.0366	1	07/17/2020 05:45	WG1510584
4-Methyl-2-pentanone (MIBK)	U		0.00334	0.0366	1	07/17/2020 05:45	WG1510584

JC 8/3/2020

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.000512	0.00146	1	07/17/2020 05:45	WG1510584
Naphthalene	U		0.00714	0.0183	1	07/17/2020 05:45	WG1510584
n-Propylbenzene	U		0.00139	0.00732	1	07/17/2020 05:45	WG1510584
Styrene	U		0.000335	0.0183	1	07/17/2020 05:45	WG1510584
1,1,1,2-Tetrachloroethane	U		0.00139	0.00366	1	07/17/2020 05:45	WG1510584
1,1,2,2-Tetrachloroethane	U		0.00102	0.00366	1	07/17/2020 05:45	WG1510584
1,1,2-Trichlorotrifluoroethane	U		0.00110	0.00366	1	07/17/2020 05:45	WG1510584
Tetrachloroethene	U		0.00131	0.00366	1	07/17/2020 05:45	WG1510584
Toluene	U		0.00190	0.00732	1	07/17/2020 05:45	WG1510584
1,2,3-Trichlorobenzene	U		0.0107	0.0183	1	07/17/2020 05:45	WG1510584
1,2,4-Trichlorobenzene	U		0.00644	0.0183	1	07/17/2020 05:45	WG1510584
1,1,1-Trichloroethane	U		0.00135	0.00366	1	07/17/2020 05:45	WG1510584
1,1,2-Trichloroethane	U		0.000874	0.00366	1	07/17/2020 05:45	WG1510584
Trichloroethene	U		0.000855	0.00146	1	07/17/2020 05:45	WG1510584
Trichlorofluoromethane	U		0.00121	0.00366	1	07/17/2020 05:45	WG1510584
1,2,3-Trichloropropane	U		0.00237	0.0183	1	07/17/2020 05:45	WG1510584
1,2,4-Trimethylbenzene	U		0.00231	0.00732	1	07/17/2020 05:45	WG1510584
1,2,3-Trimethylbenzene	U		0.00231	0.00732	1	07/17/2020 05:45	WG1510584
1,3,5-Trimethylbenzene	U		0.00293	0.00732	1	07/17/2020 05:45	WG1510584
Vinyl acetate	U		0.00372	0.0183	1	07/17/2020 05:45	WG1510584
Vinyl chloride	U		0.00170	0.00366	1	07/17/2020 05:45	WG1510584
Xylenes, Total	U		0.00129	0.00951	1	07/17/2020 05:45	WG1510584
(S) Toluene-d8	*97.4*			*75.0-131*		*07/17/2020 05:45*	WG1510584
(S) 4-Bromofluorobenzene	*85.7*			*67.0-138*		*07/17/2020 05:45*	WG1510584
(S) 1,2-Dichloroethane-d4	*115*			*70.0-130*		*07/17/2020 05:45*	WG1510584

JC 8/3/2020

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	88.8		1	07/15/2020 21:43	WG1509525

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	U		0.0479	0.0656	1	07/17/2020 06:04	WG1510584
Acrylonitrile	U		0.00474	0.0164	1	07/17/2020 06:04	WG1510584
Benzene	U		0.000613	0.00131	1	07/17/2020 06:04	WG1510584
Bromobenzene	U		0.00118	0.0164	1	07/17/2020 06:04	WG1510584
Bromodichloromethane	U		0.000951	0.00328	1	07/17/2020 06:04	WG1510584
Bromochloromethane	U		0.000740	0.00656	1	07/17/2020 06:04	WG1510584
Bromoform	U		0.00154	0.0328	1	07/17/2020 06:04	WG1510584
Bromomethane	U		0.00259	0.0164	1	07/17/2020 06:04	WG1510584
n-Butylbenzene	U		0.00689	0.0164	1	07/17/2020 06:04	WG1510584
sec-Butylbenzene	U		0.00378	0.0164	1	07/17/2020 06:04	WG1510584
tert-Butylbenzene	U		0.00256	0.00656	1	07/17/2020 06:04	WG1510584
Carbon disulfide	U		0.000919	0.0164	1	07/17/2020 06:04	WG1510584
Carbon tetrachloride	U		0.00118	0.00656	1	07/17/2020 06:04	WG1510584
Chlorobenzene	U		0.000276	0.00328	1	07/17/2020 06:04	WG1510584
Chlorodibromomethane	U		0.000803	0.00328	1	07/17/2020 06:04	WG1510584
Chloroethane	U		0.00223	0.00656	1	07/17/2020 06:04	WG1510584
Chloroform	U	~~J4~~	0.00135	0.00328	1	07/17/2020 06:04	WG1510584
Chloromethane	U		0.00571	0.0164	1	07/17/2020 06:04	WG1510584
2-Chlorotoluene	U		0.00114	0.00328	1	07/17/2020 06:04	WG1510584
4-Chlorotoluene	U		0.000591	0.00656	1	07/17/2020 06:04	WG1510584
1,2-Dibromo-3-Chloropropane	U		0.00512	0.0328	1	07/17/2020 06:04	WG1510584
1,2-Dibromoethane	U		0.000850	0.00328	1	07/17/2020 06:04	WG1510584
Dibromomethane	U		0.000984	0.00656	1	07/17/2020 06:04	WG1510584
1,2-Dichlorobenzene	U		0.000558	0.00656	1	07/17/2020 06:04	WG1510584
1,3-Dichlorobenzene	U		0.000787	0.00656	1	07/17/2020 06:04	WG1510584
1,4-Dichlorobenzene	U		0.000919	0.00656	1	07/17/2020 06:04	WG1510584
Dichlorodifluoromethane	U		0.00211	0.00328	1	07/17/2020 06:04	WG1510584
1,1-Dichloroethane	U		0.000644	0.00328	1	07/17/2020 06:04	WG1510584
1,2-Dichloroethane	U		0.000852	0.00328	1	07/17/2020 06:04	WG1510584
1,1-Dichloroethene	U		0.000795	0.00328	1	07/17/2020 06:04	WG1510584
cis-1,2-Dichloroethene	U		0.000963	0.00328	1	07/17/2020 06:04	WG1510584
trans-1,2-Dichloroethene	U		0.00136	0.00656	1	07/17/2020 06:04	WG1510584
1,2-Dichloropropane	U		0.00186	0.00656	1	07/17/2020 06:04	WG1510584
1,1-Dichloropropene	U		0.00106	0.00328	1	07/17/2020 06:04	WG1510584
1,3-Dichloropropane	U		0.000657	0.00656	1	07/17/2020 06:04	WG1510584
cis-1,3-Dichloropropene	U		0.000993	0.00328	1	07/17/2020 06:04	WG1510584
trans-1,3-Dichloropropene	U		0.00150	0.00656	1	07/17/2020 06:04	WG1510584
trans-1,4-Dichloro-2-butene	U		0.00244	0.00656	1	07/17/2020 06:04	WG1510584
2,2-Dichloropropane	U		0.00181	0.00328	1	07/17/2020 06:04	WG1510584
Di-isopropyl ether	U		0.000538	0.00131	1	07/17/2020 06:04	WG1510584
Ethylbenzene	U		0.000967	0.00328	1	07/17/2020 06:04	WG1510584
Hexachloro-1,3-butadiene	U		0.00787	0.0328	1	07/17/2020 06:04	WG1510584
2-Hexanone	U		0.00441	0.0328	1	07/17/2020 06:04	WG1510584
n-Hexane	U	~~J4~~	0.00297	0.00656	1	07/17/2020 06:04	WG1510584
Iodomethane	U		0.00304	0.0164	1	07/17/2020 06:04	WG1510584
Isopropylbenzene	U		0.000558	0.00328	1	07/17/2020 06:04	WG1510584
p-Isopropyltoluene	U		0.00335	0.00656	1	07/17/2020 06:04	WG1510584
2-Butanone (MEK)	U		0.0833	0.131	1	07/17/2020 06:04	WG1510584
Methylene Chloride	U		0.00871	0.0328	1	07/17/2020 06:04	WG1510584
4-Methyl-2-pentanone (MIBK)	U		0.00299	0.0328	1	07/17/2020 06:04	WG1510584

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Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.000459	0.00131	1	07/17/2020 06:04	WG1510584
Naphthalene	U		0.00640	0.0164	1	07/17/2020 06:04	WG1510584
n-Propylbenzene	U		0.00125	0.00656	1	07/17/2020 06:04	WG1510584
Styrene	U		0.000301	0.0164	1	07/17/2020 06:04	WG1510584
1,1,1,2-Tetrachloroethane	U		0.00124	0.00328	1	07/17/2020 06:04	WG1510584
1,1,2,2-Tetrachloroethane	U		0.000912	0.00328	1	07/17/2020 06:04	WG1510584
1,1,2-Trichlorotrifluoroethane	U		0.000989	0.00328	1	07/17/2020 06:04	WG1510584
Tetrachloroethene	U		0.00118	0.00328	1	07/17/2020 06:04	WG1510584
Toluene	U		0.00171	0.00656	1	07/17/2020 06:04	WG1510584
1,2,3-Trichlorobenzene	U		0.00962	0.0164	1	07/17/2020 06:04	WG1510584
1,2,4-Trichlorobenzene	U		0.00577	0.0164	1	07/17/2020 06:04	WG1510584
1,1,1-Trichloroethane	U		0.00121	0.00328	1	07/17/2020 06:04	WG1510584
1,1,2-Trichloroethane	U		0.000783	0.00328	1	07/17/2020 06:04	WG1510584
Trichloroethene	U		0.000766	0.00131	1	07/17/2020 06:04	WG1510584
Trichlorofluoromethane	U		0.00109	0.00328	1	07/17/2020 06:04	WG1510584
1,2,3-Trichloropropane	U		0.00213	0.0164	1	07/17/2020 06:04	WG1510584
1,2,4-Trimethylbenzene	U		0.00207	0.00656	1	07/17/2020 06:04	WG1510584
1,2,3-Trimethylbenzene	U		0.00207	0.00656	1	07/17/2020 06:04	WG1510584
1,3,5-Trimethylbenzene	U		0.00262	0.00656	1	07/17/2020 06:04	WG1510584
Vinyl acetate	U		0.00333	0.0164	1	07/17/2020 06:04	WG1510584
Vinyl chloride	U		0.00152	0.00328	1	07/17/2020 06:04	WG1510584
Xylenes, Total	U		0.00115	0.00853	1	07/17/2020 06:04	WG1510584
(S) Toluene-d8	*94.6*			*75.0-131*		*07/17/2020 06:04*	WG1510584
(S) 4-Bromofluorobenzene	*85.0*			*67.0-138*		*07/17/2020 06:04*	WG1510584
(S) 1,2-Dichloroethane-d4	*109*			*70.0-130*		*07/17/2020 06:04*	WG1510584

JC 8/3/2020

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	87.9		1	07/15/2020 21:43	WG1509525

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	U		0.0480	0.0657	1	07/17/2020 06:23	WG1510584
Acrylonitrile	U		0.00474	0.0164	1	07/17/2020 06:23	WG1510584
Benzene	U		0.000614	0.00131	1	07/17/2020 06:23	WG1510584
Bromobenzene	U		0.00118	0.0164	1	07/17/2020 06:23	WG1510584
Bromodichloromethane	U		0.000953	0.00328	1	07/17/2020 06:23	WG1510584
Bromochloromethane	U		0.000741	0.00657	1	07/17/2020 06:23	WG1510584
Bromoform	U		0.00154	0.0328	1	07/17/2020 06:23	WG1510584
Bromomethane	U		0.00259	0.0164	1	07/17/2020 06:23	WG1510584
n-Butylbenzene	U		0.00690	0.0164	1	07/17/2020 06:23	WG1510584
sec-Butylbenzene	U		0.00378	0.0164	1	07/17/2020 06:23	WG1510584
tert-Butylbenzene	U		0.00256	0.00657	1	07/17/2020 06:23	WG1510584
Carbon disulfide	U		0.000920	0.0164	1	07/17/2020 06:23	WG1510584
Carbon tetrachloride	U		0.00118	0.00657	1	07/17/2020 06:23	WG1510584
Chlorobenzene	U		0.000276	0.00328	1	07/17/2020 06:23	WG1510584
Chlorodibromomethane	U		0.000804	0.00328	1	07/17/2020 06:23	WG1510584
Chloroethane	U		0.00223	0.00657	1	07/17/2020 06:23	WG1510584
Chloroform	U	~~J4~~	0.00135	0.00328	1	07/17/2020 06:23	WG1510584
Chloromethane	U		0.00572	0.0164	1	07/17/2020 06:23	WG1510584
2-Chlorotoluene	U		0.00114	0.00328	1	07/17/2020 06:23	WG1510584
4-Chlorotoluene	U		0.000591	0.00657	1	07/17/2020 06:23	WG1510584
1,2-Dibromo-3-Chloropropane	U		0.00512	0.0328	1	07/17/2020 06:23	WG1510584
1,2-Dibromoethane	U		0.000851	0.00328	1	07/17/2020 06:23	WG1510584
Dibromomethane	U		0.000985	0.00657	1	07/17/2020 06:23	WG1510584
1,2-Dichlorobenzene	U		0.000558	0.00657	1	07/17/2020 06:23	WG1510584
1,3-Dichlorobenzene	U		0.000788	0.00657	1	07/17/2020 06:23	WG1510584
1,4-Dichlorobenzene	U		0.000920	0.00657	1	07/17/2020 06:23	WG1510584
Dichlorodifluoromethane	U		0.00212	0.00328	1	07/17/2020 06:23	WG1510584
1,1-Dichloroethane	U		0.000645	0.00328	1	07/17/2020 06:23	WG1510584
1,2-Dichloroethane	U		0.000853	0.00328	1	07/17/2020 06:23	WG1510584
1,1-Dichloroethene	U		0.000796	0.00328	1	07/17/2020 06:23	WG1510584
cis-1,2-Dichloroethene	U		0.000964	0.00328	1	07/17/2020 06:23	WG1510584
trans-1,2-Dichloroethene	U		0.00137	0.00657	1	07/17/2020 06:23	WG1510584
1,2-Dichloropropane	U		0.00187	0.00657	1	07/17/2020 06:23	WG1510584
1,1-Dichloropropene	U		0.00106	0.00328	1	07/17/2020 06:23	WG1510584
1,3-Dichloropropane	U		0.000658	0.00657	1	07/17/2020 06:23	WG1510584
cis-1,3-Dichloropropene	U		0.000995	0.00328	1	07/17/2020 06:23	WG1510584
trans-1,3-Dichloropropene	U		0.00150	0.00657	1	07/17/2020 06:23	WG1510584
trans-1,4-Dichloro-2-butene	U		0.00244	0.00657	1	07/17/2020 06:23	WG1510584
2,2-Dichloropropane	U		0.00181	0.00328	1	07/17/2020 06:23	WG1510584
Di-isopropyl ether	U		0.000539	0.00131	1	07/17/2020 06:23	WG1510584
Ethylbenzene	U		0.000968	0.00328	1	07/17/2020 06:23	WG1510584
Hexachloro-1,3-butadiene	U		0.00788	0.0328	1	07/17/2020 06:23	WG1510584
2-Hexanone	U		0.00441	0.0328	1	07/17/2020 06:23	WG1510584
n-Hexane	U	~~J4~~	0.00297	0.00657	1	07/17/2020 06:23	WG1510584
Iodomethane	U		0.00305	0.0164	1	07/17/2020 06:23	WG1510584
Isopropylbenzene	U		0.000558	0.00328	1	07/17/2020 06:23	WG1510584
p-Isopropyltoluene	U		0.00335	0.00657	1	07/17/2020 06:23	WG1510584
2-Butanone (MEK)	0.107	J	0.0834	0.131	1	07/17/2020 06:23	WG1510584
Methylene Chloride	U		0.00872	0.0328	1	07/17/2020 06:23	WG1510584
4-Methyl-2-pentanone (MIBK)	U		0.00300	0.0328	1	07/17/2020 06:23	WG1510584

JC 8/3/2020

SV-27-13.5

Collected date/time: 07/10/20 14:10

SAMPLE RESULTS - 10

L1238798

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.000460	0.00131	1	07/17/2020 06:23	WG1510584
Naphthalene	U		0.00641	0.0164	1	07/17/2020 06:23	WG1510584
n-Propylbenzene	U		0.00125	0.00657	1	07/17/2020 06:23	WG1510584
Styrene	U		0.000301	0.0164	1	07/17/2020 06:23	WG1510584
1,1,1,2-Tetrachloroethane	U		0.00125	0.00328	1	07/17/2020 06:23	WG1510584
1,1,2,2-Tetrachloroethane	U		0.000913	0.00328	1	07/17/2020 06:23	WG1510584
1,1,2-Trichlorotrifluoroethane	U		0.000991	0.00328	1	07/17/2020 06:23	WG1510584
Tetrachloroethene	0.00372		0.00118	0.00328	1	07/17/2020 06:23	WG1510584
Toluene	U		0.00171	0.00657	1	07/17/2020 06:23	WG1510584
1,2,3-Trichlorobenzene	U		0.00963	0.0164	1	07/17/2020 06:23	WG1510584
1,2,4-Trichlorobenzene	U		0.00578	0.0164	1	07/17/2020 06:23	WG1510584
1,1,1-Trichloroethane	U		0.00121	0.00328	1	07/17/2020 06:23	WG1510584
1,1,2-Trichloroethane	U		0.000784	0.00328	1	07/17/2020 06:23	WG1510584
Trichloroethene	U		0.000767	0.00131	1	07/17/2020 06:23	WG1510584
Trichlorofluoromethane	U		0.00109	0.00328	1	07/17/2020 06:23	WG1510584
1,2,3-Trichloropropane	U		0.00213	0.0164	1	07/17/2020 06:23	WG1510584
1,2,4-Trimethylbenzene	U		0.00208	0.00657	1	07/17/2020 06:23	WG1510584
1,2,3-Trimethylbenzene	U		0.00208	0.00657	1	07/17/2020 06:23	WG1510584
1,3,5-Trimethylbenzene	U		0.00263	0.00657	1	07/17/2020 06:23	WG1510584
Vinyl acetate	U		0.00334	0.0164	1	07/17/2020 06:23	WG1510584
Vinyl chloride	U		0.00152	0.00328	1	07/17/2020 06:23	WG1510584
Xylenes, Total	U		0.00116	0.00854	1	07/17/2020 06:23	WG1510584
(S) Toluene-d8	*94.6*			*75.0-131*		*07/17/2020 06:23*	WG1510584
(S) 4-Bromofluorobenzene	*87.8*			*67.0-138*		*07/17/2020 06:23*	WG1510584
(S) 1,2-Dichloroethane-d4	*110*			*70.0-130*		*07/17/2020 06:23*	WG1510584

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U		11.3	25.0	1	07/15/2020 19:06	WG1509734
Acrylonitrile	U		0.671	5.00	1	07/15/2020 19:06	WG1509734
Benzene	U		0.0941	0.500	1	07/15/2020 19:06	WG1509734
Bromobenzene	U		0.118	0.500	1	07/15/2020 19:06	WG1509734
Bromodichloromethane	U		0.136	0.500	1	07/15/2020 19:06	WG1509734
Bromochloromethane	U		0.128	0.500	1	07/15/2020 19:06	WG1509734
Bromoform	U		0.129	0.500	1	07/15/2020 19:06	WG1509734
Bromomethane	U		0.605	2.50	1	07/15/2020 19:06	WG1509734
n-Butylbenzene	U		0.157	0.500	1	07/15/2020 19:06	WG1509734
sec-Butylbenzene	U		0.125	0.500	1	07/15/2020 19:06	WG1509734
tert-Butylbenzene	U		0.127	0.500	1	07/15/2020 19:06	WG1509734
Carbon disulfide	U		0.0962	0.500	1	07/15/2020 19:06	WG1509734
Carbon tetrachloride	U		0.128	0.500	1	07/15/2020 19:06	WG1509734
Chlorobenzene	U		0.117	0.500	1	07/15/2020 19:06	WG1509734
Chlorodibromomethane	U		0.140	0.500	1	07/15/2020 19:06	WG1509734
Chloroethane	U		0.192	2.50	1	07/15/2020 19:06	WG1509734
Chloroform	U		0.111	0.500	1	07/15/2020 19:06	WG1509734
Chloromethane	U		0.960	1.25	1	07/15/2020 19:06	WG1509734
2-Chlorotoluene	U		0.106	0.500	1	07/15/2020 19:06	WG1509734
4-Chlorotoluene	U		0.114	0.500	1	07/15/2020 19:06	WG1509734
1,2-Dibromo-3-Chloropropane	U		0.276	2.50	1	07/15/2020 19:06	WG1509734
1,2-Dibromoethane	U		0.126	0.500	1	07/15/2020 19:06	WG1509734
Dibromomethane	U		0.122	0.500	1	07/15/2020 19:06	WG1509734
1,2-Dichlorobenzene	U		0.107	0.500	1	07/15/2020 19:06	WG1509734
1,3-Dichlorobenzene	U		0.299	0.500	1	07/15/2020 19:06	WG1509734
1,4-Dichlorobenzene	U		0.120	0.500	1	07/15/2020 19:06	WG1509734
Dichlorodifluoromethane	U		0.374	2.50	1	07/15/2020 19:06	WG1509734
1,1-Dichloroethane	U		0.100	0.500	1	07/15/2020 19:06	WG1509734
1,2-Dichloroethane	U		0.0819	0.500	1	07/15/2020 19:06	WG1509734
1,1-Dichloroethene	U		0.188	0.500	1	07/15/2020 19:06	WG1509734
cis-1,2-Dichloroethene	U		0.126	0.500	1	07/15/2020 19:06	WG1509734
trans-1,2-Dichloroethene	U		0.149	0.500	1	07/15/2020 19:06	WG1509734
1,2-Dichloropropane	U		0.149	0.500	1	07/15/2020 19:06	WG1509734
1,1-Dichloropropene	U		0.142	0.500	1	07/15/2020 19:06	WG1509734
1,3-Dichloropropane	U		0.109	1.00	1	07/15/2020 19:06	WG1509734
cis-1,3-Dichloropropene	U		0.111	0.500	1	07/15/2020 19:06	WG1509734
trans-1,3-Dichloropropene	U		0.118	0.500	1	07/15/2020 19:06	WG1509734
trans-1,4-Dichloro-2-butene	U	J0	0.467	5.00	1	07/15/2020 19:06	WG1509734
2,2-Dichloropropane	U	J0	0.161	0.500	1	07/15/2020 19:06	WG1509734
Di-isopropyl ether	U		0.105	0.500	1	07/15/2020 19:06	WG1509734
Ethylbenzene	U		0.137	0.500	1	07/15/2020 19:06	WG1509734
Hexachloro-1,3-butadiene	U		0.337	1.00	1	07/15/2020 19:06	WG1509734
2-Hexanone	U		0.787	5.00	1	07/15/2020 19:06	WG1509734
n-Hexane	U		0.749	5.00	1	07/15/2020 19:06	WG1509734
Iodomethane	U		0.554	5.00	1	07/15/2020 19:06	WG1509734
Isopropylbenzene	U		0.105	0.500	1	07/15/2020 19:06	WG1509734
p-Isopropyltoluene	U		0.120	0.500	1	07/15/2020 19:06	WG1509734
2-Butanone (MEK)	12.9		1.19	5.00	1	07/15/2020 19:06	WG1509734
Methylene Chloride	U		0.430	2.50	1	07/15/2020 19:06	WG1509734
4-Methyl-2-pentanone (MIBK)	U		0.478	5.00	1	07/15/2020 19:06	WG1509734
Methyl tert-butyl ether	U		0.101	0.500	1	07/15/2020 19:06	WG1509734
Naphthalene	U		0.174	2.50	1	07/15/2020 19:06	WG1509734
n-Propylbenzene	U		0.0993	0.500	1	07/15/2020 19:06	WG1509734
Styrene	U		0.118	0.500	1	07/15/2020 19:06	WG1509734
1,1,1,2-Tetrachloroethane	U		0.147	0.500	1	07/15/2020 19:06	WG1509734
1,1,2,2-Tetrachloroethane	U		0.133	0.500	1	07/15/2020 19:06	WG1509734

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Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,1,2-Trichlorotrifluoroethane	U		0.180	0.500	1	07/15/2020 19:06	WG1509734
Tetrachloroethene	U		0.300	0.500	1	07/15/2020 19:06	WG1509734
Toluene	U		0.278	0.500	1	07/15/2020 19:06	WG1509734
1,2,3-Trichlorobenzene	U		0.164	0.500	1	07/15/2020 19:06	WG1509734
1,2,4-Trichlorobenzene	U		0.481	1.00	1	07/15/2020 19:06	WG1509734
1,1,1-Trichloroethane	U		0.149	0.500	1	07/15/2020 19:06	WG1509734
1,1,2-Trichloroethane	U		0.158	0.500	1	07/15/2020 19:06	WG1509734
Trichloroethene	U		0.190	0.500	1	07/15/2020 19:06	WG1509734
Trichlorofluoromethane	U		0.160	2.50	1	07/15/2020 19:06	WG1509734
1,2,3-Trichloropropane	U		0.237	2.50	1	07/15/2020 19:06	WG1509734
1,2,4-Trimethylbenzene	U		0.322	0.500	1	07/15/2020 19:06	WG1509734
1,2,3-Trimethylbenzene	U		0.104	0.500	1	07/15/2020 19:06	WG1509734
1,3,5-Trimethylbenzene	U		0.104	0.500	1	07/15/2020 19:06	WG1509734
Vinyl acetate	U		0.692	5.00	1	07/15/2020 19:06	WG1509734
Vinyl chloride	U		0.234	0.500	1	07/15/2020 19:06	WG1509734
Xylenes, Total	U		0.174	1.50	1	07/15/2020 19:06	WG1509734
(S) Toluene-d8	*102*			*80.0-120*		*07/15/2020 19:06*	WG1509734
(S) 4-Bromofluorobenzene	*99.4*			*77.0-126*		*07/15/2020 19:06*	WG1509734
(S) 1,2-Dichloroethane-d4	*92.2*			*70.0-130*		*07/15/2020 19:06*	WG1509734

JC 8/3/2020

MEMORANDUM

TO: Project File **DATE:** August 6, 2020

FROM: Jessie Compeau

SUBJECT: Laboratory Data Validation Review

PROJECT: American Linen Data Validation

PROJECT #: 1413.001.02.501F

TASK: EIM Data Validation Level EPA2A for July 2020 – Soil Vapor Samples

LAB: Pace Sample Delivery Groups (SDG): L1241285

Twenty-nine (29) soil vapor samples (including two field duplicates) were collected as part of the ongoing soil vapor probe monitoring event at the Former American Linen Supply Site, in Seattle, Washington on July 14-17, 2020. The samples were shipped via courier and delivered to Pace Lab Sciences (Pace) of Mount Juliet, TN for laboratory analysis. Samples were analyzed for the following:

- Volatile organic compounds (VOCs) by United States Environmental Protection Agency (USEPA) Method TO-15

The quality assurance review of the sample data associated with SDG L1241285 is summarized below.

DATA QUALIFICATIONS

Guidelines established by USEPA for a limited data validation review of analytical data along with PACE control limit criteria were used to validate the data. The comments presented in this memorandum refer to the laboratory's performance in meeting the quality control criteria outlined in the USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (USEPA, 2017). Following Guidelines, non-project-specific laboratory duplicates and matrix spike results were not evaluated as part of this data validation.

DATA VALIDATION

Completeness

All samples were collected and analyzed as requested.

Sample Collection and Preservation

The laboratory supplied Summa Canister TM canisters (1Liter) for the air samples. The samples were shipped, delivered by FedEx, and received in good condition by the laboratory. The sample was collected, handled, and delivered in an appropriate manner. No data qualifications were warranted based upon sampling techniques.

Holding Times

The analyses for VOCs by Method TO-15 were performed within the 30-day recommended holding time limit for the air samples collected in Summa canisters. All holding time criteria are met.

Initial and Continuing Calibration

Initial and continuing calibration data for this project are retained by the laboratory and available for review if necessary. Case narrative and laboratory notes do not indicate that there are any issues with calibration.

Method Blank Results

A laboratory method blank is included with each analytical batch per method requirement. The target analytes were not detected in the method blank at or above the RDLs with one exception:

- Analytical Batch WG1514010: A low level of ethanol was detected in the method blank. No action is required since the associated sample detections are much higher than the detected concentration in the blank.

- Analytical Batch WG1514571: A low level of propene was detected in the method blank. No action is required since the associated sample detection is much higher than the propene concentration in the blank.

- Analytical Batch WG1514638: A low level of propene was detected in the method blank. No action is required since either the associated sample propene detections are either much greater than the method blank or are not detected.

- Analytical Batch WG1515454: A low level of propene was detected in the method blank. No action is required since either the associated propene detections are either much greater than the method blank or are not detected in the associated samples.

Trip Blank Results

A trip blank was not required for the VOCs by TO-15 analyses. No action is taken other than to note this.

Field Duplicate Analyses

Field duplicate sample pair is as follows:

- Samples SV-09-071420 and SV-900-071420
- Samples SV-07-071620 and SV-901-071620

Target analyte results are comparable and within a relative percent difference (RPD) of 30% for the field duplicate pair with the following exceptions:

- Samples SV-07-071620 and SV-901-071620. VOC results are not comparable with an RPD greater than 30% (or for results < 5X RDL the absolute difference < 1X RDL). **Field duplicate results for 1,2,4-trimethylbenzene, p-ethyltoluene (4-ethyltoluene), ethanol, m,p-xylene, and tetrahydrofuran are estimated and qualified (UJ/J).**

Laboratory Duplicate/Replicate Analyses

A laboratory replicate was not performed. Refer to the Laboratory Control Sample section for additional information.

Surrogate Recoveries

The surrogate percent recovery (% R) results for the VOCs by TO-15 air samples, method blank, and laboratory control samples are within the laboratory surrogate control limits of 60 -140% R with the following exception:

- Surrogate 1,4-bromoflurobenzene (analytical batch WG1514010) recovery is above criteria in sample SV-24-071420 due to matrix interference. **Associated sample SV-24-071420 positive detections are estimated and qualified (J).**

Laboratory Control Samples

A laboratory control sample/laboratory control sample duplicate (LCS/LCSD) were analyzed for the VOCs by TO-15 along with each analytical batch. The LCS/LCSD recovery and relative percent differences (RPDs) for all control compounds met laboratory control limit criteria.

Matrix Spike/Matrix Spike Duplicates

A matrix spike/matrix spike duplicate (MS/MSD) is not required for the VOCs by TO-15 method.

Other Quality Control Issues

No laboratory quality control issues were identified in the laboratory report with the following discussion:

- Electronic data deliverables (EDDs) for these SDGs were provided by the laboratory and data validator qualifiers were entered. In some cases, different chemical synonyms are used between the EDD and the hardcopy however associated Chemical Abstracts Service (CAS) numbers are provided in the EDD to confirm chemical identifications.

Quantitation Limits

Results of the VOCs by TO-15 analysis are reported based on laboratory MRLs (assuming standard temperature and pressure is equal to 24.45) and reported in units of ppbv and µg/m^3.

The RDLs indicate the minimum quantity of a target analyte that can be confidently determined by the reference method. The RDLs were acceptable for the project; therefore, no data qualifications were warranted.

Data Assessment

The laboratory data reported for this project were reviewed based on the criteria outlined in:

- USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (USEPA, 2017).

Data qualifiers are assigned and laboratory report pages with qualifiers are attached. All data, including qualified data, are judged to be acceptable for their intended use.

SV-24-071420
Collected date/time: 07/14/20 15:40

SAMPLE RESULTS - 05

L1241285

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
Acetone	67-64-1	58.10	1.25	2.97	4.84	11.5	J	1	WG1514010
Allyl chloride	107-05-1	76.53	0.200	0.626	ND	ND		1	WG1514010
Benzene	71-43-2	78.10	0.200	0.639	ND	ND		1	WG1514010
Benzyl Chloride	100-44-7	127	0.200	1.04	ND	ND		1	WG1514010
Bromodichloromethane	75-27-4	164	0.200	1.34	ND	ND		1	WG1514010
Bromoform	75-25-2	253	0.600	6.21	ND	ND		1	WG1514010
Bromomethane	74-83-9	94.90	0.200	0.776	ND	ND		1	WG1514010
1,3-Butadiene	106-99-0	54.10	2.00	4.43	ND	ND		1	WG1514010
Carbon disulfide	75-15-0	76.10	0.200	0.622	2.90	9.03	J	1	WG1514010
Carbon tetrachloride	56-23-5	154	0.200	1.26	ND	ND		1	WG1514010
Chlorobenzene	108-90-7	113	0.200	0.924	ND	ND		1	WG1514010
Chloroethane	75-00-3	64.50	0.200	0.528	ND	ND		1	WG1514010
Chloroform	67-66-3	119	0.200	0.973	ND	ND		1	WG1514010
Chloromethane	74-87-3	50.50	0.200	0.413	ND	ND		1	WG1514010
2-Chlorotoluene	95-49-8	126	0.200	1.03	ND	ND		1	WG1514010
Cyclohexane	110-82-7	84.20	0.200	0.689	ND	ND		1	WG1514010
Dibromochloromethane	124-48-1	208	0.200	1.70	ND	ND		1	WG1514010
1,2-Dibromoethane	106-93-4	188	0.200	1.54	ND	ND		1	WG1514010
1,2-Dichlorobenzene	95-50-1	147	0.200	1.20	ND	ND		1	WG1514010
1,3-Dichlorobenzene	541-73-1	147	0.200	1.20	ND	ND		1	WG1514010
1,4-Dichlorobenzene	106-46-7	147	0.200	1.20	ND	ND		1	WG1514010
1,2-Dichloroethane	107-06-2	99	0.200	0.810	ND	ND		1	WG1514010
1,1-Dichloroethane	75-34-3	98	0.200	0.802	ND	ND		1	WG1514010
1,1-Dichloroethene	75-35-4	96.90	0.200	0.793	ND	ND		1	WG1514010
cis-1,2-Dichloroethene	156-59-2	96.90	0.200	0.793	ND	ND		1	WG1514010
trans-1,2-Dichloroethene	156-60-5	96.90	0.200	0.793	ND	ND		1	WG1514010
1,2-Dichloropropane	78-87-5	113	0.200	0.924	ND	ND		1	WG1514010
cis-1,3-Dichloropropene	10061-01-5	111	0.200	0.908	ND	ND		1	WG1514010
trans-1,3-Dichloropropene	10061-02-6	111	0.200	0.908	ND	ND		1	WG1514010
1,4-Dioxane	123-91-1	88.10	0.200	0.721	ND	ND		1	WG1514010
Ethanol	64-17-5	46.10	0.630	1.19	9.93	18.7	J	1	WG1514010
Ethylbenzene	100-41-4	106	0.200	0.867	ND	ND		1	WG1514010
4-Ethyltoluene	622-96-8	120	0.200	0.982	ND	ND		1	WG1514010
Trichlorofluoromethane	75-69-4	137.40	0.200	1.12	ND	ND		1	WG1514010
Dichlorodifluoromethane	75-71-8	120.92	0.200	0.989	ND	ND		1	WG1514010
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	0.200	1.53	ND	ND		1	WG1514010
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.200	1.40	ND	ND		1	WG1514010
Heptane	142-82-5	100	0.200	0.818	ND	ND		1	WG1514010
Hexachloro-1,3-butadiene	87-68-3	261	0.630	6.73	ND	ND		1	WG1514010
n-Hexane	110-54-3	86.20	0.630	2.22	2.76	9.73	J	1	WG1514010
Isopropylbenzene	98-82-8	120.20	0.200	0.983	ND	ND		1	WG1514010
Methylene Chloride	75-09-2	84.90	0.200	0.694	ND	ND		1	WG1514010
Methyl Butyl Ketone	591-78-6	100	1.25	5.11	ND	ND		1	WG1514010
2-Butanone (MEK)	78-93-3	72.10	1.25	3.69	ND	ND		1	WG1514010
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	1.25	5.12	ND	ND		1	WG1514010
Methyl methacrylate	80-62-6	100.12	0.200	0.819	ND	ND		1	WG1514010
MTBE	1634-04-4	88.10	0.200	0.721	ND	ND		1	WG1514010
Naphthalene	91-20-3	128	0.630	3.30	ND	ND		1	WG1514010
2-Propanol	67-63-0	60.10	1.25	3.07	ND	ND		1	WG1514010
Propene	115-07-1	42.10	0.400	0.689	ND	ND		1	WG1514010
Styrene	100-42-5	104	0.200	0.851	ND	ND		1	WG1514010
1,1,2,2-Tetrachloroethane	79-34-5	168	0.200	1.37	ND	ND		1	WG1514010
Tetrachloroethylene	127-18-4	166	0.200	1.36	ND	ND		1	WG1514010
Tetrahydrofuran	109-99-9	72.10	0.200	0.590	ND	ND		1	WG1514010
Toluene	108-88-3	92.10	0.200	0.753	ND	ND		1	WG1514010
1,2,4-Trichlorobenzene	120-82-1	181	0.630	4.66	ND	ND		1	WG1514010

JC 8/3/2020

SV-24-071420

Collected date/time: 07/14/20 15:40

SAMPLE RESULTS - 05

L1241285

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
1,1,1-Trichloroethane	71-55-6	133	0.200	1.09	ND	ND		1	WG1514010
1,1,2-Trichloroethane	79-00-5	133	0.200	1.09	ND	ND		1	WG1514010
Trichloroethylene	79-01-6	131	0.200	1.07	ND	ND		1	WG1514010
1,2,4-Trimethylbenzene	95-63-6	120	0.200	0.982	ND	ND		1	WG1514010
1,3,5-Trimethylbenzene	108-67-8	120	0.200	0.982	ND	ND		1	WG1514010
2,2,4-Trimethylpentane	540-84-1	114.22	10.0	46.7	1620	7570		50	WG1514625
Vinyl chloride	75-01-4	62.50	0.200	0.511	ND	ND		1	WG1514010
Vinyl Bromide	593-60-2	106.95	0.200	0.875	ND	ND		1	WG1514010
Vinyl acetate	108-05-4	86.10	0.200	0.704	ND	ND		1	WG1514010
m&p-Xylene	1330-20-7	106	0.400	1.73	ND	ND		1	WG1514010
o-Xylene	95-47-6	106	0.200	0.867	ND	ND		1	WG1514010
(S) 1,4-Bromofluorobenzene	*460-00-4*	*175*	*60.0-140*		*160*		J1		WG1514010
(S) 1,4-Bromofluorobenzene	*460-00-4*	*175*	*60.0-140*		*93.7*				WG1514625

Sample Narrative:

L1241285-05 WG1514010: Surrogate failure due to matrix interference.

JC 8/3/2020

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
Acetone	67-64-1	58.10	1.25	2.97	4.64	11.0		1	WG1514638
Allyl chloride	107-05-1	76.53	0.200	0.626	ND	ND		1	WG1514638
Benzene	71-43-2	78.10	0.200	0.639	1.90	6.07		1	WG1514638
Benzyl Chloride	100-44-7	127	0.200	1.04	ND	ND		1	WG1514638
Bromodichloromethane	75-27-4	164	0.200	1.34	ND	ND		1	WG1514638
Bromoform	75-25-2	253	0.600	6.21	ND	ND		1	WG1514638
Bromomethane	74-83-9	94.90	0.200	0.776	ND	ND		1	WG1514638
1,3-Butadiene	106-99-0	54.10	2.00	4.43	ND	ND		1	WG1514638
Carbon disulfide	75-15-0	76.10	0.200	0.622	17.0	52.9		1	WG1514638
Carbon tetrachloride	56-23-5	154	0.200	1.26	1.08	6.80		1	WG1514638
Chlorobenzene	108-90-7	113	0.200	0.924	ND	ND		1	WG1514638
Chloroethane	75-00-3	64.50	0.200	0.528	ND	ND		1	WG1514638
Chloroform	67-66-3	119	0.200	0.973	ND	ND		1	WG1514638
Chloromethane	74-87-3	50.50	0.200	0.413	11.7	24.2		1	WG1514638
2-Chlorotoluene	95-49-8	126	0.200	1.03	ND	ND		1	WG1514638
Cyclohexane	110-82-7	84.20	0.200	0.689	14.9	51.3		1	WG1514638
Dibromochloromethane	124-48-1	208	0.200	1.70	ND	ND		1	WG1514638
1,2-Dibromoethane	106-93-4	188	0.200	1.54	ND	ND		1	WG1514638
1,2-Dichlorobenzene	95-50-1	147	0.200	1.20	ND	ND		1	WG1514638
1,3-Dichlorobenzene	541-73-1	147	0.200	1.20	ND	ND		1	WG1514638
1,4-Dichlorobenzene	106-46-7	147	0.200	1.20	ND	ND		1	WG1514638
1,2-Dichloroethane	107-06-2	99	0.200	0.810	ND	ND		1	WG1514638
1,1-Dichloroethane	75-34-3	98	0.200	0.802	ND	ND		1	WG1514638
1,1-Dichloroethene	75-35-4	96.90	0.200	0.793	ND	ND		1	WG1514638
cis-1,2-Dichloroethene	156-59-2	96.90	0.200	0.793	ND	ND		1	WG1514638
trans-1,2-Dichloroethene	156-60-5	96.90	0.200	0.793	ND	ND		1	WG1514638
1,2-Dichloropropane	78-87-5	113	0.200	0.924	ND	ND		1	WG1514638
cis-1,3-Dichloropropene	10061-01-5	111	0.200	0.908	ND	ND		1	WG1514638
trans-1,3-Dichloropropene	10061-02-6	111	0.200	0.908	ND	ND		1	WG1514638
1,4-Dioxane	123-91-1	88.10	0.200	0.721	ND	ND		1	WG1514638
Ethanol	64-17-5	46.10	0.630	1.19	4.84	9.13	J	1	WG1514638
Ethylbenzene	100-41-4	106	0.200	0.867	0.334	1.45		1	WG1514638
4-Ethyltoluene	622-96-8	120	0.200	0.982	0.609	2.99	J	1	WG1514638
Trichlorofluoromethane	75-69-4	137.40	0.200	1.12	0.533	3.00		1	WG1514638
Dichlorodifluoromethane	75-71-8	120.92	0.200	0.989	0.553	2.73		1	WG1514638
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	0.200	1.53	ND	ND		1	WG1514638
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.200	1.40	ND	ND		1	WG1514638
Heptane	142-82-5	100	0.200	0.818	ND	ND		1	WG1514638
Hexachloro-1,3-butadiene	87-68-3	261	0.630	6.73	ND	ND		1	WG1514638
n-Hexane	110-54-3	86.20	0.630	2.22	1.91	6.73		1	WG1514638
Isopropylbenzene	98-82-8	120.20	0.200	0.983	ND	ND		1	WG1514638
Methylene Chloride	75-09-2	84.90	0.200	0.694	ND	ND		1	WG1514638
Methyl Butyl Ketone	591-78-6	100	1.25	5.11	ND	ND		1	WG1514638
2-Butanone (MEK)	78-93-3	72.10	1.25	3.69	1.31	3.86		1	WG1514638
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	1.25	5.12	ND	ND		1	WG1514638
Methyl methacrylate	80-62-6	100.12	0.200	0.819	ND	ND		1	WG1514638
MTBE	1634-04-4	88.10	0.200	0.721	ND	ND		1	WG1514638
Naphthalene	91-20-3	128	0.630	3.30	ND	ND		1	WG1514638
2-Propanol	67-63-0	60.10	1.25	3.07	ND	ND		1	WG1514638
Propene	115-07-1	42.10	4.00	6.89	265	456		10	WG1515454
Styrene	100-42-5	104	0.200	0.851	ND	ND		1	WG1514638
1,1,2,2-Tetrachloroethane	79-34-5	168	0.200	1.37	ND	ND		1	WG1514638
Tetrachloroethylene	127-18-4	166	0.200	1.36	6.41	43.5		1	WG1514638
Tetrahydrofuran	109-99-9	72.10	0.200	0.590	ND	ND	UJ	1	WG1514638
Toluene	108-88-3	92.10	0.200	0.753	1.84	6.93		1	WG1514638
1,2,4-Trichlorobenzene	120-82-1	181	0.630	4.66	ND	ND		1	WG1514638

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Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
1,1,1-Trichloroethane	71-55-6	133	0.200	1.09	ND	ND		1	WG1514638
1,1,2-Trichloroethane	79-00-5	133	0.200	1.09	ND	ND		1	WG1514638
Trichloroethylene	79-01-6	131	0.200	1.07	ND	ND		1	WG1514638
1,2,4-Trimethylbenzene	95-63-6	120	0.200	0.982	0.967	4.75		1	WG1514638
1,3,5-Trimethylbenzene	108-67-8	120	0.200	0.982	0.270	1.33		1	WG1514638
2,2,4-Trimethylpentane	540-84-1	114.22	0.200	0.934	ND	ND		1	WG1514638
Vinyl chloride	75-01-4	62.50	0.200	0.511	ND	ND		1	WG1514638
Vinyl Bromide	593-60-2	106.95	0.200	0.875	ND	ND		1	WG1514638
Vinyl acetate	108-05-4	86.10	0.200	0.704	ND	ND		1	WG1514638
m&p-Xylene	1330-20-7	106	0.400	1.73	1.51	6.55 J		1	WG1514638
o-Xylene	95-47-6	106	0.200	0.867	0.630	2.73		1	WG1514638
(S) 1,4-Bromofluorobenzene	*460-00-4*	*175*	*60.0-140*		*101*				WG1514638
(S) 1,4-Bromofluorobenzene	*460-00-4*	*175*	*60.0-140*		*97.7*				WG1515454

Cp
Tc
Ss
Cn
Sr
Qc
Gl
Al
Sc

JC 8/3/2020

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Volatile Organic Compounds (MS) by Method TO-15

	CAS #	Mol. Wt.	RDL1	RDL2	Result	Result	Qualifier	Dilution	Batch	
Analyte			ppbv	ug/m3	ppbv	ug/m3				
Acetone	67-64-1	58.10	1.25	2.97	5.42	12.9		1	WG1514638	
Allyl chloride	107-05-1	76.53	0.200	0.626	ND	ND		1	WG1514638	
Benzene	71-43-2	78.10	0.200	0.639	1.82	5.81		1	WG1514638	
Benzyl Chloride	100-44-7	127	0.200	1.04	ND	ND		1	WG1514638	
Bromodichloromethane	75-27-4	164	0.200	1.34	ND	ND		1	WG1514638	
Bromoform	75-25-2	253	0.600	6.21	ND	ND		1	WG1514638	
Bromomethane	74-83-9	94.90	0.200	0.776	ND	ND		1	WG1514638	
1,3-Butadiene	106-99-0	54.10	2.00	4.43	ND	ND		1	WG1514638	
Carbon disulfide	75-15-0	76.10	0.200	0.622	15.6	48.6		1	WG1514638	
Carbon tetrachloride	56-23-5	154	0.200	1.26	1.06	6.68		1	WG1514638	
Chlorobenzene	108-90-7	113	0.200	0.924	ND	ND		1	WG1514638	
Chloroethane	75-00-3	64.50	0.200	0.528	ND	ND		1	WG1514638	
Chloroform	67-66-3	119	0.200	0.973	ND	ND		1	WG1514638	
Chloromethane	74-87-3	50.50	0.200	0.413	ND	ND		1	WG1514638	
2-Chlorotoluene	95-49-8	126	0.200	1.03	ND	ND		1	WG1514638	
Cyclohexane	110-82-7	84.20	0.200	0.689	14.5	49.9		1	WG1514638	
Dibromochloromethane	124-48-1	208	0.200	1.70	ND	ND		1	WG1514638	
1,2-Dibromoethane	106-93-4	188	0.200	1.54	ND	ND		1	WG1514638	
1,2-Dichlorobenzene	95-50-1	147	0.200	1.20	ND	ND		1	WG1514638	
1,3-Dichlorobenzene	541-73-1	147	0.200	1.20	ND	ND		1	WG1514638	
1,4-Dichlorobenzene	106-46-7	147	0.200	1.20	ND	ND		1	WG1514638	
1,2-Dichloroethane	107-06-2	99	0.200	0.810	ND	ND		1	WG1514638	
1,1-Dichloroethane	75-34-3	98	0.200	0.802	ND	ND		1	WG1514638	
1,1-Dichloroethene	75-35-4	96.90	0.200	0.793	ND	ND		1	WG1514638	
cis-1,2-Dichloroethene	156-59-2	96.90	0.200	0.793	ND	ND		1	WG1514638	
trans-1,2-Dichloroethene	156-60-5	96.90	0.200	0.793	ND	ND		1	WG1514638	
1,2-Dichloropropane	78-87-5	113	0.200	0.924	ND	ND		1	WG1514638	
cis-1,3-Dichloropropene	10061-01-5	111	0.200	0.908	ND	ND		1	WG1514638	
trans-1,3-Dichloropropene	10061-02-6	111	0.200	0.908	ND	ND		1	WG1514638	
1,4-Dioxane	123-91-1	88.10	0.200	0.721	ND	ND		1	WG1514638	
Ethanol	64-17-5	46.10	0.630	1.19	23.6	44.5	J	1	WG1514638	
Ethylbenzene	100-41-4	106	0.200	0.867	0.235	1.02		1	WG1514638	
4-Ethyltoluene	622-96-8	120	0.200	0.982	ND	ND	UJ	1	WG1514638	
Trichlorofluoromethane	75-69-4	137.40	0.200	1.12	0.526	2.96		1	WG1514638	
Dichlorodifluoromethane	75-71-8	120.92	0.200	0.989	0.563	2.78		1	WG1514638	
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	0.200	1.53	ND	ND		1	WG1514638	
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.200	1.40	ND	ND		1	WG1514638	
Heptane	142-82-5	100	0.200	0.818	0.442	1.81		1	WG1514638	
Hexachloro-1,3-butadiene	87-68-3	261	0.630	6.73	ND	ND		1	WG1514638	
n-Hexane	110-54-3	86.20	0.630	2.22	1.65	5.82		1	WG1514638	
Isopropylbenzene	98-82-8	120.20	0.200	0.983	ND	ND		1	WG1514638	
Methylene Chloride	75-09-2	84.90	0.200	0.694	ND	ND		1	WG1514638	
Methyl Butyl Ketone	591-78-6	100	1.25	5.11	ND	ND		1	WG1514638	
2-Butanone (MEK)	78-93-3	72.10	1.25	3.69	1.45	4.28		1	WG1514638	
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	1.25	5.12	ND	ND		1	WG1514638	
Methyl methacrylate	80-62-6	100.12	0.200	0.819	ND	ND		1	WG1514638	
MTBE	1634-04-4	88.10	0.200	0.721	ND	ND		1	WG1514638	
Naphthalene	91-20-3	128	0.630	3.30	ND	ND		1	WG1514638	
2-Propanol	67-63-0	60.10	1.25	3.07	1.62	3.98		1	WG1514638	
Propene	115-07-1	42.10	4.00	6.89	233	401		10	WG1515454	
Styrene	100-42-5	104	0.200	0.851	ND	ND		1	WG1514638	
1,1,2,2-Tetrachloroethane	79-34-5	168	0.200	1.37	ND	ND		1	WG1514638	
Tetrachloroethylene	127-18-4	166	0.200	1.36	6.26	42.5		1	WG1514638	
Tetrahydrofuran	109-99-9	72.10	0.200	0.590	ND	ND	UJ	1	WG1514638	JC 8/3/2020
Toluene	108-88-3	92.10	0.200	0.753	3.20	12.1		1	WG1514638	
1,2,4-Trichlorobenzene	120-82-1	181	0.630	4.66	ND	ND		1	WG1514638	

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
1,1,1-Trichloroethane	71-55-6	133	0.200	1.09	ND	ND		1	WG1514638
1,1,2-Trichloroethane	79-00-5	133	0.200	1.09	ND	ND		1	WG1514638
Trichloroethylene	79-01-6	131	0.200	1.07	0.221	1.18		1	WG1514638
1,2,4-Trimethylbenzene	95-63-6	120	0.200	0.982	0.453	2.22		1	WG1514638
1,3,5-Trimethylbenzene	108-67-8	120	0.200	0.982	ND	ND		1	WG1514638
2,2,4-Trimethylpentane	540-84-1	114.22	0.200	0.934	ND	ND		1	WG1514638
Vinyl chloride	75-01-4	62.50	0.200	0.511	ND	ND		1	WG1514638
Vinyl Bromide	593-60-2	106.95	0.200	0.875	ND	ND		1	WG1514638
Vinyl acetate	108-05-4	86.10	0.200	0.704	ND	ND		1	WG1514638
m&p-Xylene	1330-20-7	106	0.400	1.73	0.560	2.43		1	WG1514638
o-Xylene	95-47-6	106	0.200	0.867	0.307	1.33	J	1	WG1514638
(S) 1,4-Bromofluorobenzene	*460-00-4*	*175*	*60.0-140*		*101*				WG1514638
(S) 1,4-Bromofluorobenzene	*460-00-4*	*175*	*60.0-140*		*98.0*				WG1515454

JC 8/3/2020

MEMORANDUM

TO: Project File **DATE:** May 29, 2020

FROM: Jessie Compeau

SUBJECT: Laboratory Data Validation Review

PROJECT: American Linen Data Validation

PROJECT #: 1413.001.05.202

TASK: EIM Data Validation Level EPA2A for Interim Action for Utility Borings - August 2020 Soil Samples.

LAB: Pace Sample Delivery Groups (SDGs): L1253451, L1253974, and L1255238

Twenty-nine (29) soil samples, including one field duplicate, and one trip blank were collected on August 19, 20, 22, and 26, 2020 as part of the Interim Action (IA) portion of the Work Plan at the Former American Linen Supply Site, in Seattle, Washington. The samples were delivered to Pace Analytical (Pace) of Mount Juliet, TN for laboratory analysis. Selected samples were analyzed for the following parameters:

- Volatile organic compounds (VOCs) by United States Environmental Protection Agency (USEPA) Method 8260D; and
- Total Solids by Standard Methods (SM) 2540 G-2011.

The utility boring soil sampling results are reported in Pace SDGs L1253451, L1253974, and L1255238. The quality assurance review of the laboratory data associated with these SDGs are summarized below.

DATA QUALIFICATIONS

Guidelines established by USEPA for review of analytical data were used to validate the data. The comments presented in this memorandum refer to the laboratory’s performance in meeting the quality control criteria outlined in the USEPA Contract Laboratory Program National Functional Guidelines for Organic Superfund Methods Data Review (USEPA, 2017). Following Guidelines, non-project-specific laboratory duplicates and matrix spike results were not evaluated as part of this data validation.

DATA VALIDATION

Sample Receipt, Preservation and Handling

The samples were collected and delivered to the laboratory by courier. The samples were delivered to the project laboratory in coolers under standard chain-of-custody protocols. Review of Pace's chain of custody (COC) notes indicate that all samples were received in good condition below the recommended preservation temperature 6.0°C. No data qualifications were assigned due to sample receipt or temperature preservation issues.

Holding Times

USEPA Method 8260D:
All samples were analyzed for VOCs within the USEPA recommended holding time of fourteen days for soils and waters (trip blanks) from the date of sample collection. All holding time criteria are met.

Total Solids by SM 2540 G-2011:
Samples were analyzed within the USEPA recommended holding time of seven days for total solids.

Initial and Continuing Calibration

Calibration data for this project are not required for this deliverable however PACE's notes indicate the following:

- Multiple SDGs - *USEPA Method 8260D:* Continuing calibration verification (CCV) issues were noted by Pace for multiple compounds associated with analytical batches in each SDG. These compounds are qualified by the laboratory "J0" to indicate that percent difference CCV is outside of laboratory acceptance criteria. **Associated sample results with laboratory qualified (J0) results are estimated and qualified (J/UJ).**

Method Blank Results

USEPA Method 8260D:
Laboratory method blanks are included with the analytical batches per method requirement. The target analytes are not detected in the method blanks at or above the method detection limit (MDLs) or the reporting detection limit (RDLs) with the following exceptions:

- SDG L1255238: Naphthalene is detected below the RDL in the method blank (analytical batch WG1534818). **Associated naphthalene detections in B-297-5 and B-298-5 are detected below the RDL and are qualified as not detected (U) due to method or trip blank contamination.** Refer to Trip Blank Results for further information.

Trip Blank Results

USEPA Method 8260D:
One trip blank (TB-082620) was collected and analyzed. The target analytes were not detected in the trip blanks at or above the MDLs or RDLs with the following exceptions:

- SDG L1255238: Low levels of 2-butanone (MEK), naphthalene, toluene, and total xylenes are detected in the trip blank TB-082620.
    - **Associated MEK detection in sample B-294-10 is qualified as not detected (U) due to blank contamination.**

  - **Associated naphthalene detections in samples B-294-10, B-295-1, B-295-7, B-295-10, B-296-1, B-293-1, B-297-1, B-297-3, B-297-5, B-298-5, and B-500-1 are qualified as not detected (U) due to method or trip blank contamination.** Refer to Method Blank Results for further information.

  - **Associated toluene detections in samples B-294-6, B-294-10, B-295-3, B-295-7, B-295-10, B-293-1, B-297-3, B-297-5, and B-298-5 are qualified as not detected (U) due to trip blank contamination.**

  - **Associated total xylene detections in samples B-294-6, B-294-10, B-295-1, B-295-3, B-295-7, B-295-10, B-296-1, B-293-1, B-297-3, B-297-5, B-298-5, and B-500-1 are qualified as not detected (U) due to trip blank contamination.**

Field, Rinsate, or Equipment Blank Results

Field, rinsate or equipment blanks were not collected.

Field Duplicate Analyses

Field duplicate sample pair is as follows:

- SDG L1255238: Samples B-297-3 and B-500-1

Field duplicate pair was submitted and analyzed for VOCs and percent solids. Percent solids and VOC target analyte results are comparable and within a relative percent difference (RPD) of 30% (± 2x RDL for soil results <5X the RDL) for the field duplicate.

Laboratory Duplicate Analyses

USEPA Method 8260D:
Laboratory duplicate analyses were not performed. Refer to laboratory control samples, field duplicate samples, or matrix spike results for precision data.

Total Solids by SM 2540 G-2011:
Laboratory duplicate samples were performed on client and non-client samples associated with the analytical batches. The RPDs for percent moisture are within the laboratory control limit of 20% RPD.

Surrogate Recoveries

USEPA Method 8260D:
The surrogate recovery results for the samples, laboratory control samples, matrix spike samples, and the method blanks are within the laboratory surrogate control limits for all the analyses.

Matrix Spike/ Matrix Spike Duplicates

USEPA Method 8260D:
Matrix spike/matrix spike duplicate (MS/MSD) analyses were performed on non-client samples within the analytical batch. In cases where MS/MSDs were not performed refer to laboratory control samples, field duplicate data for accuracy and precision data. The MS/MSD %R's and RPDs for the target compounds are within the laboratory control criteria for soil and waters with the following discussion:

- SDG L1255238: Matrix spike analyses (analytical batch WG1534490) were performed on a non-client sample within the analytical batch. MS/MSD iodomethane recoveries are wide with an elevated RPD and laboratory qualified (J3). MS/MSD recoveries for vinyl acetate were below criteria due to matrix interference and laboratory qualified (J6). No action is taken since the spike is performed on a non-client sample.

- SDG L1255238: Matrix spike analyses (analytical batch WG1534818) was performed on a non-client sample within the analytical batch. MS/MSD recoveries for acetone and trichlorofluoromethane are recovered wide and laboratory qualified (J3). MS recovery for trichlorofluoromethane is below criteria due to matrix interference and laboratory qualified (J6). No action is taken since the spike is performed on a non-client sample.

Laboratory Control Samples

USEPA Method 8260D:
Laboratory control sample/laboratory control sample duplicates (LCS/LCSD) were analyzed by USEPA Method 8260D. The LCS/LCSD %R's and RPDs for the target compounds are within the laboratory control criteria for soils with the following discussion:

- SDG L1255238: LCS/LCSD (analytical batch WG1534490) recoveries for multiple compounds are recovered wide with elevated RPDs and laboratory qualified (J3). No action is taken since the recoveries are within criteria but are recovered wide (due to wide recovery control limits).

- SDG L1255238: LCS/LCSD (analytical batch WG1534818) recoveries for acetone and acrylonitrile are recovered wide with elevated RPDs and laboratory qualified (J3). No action is taken since the recoveries are within criteria but are recovered wide.

Moisture by Method 8000D:
LCS were analyzed within the analytical batch. For precision data refer to laboratory or field duplicate results. The LCS %Rs for the target compound is within the laboratory control criteria for soils.

Other Quality Control Issues

No laboratory quality control issues were identified in the laboratory reports with the following discussion:

- Electronic data deliverables (EDDs) for these Work Orders were provided by the laboratory and data validator qualifiers were entered, as appropriate, into the EDDs.

Quantitation Limits

Results of all analyses were reported based on standard laboratory RLs. The reported RLs are considered appropriate for this project.

Completeness

The samples were collected and analyzed as requested. Data completeness is 100%.

Data Assessment

The laboratory data reported for this project were reviewed based on laboratory control limit acceptance criteria and criteria outlined in:

- USEPA Contract Laboratory Program National Functional Guidelines for Organic Superfund Methods Data Review (USEPA, 2017)

Data qualifiers are assigned and laboratory report pages with qualifiers are attached. All data, including qualified data, are judged to be acceptable for their intended use.

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	38.8		1	08/23/2020 01:07	WG1530651

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	U		0.159	0.218	1.08	08/22/2020 20:14	WG1530753
Acrylonitrile	U		0.0158	0.0545	1.08	08/22/2020 20:14	WG1530753
Benzene	0.00207	J	0.00204	0.00436	1.08	08/22/2020 20:14	WG1530753
Bromobenzene	U		0.00393	0.0545	1.08	08/22/2020 20:14	WG1530753
Bromodichloromethane	U		0.00316	0.0109	1.08	08/22/2020 20:14	WG1530753
Bromochloromethane	U		0.00246	0.0218	1.08	08/22/2020 20:14	WG1530753
Bromoform	U		0.00509	0.109	1.08	08/22/2020 20:14	WG1530753
Bromomethane	U		0.00861	0.0545	1.08	08/22/2020 20:14	WG1530753
n-Butylbenzene	U		0.0229	0.0545	1.08	08/22/2020 20:14	WG1530753
sec-Butylbenzene	U		0.0126	0.0545	1.08	08/22/2020 20:14	WG1530753
tert-Butylbenzene	U		0.00853	0.0218	1.08	08/22/2020 20:14	WG1530753
Carbon disulfide	U		0.00305	0.0545	1.08	08/22/2020 20:14	WG1530753
Carbon tetrachloride	U		0.00392	0.0218	1.08	08/22/2020 20:14	WG1530753
Chlorobenzene	U		0.000917	0.0109	1.08	08/22/2020 20:14	WG1530753
Chlorodibromomethane	U		0.00267	0.0109	1.08	08/22/2020 20:14	WG1530753
Chloroethane	U		0.00743	0.0218	1.08	08/22/2020 20:14	WG1530753
Chloroform	U		0.00449	0.0109	1.08	08/22/2020 20:14	WG1530753
Chloromethane	U		0.0190	0.0545	1.08	08/22/2020 20:14	WG1530753
2-Chlorotoluene	U		0.00377	0.0109	1.08	08/22/2020 20:14	WG1530753
4-Chlorotoluene	U		0.00196	0.0218	1.08	08/22/2020 20:14	WG1530753
1,2-Dibromo-3-Chloropropane	U		0.0170	0.109	1.08	08/22/2020 20:14	WG1530753
1,2-Dibromoethane	U		0.00283	0.0109	1.08	08/22/2020 20:14	WG1530753
Dibromomethane	U		0.00327	0.0218	1.08	08/22/2020 20:14	WG1530753
1,2-Dichlorobenzene	U		0.00185	0.0218	1.08	08/22/2020 20:14	WG1530753
1,3-Dichlorobenzene	U		0.00262	0.0218	1.08	08/22/2020 20:14	WG1530753
1,4-Dichlorobenzene	U		0.00305	0.0218	1.08	08/22/2020 20:14	WG1530753
Dichlorodifluoromethane	U		0.00703	0.0109	1.08	08/22/2020 20:14	WG1530753
1,1-Dichloroethane	U		0.00214	0.0109	1.08	08/22/2020 20:14	WG1530753
1,2-Dichloroethane	U		0.00283	0.0109	1.08	08/22/2020 20:14	WG1530753
1,1-Dichloroethene	U		0.00264	0.0109	1.08	08/22/2020 20:14	WG1530753
cis-1,2-Dichloroethene	U		0.00320	0.0109	1.08	08/22/2020 20:14	WG1530753
trans-1,2-Dichloroethene	U		0.00453	0.0218	1.08	08/22/2020 20:14	WG1530753
1,2-Dichloropropane	U		0.00618	0.0218	1.08	08/22/2020 20:14	WG1530753
1,1-Dichloropropene	U		0.00353	0.0109	1.08	08/22/2020 20:14	WG1530753
1,3-Dichloropropane	U		0.00219	0.0218	1.08	08/22/2020 20:14	WG1530753
cis-1,3-Dichloropropene	U		0.00331	0.0109	1.08	08/22/2020 20:14	WG1530753
trans-1,3-Dichloropropene	U		0.00497	0.0218	1.08	08/22/2020 20:14	WG1530753
trans-1,4-Dichloro-2-butene	U		0.00812	0.0218	1.08	08/22/2020 20:14	WG1530753
2,2-Dichloropropane	U		0.00602	0.0109	1.08	08/22/2020 20:14	WG1530753
Di-isopropyl ether	U		0.00179	0.00436	1.08	08/22/2020 20:14	WG1530753
Ethylbenzene	U		0.00322	0.0109	1.08	08/22/2020 20:14	WG1530753
Hexachloro-1,3-butadiene	U UJ	J0	0.0262	0.109	1.08	08/22/2020 20:14	WG1530753
2-Hexanone	U		0.0147	0.109	1.08	08/22/2020 20:14	WG1530753
n-Hexane	U		0.00986	0.0218	1.08	08/22/2020 20:14	WG1530753
Iodomethane	U		0.0101	0.0545	1.08	08/22/2020 20:14	WG1530753
Isopropylbenzene	U		0.00185	0.0109	1.08	08/22/2020 20:14	WG1530753
p-Isopropyltoluene	U		0.0111	0.0218	1.08	08/22/2020 20:14	WG1530753
2-Butanone (MEK)	U		0.277	0.436	1.08	08/22/2020 20:14	WG1530753
Methylene Chloride	U		0.0290	0.109	1.08	08/22/2020 20:14	WG1530753
4-Methyl-2-pentanone (MIBK)	U		0.00994	0.109	1.08	08/22/2020 20:14	WG1530753

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B-289-0.5

Collected date/time: 08/19/20 09:35

SAMPLE RESULTS - 01

L1253451

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.00153	0.00436	1.08	08/22/2020 20:14	WG1530753
Naphthalene	U UJ	J0	0.0213	0.0545	1.08	08/22/2020 20:14	WG1530753
n-Propylbenzene	U		0.00416	0.0218	1.08	08/22/2020 20:14	WG1530753
Styrene	U		0.000998	0.0545	1.08	08/22/2020 20:14	WG1530753
1,1,1,2-Tetrachloroethane	U UJ	J0	0.00412	0.0109	1.08	08/22/2020 20:14	WG1530753
1,1,2,2-Tetrachloroethane	U		0.00303	0.0109	1.08	08/22/2020 20:14	WG1530753
1,1,2-Trichlorotrifluoroethane	U		0.00329	0.0109	1.08	08/22/2020 20:14	WG1530753
Tetrachloroethene	U		0.00391	0.0109	1.08	08/22/2020 20:14	WG1530753
Toluene	0.0134	J	0.00566	0.0218	1.08	08/22/2020 20:14	WG1530753
1,2,3-Trichlorobenzene	U UJ	J0	0.0320	0.0545	1.08	08/22/2020 20:14	WG1530753
1,2,4-Trichlorobenzene	U UJ	J0	0.0192	0.0545	1.08	08/22/2020 20:14	WG1530753
1,1,1-Trichloroethane	U		0.00403	0.0109	1.08	08/22/2020 20:14	WG1530753
1,1,2-Trichloroethane	U		0.00261	0.0109	1.08	08/22/2020 20:14	WG1530753
Trichloroethene	U		0.00255	0.00436	1.08	08/22/2020 20:14	WG1530753
Trichlorofluoromethane	U		0.00361	0.0109	1.08	08/22/2020 20:14	WG1530753
1,2,3-Trichloropropane	U		0.00707	0.0545	1.08	08/22/2020 20:14	WG1530753
1,2,4-Trimethylbenzene	0.0198	J	0.00691	0.0218	1.08	08/22/2020 20:14	WG1530753
1,2,3-Trimethylbenzene	0.0175	J	0.00691	0.0218	1.08	08/22/2020 20:14	WG1530753
1,3,5-Trimethylbenzene	U		0.00873	0.0218	1.08	08/22/2020 20:14	WG1530753
Vinyl acetate	U		0.0111	0.0545	1.08	08/22/2020 20:14	WG1530753
Vinyl chloride	U		0.00505	0.0109	1.08	08/22/2020 20:14	WG1530753
Xylenes, Total	0.0115	J	0.00384	0.0284	1.08	08/22/2020 20:14	WG1530753
(S) Toluene-d8	*93.8*			*75.0-131*		*08/22/2020 20:14*	WG1530753
(S) 4-Bromofluorobenzene	*101*			*67.0-138*		*08/22/2020 20:14*	WG1530753
(S) 1,2-Dichloroethane-d4	*98.8*			*70.0-130*		*08/22/2020 20:14*	WG1530753

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1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	38.5		1	08/23/2020 01:07	WG1530651

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch	
Acetone	U		0.194	0.265	1.43	08/22/2020 20:33	WG1530753	
Acrylonitrile	U		0.0191	0.0664	1.43	08/22/2020 20:33	WG1530753	
Benzene	0.0224		0.00248	0.00531	1.43	08/22/2020 20:33	WG1530753	
Bromobenzene	U		0.00479	0.0664	1.43	08/22/2020 20:33	WG1530753	
Bromodichloromethane	U		0.00386	0.0133	1.43	08/22/2020 20:33	WG1530753	
Bromochloromethane	U		0.00299	0.0265	1.43	08/22/2020 20:33	WG1530753	
Bromoform	U		0.00620	0.132	1.43	08/22/2020 20:33	WG1530753	
Bromomethane	U		0.0105	0.0664	1.43	08/22/2020 20:33	WG1530753	
n-Butylbenzene	U		0.0279	0.0664	1.43	08/22/2020 20:33	WG1530753	
sec-Butylbenzene	U		0.0153	0.0664	1.43	08/22/2020 20:33	WG1530753	
tert-Butylbenzene	U		0.0104	0.0265	1.43	08/22/2020 20:33	WG1530753	
Carbon disulfide	U		0.00371	0.0664	1.43	08/22/2020 20:33	WG1530753	
Carbon tetrachloride	U		0.00475	0.0265	1.43	08/22/2020 20:33	WG1530753	
Chlorobenzene	U		0.00111	0.0133	1.43	08/22/2020 20:33	WG1530753	
Chlorodibromomethane	U		0.00325	0.0133	1.43	08/22/2020 20:33	WG1530753	
Chloroethane	U		0.00902	0.0265	1.43	08/22/2020 20:33	WG1530753	
Chloroform	U		0.00546	0.0133	1.43	08/22/2020 20:33	WG1530753	
Chloromethane	U		0.0231	0.0664	1.43	08/22/2020 20:33	WG1530753	
2-Chlorotoluene	U		0.00460	0.0133	1.43	08/22/2020 20:33	WG1530753	
4-Chlorotoluene	U		0.00239	0.0265	1.43	08/22/2020 20:33	WG1530753	
1,2-Dibromo-3-Chloropropane	U		0.0207	0.132	1.43	08/22/2020 20:33	WG1530753	
1,2-Dibromoethane	U		0.00344	0.0133	1.43	08/22/2020 20:33	WG1530753	
Dibromomethane	U		0.00397	0.0265	1.43	08/22/2020 20:33	WG1530753	
1,2-Dichlorobenzene	U		0.00226	0.0265	1.43	08/22/2020 20:33	WG1530753	
1,3-Dichlorobenzene	U		0.00318	0.0265	1.43	08/22/2020 20:33	WG1530753	
1,4-Dichlorobenzene	U		0.00371	0.0265	1.43	08/22/2020 20:33	WG1530753	
Dichlorodifluoromethane	U		0.00854	0.0133	1.43	08/22/2020 20:33	WG1530753	
1,1-Dichloroethane	U		0.00261	0.0133	1.43	08/22/2020 20:33	WG1530753	
1,2-Dichloroethane	U		0.00344	0.0133	1.43	08/22/2020 20:33	WG1530753	
1,1-Dichloroethene	U		0.00322	0.0133	1.43	08/22/2020 20:33	WG1530753	
cis-1,2-Dichloroethene	U		0.00390	0.0133	1.43	08/22/2020 20:33	WG1530753	
trans-1,2-Dichloroethene	U		0.00553	0.0265	1.43	08/22/2020 20:33	WG1530753	
1,2-Dichloropropane	U		0.00753	0.0265	1.43	08/22/2020 20:33	WG1530753	
1,1-Dichloropropene	U		0.00430	0.0133	1.43	08/22/2020 20:33	WG1530753	
1,3-Dichloropropane	U		0.00266	0.0265	1.43	08/22/2020 20:33	WG1530753	
cis-1,3-Dichloropropene	U		0.00401	0.0133	1.43	08/22/2020 20:33	WG1530753	
trans-1,3-Dichloropropene	U		0.00605	0.0265	1.43	08/22/2020 20:33	WG1530753	
trans-1,4-Dichloro-2-butene	U		0.00987	0.0265	1.43	08/22/2020 20:33	WG1530753	
2,2-Dichloropropane	U		0.00731	0.0133	1.43	08/22/2020 20:33	WG1530753	
Di-isopropyl ether	U		0.00217	0.00531	1.43	08/22/2020 20:33	WG1530753	
Ethylbenzene	0.0479		0.00390	0.0133	1.43	08/22/2020 20:33	WG1530753	
Hexachloro-1,3-butadiene	U UJ	J0	0.0318	0.132	1.43	08/22/2020 20:33	WG1530753	JC 9/17/2020
2-Hexanone	U		0.0178	0.132	1.43	08/22/2020 20:33	WG1530753	
n-Hexane	0.0430		0.0120	0.0265	1.43	08/22/2020 20:33	WG1530753	
Iodomethane	U		0.0123	0.0664	1.43	08/22/2020 20:33	WG1530753	
Isopropylbenzene	0.00318	J	0.00226	0.0133	1.43	08/22/2020 20:33	WG1530753	
p-Isopropyltoluene	U		0.0135	0.0265	1.43	08/22/2020 20:33	WG1530753	
2-Butanone (MEK)	U		0.337	0.531	1.43	08/22/2020 20:33	WG1530753	
Methylene Chloride	U		0.0353	0.132	1.43	08/22/2020 20:33	WG1530753	
4-Methyl-2-pentanone (MIBK)	U		0.0121	0.132	1.43	08/22/2020 20:33	WG1530753	

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.00186	0.00531	1.43	08/22/2020 20:33	WG1530753
Naphthalene	U	UJ J0	0.0259	0.0664	1.43	08/22/2020 20:33	WG1530753
n-Propylbenzene	0.0211	J	0.00505	0.0265	1.43	08/22/2020 20:33	WG1530753
Styrene	U		0.00121	0.0664	1.43	08/22/2020 20:33	WG1530753
1,1,1,2-Tetrachloroethane	U	UJ J0	0.00505	0.0133	1.43	08/22/2020 20:33	WG1530753
1,1,2,2-Tetrachloroethane	U		0.00369	0.0133	1.43	08/22/2020 20:33	WG1530753
1,1,2-Trichlorotrifluoroethane	U		0.00401	0.0133	1.43	08/22/2020 20:33	WG1530753
Tetrachloroethene	0.0145		0.00475	0.0133	1.43	08/22/2020 20:33	WG1530753
Toluene	0.382		0.00690	0.0265	1.43	08/22/2020 20:33	WG1530753
1,2,3-Trichlorobenzene	U	UJ J0	0.0390	0.0664	1.43	08/22/2020 20:33	WG1530753
1,2,4-Trichlorobenzene	U	UJ J0	0.0233	0.0664	1.43	08/22/2020 20:33	WG1530753
1,1,1-Trichloroethane	U		0.00490	0.0133	1.43	08/22/2020 20:33	WG1530753
1,1,2-Trichloroethane	U		0.00317	0.0133	1.43	08/22/2020 20:33	WG1530753
Trichloroethene	U		0.00310	0.00531	1.43	08/22/2020 20:33	WG1530753
Trichlorofluoromethane	U		0.00438	0.0133	1.43	08/22/2020 20:33	WG1530753
1,2,3-Trichloropropane	U		0.00861	0.0664	1.43	08/22/2020 20:33	WG1530753
1,2,4-Trimethylbenzene	0.0616		0.00839	0.0265	1.43	08/22/2020 20:33	WG1530753
1,2,3-Trimethylbenzene	0.0206	J	0.00839	0.0265	1.43	08/22/2020 20:33	WG1530753
1,3,5-Trimethylbenzene	0.0194	J	0.0106	0.0265	1.43	08/22/2020 20:33	WG1530753
Vinyl acetate	U		0.0135	0.0664	1.43	08/22/2020 20:33	WG1530753
Vinyl chloride	U		0.00616	0.0133	1.43	08/22/2020 20:33	WG1530753
Xylenes, Total	0.241		0.00468	0.0345	1.43	08/22/2020 20:33	WG1530753
(S) Toluene-d8	*94.8*			*75.0-131*		*08/22/2020 20:33*	WG1530753
(S) 4-Bromofluorobenzene	*97.1*			*67.0-138*		*08/22/2020 20:33*	WG1530753
(S) 1,2-Dichloroethane-d4	*96.8*			*70.0-130*		*08/22/2020 20:33*	WG1530753

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Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	91.2		1	08/23/2020 01:07	WG1530651

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	U		0.0439	0.0601	1	08/22/2020 20:52	WG1530753
Acrylonitrile	U		0.00434	0.0150	1	08/22/2020 20:52	WG1530753
Benzene	U		0.000562	0.00120	1	08/22/2020 20:52	WG1530753
Bromobenzene	U		0.00108	0.0150	1	08/22/2020 20:52	WG1530753
Bromodichloromethane	U		0.000872	0.00301	1	08/22/2020 20:52	WG1530753
Bromochloromethane	U		0.000678	0.00601	1	08/22/2020 20:52	WG1530753
Bromoform	U		0.00141	0.0301	1	08/22/2020 20:52	WG1530753
Bromomethane	U		0.00237	0.0150	1	08/22/2020 20:52	WG1530753
n-Butylbenzene	U		0.00631	0.0150	1	08/22/2020 20:52	WG1530753
sec-Butylbenzene	U		0.00346	0.0150	1	08/22/2020 20:52	WG1530753
tert-Butylbenzene	U		0.00235	0.00601	1	08/22/2020 20:52	WG1530753
Carbon disulfide	U		0.000842	0.0150	1	08/22/2020 20:52	WG1530753
Carbon tetrachloride	U		0.00108	0.00601	1	08/22/2020 20:52	WG1530753
Chlorobenzene	U		0.000253	0.00301	1	08/22/2020 20:52	WG1530753
Chlorodibromomethane	U		0.000736	0.00301	1	08/22/2020 20:52	WG1530753
Chloroethane	U		0.00204	0.00601	1	08/22/2020 20:52	WG1530753
Chloroform	U		0.00124	0.00301	1	08/22/2020 20:52	WG1530753
Chloromethane	U		0.00523	0.0150	1	08/22/2020 20:52	WG1530753
2-Chlorotoluene	U		0.00104	0.00301	1	08/22/2020 20:52	WG1530753
4-Chlorotoluene	U		0.000541	0.00601	1	08/22/2020 20:52	WG1530753
1,2-Dibromo-3-Chloropropane	U		0.00469	0.0301	1	08/22/2020 20:52	WG1530753
1,2-Dibromoethane	U		0.000779	0.00301	1	08/22/2020 20:52	WG1530753
Dibromomethane	U		0.000902	0.00601	1	08/22/2020 20:52	WG1530753
1,2-Dichlorobenzene	U		0.000511	0.00601	1	08/22/2020 20:52	WG1530753
1,3-Dichlorobenzene	U		0.000722	0.00601	1	08/22/2020 20:52	WG1530753
1,4-Dichlorobenzene	U		0.000842	0.00601	1	08/22/2020 20:52	WG1530753
Dichlorodifluoromethane	U		0.00194	0.00301	1	08/22/2020 20:52	WG1530753
1,1-Dichloroethane	U		0.000590	0.00301	1	08/22/2020 20:52	WG1530753
1,2-Dichloroethane	U		0.000781	0.00301	1	08/22/2020 20:52	WG1530753
1,1-Dichloroethene	U		0.000729	0.00301	1	08/22/2020 20:52	WG1530753
cis-1,2-Dichloroethene	U		0.000883	0.00301	1	08/22/2020 20:52	WG1530753
trans-1,2-Dichloroethene	U		0.00125	0.00601	1	08/22/2020 20:52	WG1530753
1,2-Dichloropropane	U		0.00171	0.00601	1	08/22/2020 20:52	WG1530753
1,1-Dichloropropene	U		0.000973	0.00301	1	08/22/2020 20:52	WG1530753
1,3-Dichloropropane	U		0.000603	0.00601	1	08/22/2020 20:52	WG1530753
cis-1,3-Dichloropropene	U		0.000910	0.00301	1	08/22/2020 20:52	WG1530753
trans-1,3-Dichloropropene	U		0.00137	0.00601	1	08/22/2020 20:52	WG1530753
trans-1,4-Dichloro-2-butene	U		0.00224	0.00601	1	08/22/2020 20:52	WG1530753
2,2-Dichloropropane	U		0.00166	0.00301	1	08/22/2020 20:52	WG1530753
Di-isopropyl ether	U		0.000493	0.00120	1	08/22/2020 20:52	WG1530753
Ethylbenzene	0.000903	J	0.000886	0.00301	1	08/22/2020 20:52	WG1530753
Hexachloro-1,3-butadiene	U UJ	J0	0.00722	0.0301	1	08/22/2020 20:52	WG1530753
2-Hexanone	U		0.00404	0.0301	1	08/22/2020 20:52	WG1530753
n-Hexane	U		0.00272	0.00601	1	08/22/2020 20:52	WG1530753
Iodomethane	U		0.00279	0.0150	1	08/22/2020 20:52	WG1530753
Isopropylbenzene	U		0.000511	0.00301	1	08/22/2020 20:52	WG1530753
p-Isopropyltoluene	U		0.00307	0.00601	1	08/22/2020 20:52	WG1530753
2-Butanone (MEK)	U		0.0764	0.120	1	08/22/2020 20:52	WG1530753
Methylene Chloride	U		0.00799	0.0301	1	08/22/2020 20:52	WG1530753
4-Methyl-2-pentanone (MIBK)	U		0.00274	0.0301	1	08/22/2020 20:52	WG1530753

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B-283-0.5

Collected date/time: 08/19/20 11:35

SAMPLE RESULTS - 03

L1253451

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.000421	0.00120	1	08/22/2020 20:52	WG1530753
Naphthalene	U	UJ J0	0.00587	0.0150	1	08/22/2020 20:52	WG1530753
n-Propylbenzene	U		0.00114	0.00601	1	08/22/2020 20:52	WG1530753
Styrene	U		0.000275	0.0150	1	08/22/2020 20:52	WG1530753
1,1,1,2-Tetrachloroethane	U	UJ J0	0.00114	0.00301	1	08/22/2020 20:52	WG1530753
1,1,2,2-Tetrachloroethane	U		0.000836	0.00301	1	08/22/2020 20:52	WG1530753
1,1,2-Trichlorotrifluoroethane	U		0.000907	0.00301	1	08/22/2020 20:52	WG1530753
Tetrachloroethene	U		0.00108	0.00301	1	08/22/2020 20:52	WG1530753
Toluene	0.00345	J	0.00156	0.00601	1	08/22/2020 20:52	WG1530753
1,2,3-Trichlorobenzene	U	UJ J0	0.00882	0.0150	1	08/22/2020 20:52	WG1530753
1,2,4-Trichlorobenzene	U	UJ J0	0.00529	0.0150	1	08/22/2020 20:52	WG1530753
1,1,1-Trichloroethane	U		0.00111	0.00301	1	08/22/2020 20:52	WG1530753
1,1,2-Trichloroethane	U		0.000718	0.00301	1	08/22/2020 20:52	WG1530753
Trichloroethene	U		0.000702	0.00120	1	08/22/2020 20:52	WG1530753
Trichlorofluoromethane	U		0.000995	0.00301	1	08/22/2020 20:52	WG1530753
1,2,3-Trichloropropane	U		0.00195	0.0150	1	08/22/2020 20:52	WG1530753
1,2,4-Trimethylbenzene	0.00257	J	0.00190	0.00601	1	08/22/2020 20:52	WG1530753
1,2,3-Trimethylbenzene	0.00597	J	0.00190	0.00601	1	08/22/2020 20:52	WG1530753
1,3,5-Trimethylbenzene	0.00317	J	0.00241	0.00601	1	08/22/2020 20:52	WG1530753
Vinyl acetate	U		0.00305	0.0150	1	08/22/2020 20:52	WG1530753
Vinyl chloride	U		0.00140	0.00301	1	08/22/2020 20:52	WG1530753
Xylenes, Total	0.00414	J	0.00106	0.00782	1	08/22/2020 20:52	WG1530753
(S) Toluene-d8	*93.3*			*75.0-131*		*08/22/2020 20:52*	WG1530753
(S) 4-Bromofluorobenzene	*95.6*			*67.0-138*		*08/22/2020 20:52*	WG1530753
(S) 1,2-Dichloroethane-d4	*94.9*			*70.0-130*		*08/22/2020 20:52*	WG1530753

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Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	90.9		1	08/23/2020 01:07	WG1530651

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Acetone	0.0551	J	0.0438	0.0600	1	08/22/2020 21:11	WG1530753
Acrylonitrile	U		0.00433	0.0150	1	08/22/2020 21:11	WG1530753
Benzene	U		0.000560	0.00120	1	08/22/2020 21:11	WG1530753
Bromobenzene	U		0.00108	0.0150	1	08/22/2020 21:11	WG1530753
Bromodichloromethane	U		0.000870	0.00300	1	08/22/2020 21:11	WG1530753
Bromochloromethane	U		0.000677	0.00600	1	08/22/2020 21:11	WG1530753
Bromoform	U		0.00140	0.0300	1	08/22/2020 21:11	WG1530753
Bromomethane	U		0.00236	0.0150	1	08/22/2020 21:11	WG1530753
n-Butylbenzene	U		0.00630	0.0150	1	08/22/2020 21:11	WG1530753
sec-Butylbenzene	U		0.00346	0.0150	1	08/22/2020 21:11	WG1530753
tert-Butylbenzene	U		0.00234	0.00600	1	08/22/2020 21:11	WG1530753
Carbon disulfide	U		0.000840	0.0150	1	08/22/2020 21:11	WG1530753
Carbon tetrachloride	U		0.00108	0.00600	1	08/22/2020 21:11	WG1530753
Chlorobenzene	U		0.000252	0.00300	1	08/22/2020 21:11	WG1530753
Chlorodibromomethane	U		0.000734	0.00300	1	08/22/2020 21:11	WG1530753
Chloroethane	U		0.00204	0.00600	1	08/22/2020 21:11	WG1530753
Chloroform	U		0.00124	0.00300	1	08/22/2020 21:11	WG1530753
Chloromethane	U		0.00522	0.0150	1	08/22/2020 21:11	WG1530753
2-Chlorotoluene	U		0.00104	0.00300	1	08/22/2020 21:11	WG1530753
4-Chlorotoluene	U		0.000540	0.00600	1	08/22/2020 21:11	WG1530753
1,2-Dibromo-3-Chloropropane	U		0.00468	0.0300	1	08/22/2020 21:11	WG1530753
1,2-Dibromoethane	U		0.000778	0.00300	1	08/22/2020 21:11	WG1530753
Dibromomethane	U		0.000900	0.00600	1	08/22/2020 21:11	WG1530753
1,2-Dichlorobenzene	U		0.000510	0.00600	1	08/22/2020 21:11	WG1530753
1,3-Dichlorobenzene	U		0.000720	0.00600	1	08/22/2020 21:11	WG1530753
1,4-Dichlorobenzene	U		0.000840	0.00600	1	08/22/2020 21:11	WG1530753
Dichlorodifluoromethane	U		0.00193	0.00300	1	08/22/2020 21:11	WG1530753
1,1-Dichloroethane	U		0.000589	0.00300	1	08/22/2020 21:11	WG1530753
1,2-Dichloroethane	U		0.000779	0.00300	1	08/22/2020 21:11	WG1530753
1,1-Dichloroethene	U		0.000727	0.00300	1	08/22/2020 21:11	WG1530753
cis-1,2-Dichloroethene	U		0.000881	0.00300	1	08/22/2020 21:11	WG1530753
trans-1,2-Dichloroethene	U		0.00125	0.00600	1	08/22/2020 21:11	WG1530753
1,2-Dichloropropane	U		0.00170	0.00600	1	08/22/2020 21:11	WG1530753
1,1-Dichloropropene	U		0.000971	0.00300	1	08/22/2020 21:11	WG1530753
1,3-Dichloropropane	U		0.000601	0.00600	1	08/22/2020 21:11	WG1530753
cis-1,3-Dichloropropene	U		0.000908	0.00300	1	08/22/2020 21:11	WG1530753
trans-1,3-Dichloropropene	U		0.00137	0.00600	1	08/22/2020 21:11	WG1530753
trans-1,4-Dichloro-2-butene	U		0.00223	0.00600	1	08/22/2020 21:11	WG1530753
2,2-Dichloropropane	U		0.00166	0.00300	1	08/22/2020 21:11	WG1530753
Di-isopropyl ether	U		0.000492	0.00120	1	08/22/2020 21:11	WG1530753
Ethylbenzene	0.000900	J	0.000884	0.00300	1	08/22/2020 21:11	WG1530753
Hexachloro-1,3-butadiene	U UJ	J0	0.00720	0.0300	1	08/22/2020 21:11	WG1530753
2-Hexanone	U		0.00403	0.0300	1	08/22/2020 21:11	WG1530753
n-Hexane	U		0.00271	0.00600	1	08/22/2020 21:11	WG1530753
Iodomethane	U		0.00278	0.0150	1	08/22/2020 21:11	WG1530753
Isopropylbenzene	U		0.000510	0.00300	1	08/22/2020 21:11	WG1530753
p-Isopropyltoluene	U		0.00306	0.00600	1	08/22/2020 21:11	WG1530753
2-Butanone (MEK)	U		0.0762	0.120	1	08/22/2020 21:11	WG1530753
Methylene Chloride	U		0.00797	0.0300	1	08/22/2020 21:11	WG1530753
4-Methyl-2-pentanone (MIBK)	U		0.00274	0.0300	1	08/22/2020 21:11	WG1530753

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Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg		Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U			0.000420	0.00120	1	08/22/2020 21:11	WG1530753
Naphthalene	U		J0	0.00586	0.0150	1	08/22/2020 21:11	WG1530753
n-Propylbenzene	U			0.00114	0.00600	1	08/22/2020 21:11	WG1530753
Styrene	0.00128		J	0.000275	0.0150	1	08/22/2020 21:11	WG1530753
1,1,1,2-Tetrachloroethane	U	UJ	J0	0.00114	0.00300	1	08/22/2020 21:11	WG1530753
1,1,2,2-Tetrachloroethane	U			0.000834	0.00300	1	08/22/2020 21:11	WG1530753
1,1,2-Trichlorotrifluoroethane	U			0.000905	0.00300	1	08/22/2020 21:11	WG1530753
Tetrachloroethene	U			0.00108	0.00300	1	08/22/2020 21:11	WG1530753
Toluene	U			0.00156	0.00600	1	08/22/2020 21:11	WG1530753
1,2,3-Trichlorobenzene	U	UJ	J0	0.00880	0.0150	1	08/22/2020 21:11	WG1530753
1,2,4-Trichlorobenzene	U	UJ	J0	0.00528	0.0150	1	08/22/2020 21:11	WG1530753
1,1,1-Trichloroethane	U			0.00111	0.00300	1	08/22/2020 21:11	WG1530753
1,1,2-Trichloroethane	U			0.000716	0.00300	1	08/22/2020 21:11	WG1530753
Trichloroethene	U			0.000701	0.00120	1	08/22/2020 21:11	WG1530753
Trichlorofluoromethane	U			0.000992	0.00300	1	08/22/2020 21:11	WG1530753
1,2,3-Trichloropropane	U			0.00194	0.0150	1	08/22/2020 21:11	WG1530753
1,2,4-Trimethylbenzene	0.00630			0.00190	0.00600	1	08/22/2020 21:11	WG1530753
1,2,3-Trimethylbenzene	0.00296		J	0.00190	0.00600	1	08/22/2020 21:11	WG1530753
1,3,5-Trimethylbenzene	U			0.00240	0.00600	1	08/22/2020 21:11	WG1530753
Vinyl acetate	U			0.00305	0.0150	1	08/22/2020 21:11	WG1530753
Vinyl chloride	U			0.00139	0.00300	1	08/22/2020 21:11	WG1530753
Xylenes, Total	0.00490		J	0.00106	0.00780	1	08/22/2020 21:11	WG1530753
(S) Toluene-d8	*93.8*				*75.0-131*		*08/22/2020 21:11*	WG1530753
(S) 4-Bromofluorobenzene	*93.5*				*67.0-138*		*08/22/2020 21:11*	WG1530753
(S) 1,2-Dichloroethane-d4	*94.6*				*70.0-130*		*08/22/2020 21:11*	WG1530753

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Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	95.8		1	08/23/2020 01:07	WG1530651

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	0.0931		0.0477	0.0653	1.21	08/22/2020 21:30	WG1530753
Acrylonitrile	U		0.00472	0.0163	1.21	08/22/2020 21:30	WG1530753
Benzene	0.00252		0.000610	0.00131	1.21	08/22/2020 21:30	WG1530753
Bromobenzene	U		0.00118	0.0163	1.21	08/22/2020 21:30	WG1530753
Bromodichloromethane	U		0.000947	0.00327	1.21	08/22/2020 21:30	WG1530753
Bromochloromethane	U		0.000736	0.00653	1.21	08/22/2020 21:30	WG1530753
Bromoform	U		0.00153	0.0327	1.21	08/22/2020 21:30	WG1530753
Bromomethane	U		0.00257	0.0163	1.21	08/22/2020 21:30	WG1530753
n-Butylbenzene	U		0.00686	0.0163	1.21	08/22/2020 21:30	WG1530753
sec-Butylbenzene	U		0.00376	0.0163	1.21	08/22/2020 21:30	WG1530753
tert-Butylbenzene	U		0.00255	0.00653	1.21	08/22/2020 21:30	WG1530753
Carbon disulfide	U		0.000914	0.0163	1.21	08/22/2020 21:30	WG1530753
Carbon tetrachloride	U		0.00118	0.00653	1.21	08/22/2020 21:30	WG1530753
Chlorobenzene	U		0.000274	0.00327	1.21	08/22/2020 21:30	WG1530753
Chlorodibromomethane	U		0.000800	0.00327	1.21	08/22/2020 21:30	WG1530753
Chloroethane	U		0.00222	0.00653	1.21	08/22/2020 21:30	WG1530753
Chloroform	U		0.00135	0.00327	1.21	08/22/2020 21:30	WG1530753
Chloromethane	U		0.00568	0.0163	1.21	08/22/2020 21:30	WG1530753
2-Chlorotoluene	U		0.00113	0.00327	1.21	08/22/2020 21:30	WG1530753
4-Chlorotoluene	U		0.000587	0.00653	1.21	08/22/2020 21:30	WG1530753
1,2-Dibromo-3-Chloropropane	U		0.00510	0.0327	1.21	08/22/2020 21:30	WG1530753
1,2-Dibromoethane	U		0.000846	0.00327	1.21	08/22/2020 21:30	WG1530753
Dibromomethane	U		0.000980	0.00653	1.21	08/22/2020 21:30	WG1530753
1,2-Dichlorobenzene	U		0.000555	0.00653	1.21	08/22/2020 21:30	WG1530753
1,3-Dichlorobenzene	U		0.000784	0.00653	1.21	08/22/2020 21:30	WG1530753
1,4-Dichlorobenzene	U		0.000914	0.00653	1.21	08/22/2020 21:30	WG1530753
Dichlorodifluoromethane	U		0.00211	0.00327	1.21	08/22/2020 21:30	WG1530753
1,1-Dichloroethane	U		0.000641	0.00327	1.21	08/22/2020 21:30	WG1530753
1,2-Dichloroethane	U		0.000847	0.00327	1.21	08/22/2020 21:30	WG1530753
1,1-Dichloroethene	U		0.000791	0.00327	1.21	08/22/2020 21:30	WG1530753
cis-1,2-Dichloroethene	U		0.000959	0.00327	1.21	08/22/2020 21:30	WG1530753
trans-1,2-Dichloroethene	U		0.00136	0.00653	1.21	08/22/2020 21:30	WG1530753
1,2-Dichloropropane	U		0.00186	0.00653	1.21	08/22/2020 21:30	WG1530753
1,1-Dichloropropene	U		0.00106	0.00327	1.21	08/22/2020 21:30	WG1530753
1,3-Dichloropropane	U		0.000654	0.00653	1.21	08/22/2020 21:30	WG1530753
cis-1,3-Dichloropropene	U		0.000989	0.00327	1.21	08/22/2020 21:30	WG1530753
trans-1,3-Dichloropropene	U		0.00149	0.00653	1.21	08/22/2020 21:30	WG1530753
trans-1,4-Dichloro-2-butene	U		0.00243	0.00653	1.21	08/22/2020 21:30	WG1530753
2,2-Dichloropropane	U		0.00180	0.00327	1.21	08/22/2020 21:30	WG1530753
Di-isopropyl ether	U		0.000535	0.00131	1.21	08/22/2020 21:30	WG1530753
Ethylbenzene	0.00268	J	0.000963	0.00327	1.21	08/22/2020 21:30	WG1530753
Hexachloro-1,3-butadiene	U	UJ J0	0.00784	0.0327	1.21	08/22/2020 21:30	WG1530753
2-Hexanone	U		0.00439	0.0327	1.21	08/22/2020 21:30	WG1530753
n-Hexane	U		0.00295	0.00653	1.21	08/22/2020 21:30	WG1530753
Iodomethane	U		0.00303	0.0163	1.21	08/22/2020 21:30	WG1530753
Isopropylbenzene	0.00392		0.000555	0.00327	1.21	08/22/2020 21:30	WG1530753
p-Isopropyltoluene	U		0.00334	0.00653	1.21	08/22/2020 21:30	WG1530753
2-Butanone (MEK)	U		0.0829	0.131	1.21	08/22/2020 21:30	WG1530753
Methylene Chloride	U		0.00867	0.0327	1.21	08/22/2020 21:30	WG1530753
4-Methyl-2-pentanone (MIBK)	U		0.00298	0.0327	1.21	08/22/2020 21:30	WG1530753

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Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.000457	0.00131	1.21	08/22/2020 21:30	WG1530753
Naphthalene	U	UJ J0	0.00637	0.0163	1.21	08/22/2020 21:30	WG1530753
n-Propylbenzene	0.00340	J	0.00124	0.00653	1.21	08/22/2020 21:30	WG1530753
Styrene	U		0.000299	0.0163	1.21	08/22/2020 21:30	WG1530753
1,1,1,2-Tetrachloroethane	U	UJ J0	0.00124	0.00327	1.21	08/22/2020 21:30	WG1530753
1,1,2,2-Tetrachloroethane	U		0.000908	0.00327	1.21	08/22/2020 21:30	WG1530753
1,1,2-Trichlorotrifluoroethane	U		0.000985	0.00327	1.21	08/22/2020 21:30	WG1530753
Tetrachloroethene	0.00437		0.00117	0.00327	1.21	08/22/2020 21:30	WG1530753
Toluene	0.00323	J	0.00169	0.00653	1.21	08/22/2020 21:30	WG1530753
1,2,3-Trichlorobenzene	U	UJ J0	0.00958	0.0163	1.21	08/22/2020 21:30	WG1530753
1,2,4-Trichlorobenzene	U	UJ J0	0.00574	0.0163	1.21	08/22/2020 21:30	WG1530753
1,1,1-Trichloroethane	U		0.00121	0.00327	1.21	08/22/2020 21:30	WG1530753
1,1,2-Trichloroethane	U		0.000779	0.00327	1.21	08/22/2020 21:30	WG1530753
Trichloroethene	U		0.000763	0.00131	1.21	08/22/2020 21:30	WG1530753
Trichlorofluoromethane	U		0.00108	0.00327	1.21	08/22/2020 21:30	WG1530753
1,2,3-Trichloropropane	U		0.00212	0.0163	1.21	08/22/2020 21:30	WG1530753
1,2,4-Trimethylbenzene	0.00434	J	0.00206	0.00653	1.21	08/22/2020 21:30	WG1530753
1,2,3-Trimethylbenzene	0.00444	J	0.00206	0.00653	1.21	08/22/2020 21:30	WG1530753
1,3,5-Trimethylbenzene	U		0.00261	0.00653	1.21	08/22/2020 21:30	WG1530753
Vinyl acetate	U		0.00331	0.0163	1.21	08/22/2020 21:30	WG1530753
Vinyl chloride	U		0.00151	0.00327	1.21	08/22/2020 21:30	WG1530753
Xylenes, Total	0.00542	J	0.00114	0.00849	1.21	08/22/2020 21:30	WG1530753
(S) Toluene-d8	*92.6*			*75.0-131*		*08/22/2020 21:30*	WG1530753
(S) 4-Bromofluorobenzene	*101*			*67.0-138*		*08/22/2020 21:30*	WG1530753
(S) 1,2-Dichloroethane-d4	*100*			*70.0-130*		*08/22/2020 21:30*	WG1530753

JC 9/17/2020

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	76.8		1	08/24/2020 12:58	WG1530653

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	0.103	J	0.0971	0.133	1.81	08/22/2020 21:48	WG1530753
Acrylonitrile	U		0.00960	0.0332	1.81	08/22/2020 21:48	WG1530753
Benzene	0.00651		0.00124	0.00266	1.81	08/22/2020 21:48	WG1530753
Bromobenzene	U		0.00240	0.0332	1.81	08/22/2020 21:48	WG1530753
Bromodichloromethane	U		0.00192	0.00666	1.81	08/22/2020 21:48	WG1530753
Bromochloromethane	U		0.00150	0.0133	1.81	08/22/2020 21:48	WG1530753
Bromoform	U		0.00312	0.0666	1.81	08/22/2020 21:48	WG1530753
Bromomethane	U		0.00525	0.0332	1.81	08/22/2020 21:48	WG1530753
n-Butylbenzene	U		0.0140	0.0332	1.81	08/22/2020 21:48	WG1530753
sec-Butylbenzene	U		0.00766	0.0332	1.81	08/22/2020 21:48	WG1530753
tert-Butylbenzene	U		0.00519	0.0133	1.81	08/22/2020 21:48	WG1530753
Carbon disulfide	U		0.00187	0.0332	1.81	08/22/2020 21:48	WG1530753
Carbon tetrachloride	U		0.00240	0.0133	1.81	08/22/2020 21:48	WG1530753
Chlorobenzene	U		0.000558	0.00666	1.81	08/22/2020 21:48	WG1530753
Chlorodibromomethane	U		0.00163	0.00666	1.81	08/22/2020 21:48	WG1530753
Chloroethane	U		0.00453	0.0133	1.81	08/22/2020 21:48	WG1530753
Chloroform	U		0.00273	0.00666	1.81	08/22/2020 21:48	WG1530753
Chloromethane	U		0.0116	0.0332	1.81	08/22/2020 21:48	WG1530753
2-Chlorotoluene	U		0.00231	0.00666	1.81	08/22/2020 21:48	WG1530753
4-Chlorotoluene	U		0.00120	0.0133	1.81	08/22/2020 21:48	WG1530753
1,2-Dibromo-3-Chloropropane	U		0.0104	0.0666	1.81	08/22/2020 21:48	WG1530753
1,2-Dibromoethane	U		0.00172	0.00666	1.81	08/22/2020 21:48	WG1530753
Dibromomethane	U		0.00200	0.0133	1.81	08/22/2020 21:48	WG1530753
1,2-Dichlorobenzene	U		0.00113	0.0133	1.81	08/22/2020 21:48	WG1530753
1,3-Dichlorobenzene	U		0.00160	0.0133	1.81	08/22/2020 21:48	WG1530753
1,4-Dichlorobenzene	U		0.00187	0.0133	1.81	08/22/2020 21:48	WG1530753
Dichlorodifluoromethane	U		0.00428	0.00666	1.81	08/22/2020 21:48	WG1530753
1,1-Dichloroethane	U		0.00131	0.00666	1.81	08/22/2020 21:48	WG1530753
1,2-Dichloroethane	U		0.00172	0.00666	1.81	08/22/2020 21:48	WG1530753
1,1-Dichloroethene	U		0.00162	0.00666	1.81	08/22/2020 21:48	WG1530753
cis-1,2-Dichloroethene	U		0.00195	0.00666	1.81	08/22/2020 21:48	WG1530753
trans-1,2-Dichloroethene	U		0.00276	0.0133	1.81	08/22/2020 21:48	WG1530753
1,2-Dichloropropane	U		0.00378	0.0133	1.81	08/22/2020 21:48	WG1530753
1,1-Dichloropropene	U		0.00215	0.00666	1.81	08/22/2020 21:48	WG1530753
1,3-Dichloropropane	U		0.00133	0.0133	1.81	08/22/2020 21:48	WG1530753
cis-1,3-Dichloropropene	U		0.00201	0.00666	1.81	08/22/2020 21:48	WG1530753
trans-1,3-Dichloropropene	U		0.00303	0.0133	1.81	08/22/2020 21:48	WG1530753
trans-1,4-Dichloro-2-butene	U		0.00495	0.0133	1.81	08/22/2020 21:48	WG1530753
2,2-Dichloropropane	U		0.00367	0.00666	1.81	08/22/2020 21:48	WG1530753
Di-isopropyl ether	U		0.00109	0.00266	1.81	08/22/2020 21:48	WG1530753
Ethylbenzene	0.0110		0.00195	0.00666	1.81	08/22/2020 21:48	WG1530753
Hexachloro-1,3-butadiene	U	UJ J0	0.0160	0.0666	1.81	08/22/2020 21:48	WG1530753
2-Hexanone	U		0.00893	0.0666	1.81	08/22/2020 21:48	WG1530753
n-Hexane	0.0107	J	0.00601	0.0133	1.81	08/22/2020 21:48	WG1530753
Iodomethane	U		0.00617	0.0332	1.81	08/22/2020 21:48	WG1530753
Isopropylbenzene	U		0.00113	0.00666	1.81	08/22/2020 21:48	WG1530753
p-Isopropyltoluene	U		0.00679	0.0133	1.81	08/22/2020 21:48	WG1530753
2-Butanone (MEK)	U		0.169	0.266	1.81	08/22/2020 21:48	WG1530753
Methylene Chloride	U		0.0176	0.0666	1.81	08/22/2020 21:48	WG1530753
4-Methyl-2-pentanone (MIBK)	U		0.00607	0.0666	1.81	08/22/2020 21:48	WG1530753

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Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.000932	0.00266	1.81	08/22/2020 21:48	WG1530753
Naphthalene	U	UJ J0	0.0130	0.0332	1.81	08/22/2020 21:48	WG1530753
n-Propylbenzene	U		0.00253	0.0133	1.81	08/22/2020 21:48	WG1530753
Styrene	U		0.000608	0.0332	1.81	08/22/2020 21:48	WG1530753
1,1,1,2-Tetrachloroethane	U	UJ J0	0.00253	0.00666	1.81	08/22/2020 21:48	WG1530753
1,1,2,2-Tetrachloroethane	U		0.00185	0.00666	1.81	08/22/2020 21:48	WG1530753
1,1,2-Trichlorotrifluoroethane	U		0.00200	0.00666	1.81	08/22/2020 21:48	WG1530753
Tetrachloroethene	U		0.00238	0.00666	1.81	08/22/2020 21:48	WG1530753
Toluene	0.0970		0.00345	0.0133	1.81	08/22/2020 21:48	WG1530753
1,2,3-Trichlorobenzene	U	UJ J0	0.0195	0.0332	1.81	08/22/2020 21:48	WG1530753
1,2,4-Trichlorobenzene	U	UJ J0	0.0117	0.0332	1.81	08/22/2020 21:48	WG1530753
1,1,1-Trichloroethane	U		0.00245	0.00666	1.81	08/22/2020 21:48	WG1530753
1,1,2-Trichloroethane	U		0.00159	0.00666	1.81	08/22/2020 21:48	WG1530753
Trichloroethene	U		0.00156	0.00266	1.81	08/22/2020 21:48	WG1530753
Trichlorofluoromethane	U		0.00220	0.00666	1.81	08/22/2020 21:48	WG1530753
1,2,3-Trichloropropane	U		0.00431	0.0332	1.81	08/22/2020 21:48	WG1530753
1,2,4-Trimethylbenzene	0.0118	J	0.00420	0.0133	1.81	08/22/2020 21:48	WG1530753
1,2,3-Trimethylbenzene	0.00472	J	0.00420	0.0133	1.81	08/22/2020 21:48	WG1530753
1,3,5-Trimethylbenzene	U		0.00532	0.0133	1.81	08/22/2020 21:48	WG1530753
Vinyl acetate	U		0.00676	0.0332	1.81	08/22/2020 21:48	WG1530753
Vinyl chloride	U		0.00309	0.00666	1.81	08/22/2020 21:48	WG1530753
Xylenes, Total	0.0567		0.00234	0.0173	1.81	08/22/2020 21:48	WG1530753
(S) Toluene-d8	*92.8*			*75.0-131*		*08/22/2020 21:48*	WG1530753
(S) 4-Bromofluorobenzene	*96.6*			*67.0-138*		*08/22/2020 21:48*	WG1530753
(S) 1,2-Dichloroethane-d4	*99.0*			*70.0-130*		*08/22/2020 21:48*	WG1530753

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1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	61.1		1	08/24/2020 12:58	WG1530653

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	U		0.0948	0.130	1.2	08/22/2020 22:07	WG1530753
Acrylonitrile	U		0.00938	0.0325	1.2	08/22/2020 22:07	WG1530753
Benzene	0.00149	J	0.00121	0.00260	1.2	08/22/2020 22:07	WG1530753
Bromobenzene	U		0.00234	0.0325	1.2	08/22/2020 22:07	WG1530753
Bromodichloromethane	U		0.00188	0.00650	1.2	08/22/2020 22:07	WG1530753
Bromochloromethane	U		0.00147	0.0130	1.2	08/22/2020 22:07	WG1530753
Bromoform	U		0.00303	0.0650	1.2	08/22/2020 22:07	WG1530753
Bromomethane	U		0.00511	0.0325	1.2	08/22/2020 22:07	WG1530753
n-Butylbenzene	U		0.0136	0.0325	1.2	08/22/2020 22:07	WG1530753
sec-Butylbenzene	U		0.00749	0.0325	1.2	08/22/2020 22:07	WG1530753
tert-Butylbenzene	U		0.00507	0.0130	1.2	08/22/2020 22:07	WG1530753
Carbon disulfide	U		0.00182	0.0325	1.2	08/22/2020 22:07	WG1530753
Carbon tetrachloride	U		0.00234	0.0130	1.2	08/22/2020 22:07	WG1530753
Chlorobenzene	U		0.000546	0.00650	1.2	08/22/2020 22:07	WG1530753
Chlorodibromomethane	U		0.00159	0.00650	1.2	08/22/2020 22:07	WG1530753
Chloroethane	U		0.00442	0.0130	1.2	08/22/2020 22:07	WG1530753
Chloroform	U		0.00268	0.00650	1.2	08/22/2020 22:07	WG1530753
Chloromethane	U		0.0113	0.0325	1.2	08/22/2020 22:07	WG1530753
2-Chlorotoluene	U		0.00225	0.00650	1.2	08/22/2020 22:07	WG1530753
4-Chlorotoluene	U		0.00117	0.0130	1.2	08/22/2020 22:07	WG1530753
1,2-Dibromo-3-Chloropropane	U		0.0101	0.0650	1.2	08/22/2020 22:07	WG1530753
1,2-Dibromoethane	U		0.00168	0.00650	1.2	08/22/2020 22:07	WG1530753
Dibromomethane	U		0.00195	0.0130	1.2	08/22/2020 22:07	WG1530753
1,2-Dichlorobenzene	U		0.00110	0.0130	1.2	08/22/2020 22:07	WG1530753
1,3-Dichlorobenzene	U		0.00156	0.0130	1.2	08/22/2020 22:07	WG1530753
1,4-Dichlorobenzene	U		0.00182	0.0130	1.2	08/22/2020 22:07	WG1530753
Dichlorodifluoromethane	U		0.00418	0.00650	1.2	08/22/2020 22:07	WG1530753
1,1-Dichloroethane	U		0.00128	0.00650	1.2	08/22/2020 22:07	WG1530753
1,2-Dichloroethane	U		0.00169	0.00650	1.2	08/22/2020 22:07	WG1530753
1,1-Dichloroethene	U		0.00157	0.00650	1.2	08/22/2020 22:07	WG1530753
cis-1,2-Dichloroethene	U		0.00191	0.00650	1.2	08/22/2020 22:07	WG1530753
trans-1,2-Dichloroethene	U		0.00271	0.0130	1.2	08/22/2020 22:07	WG1530753
1,2-Dichloropropane	U		0.00368	0.0130	1.2	08/22/2020 22:07	WG1530753
1,1-Dichloropropene	U		0.00210	0.00650	1.2	08/22/2020 22:07	WG1530753
1,3-Dichloropropane	U		0.00130	0.0130	1.2	08/22/2020 22:07	WG1530753
cis-1,3-Dichloropropene	U		0.00197	0.00650	1.2	08/22/2020 22:07	WG1530753
trans-1,3-Dichloropropene	U		0.00297	0.0130	1.2	08/22/2020 22:07	WG1530753
trans-1,4-Dichloro-2-butene	U		0.00483	0.0130	1.2	08/22/2020 22:07	WG1530753
2,2-Dichloropropane	U		0.00359	0.00650	1.2	08/22/2020 22:07	WG1530753
Di-isopropyl ether	U		0.00107	0.00260	1.2	08/22/2020 22:07	WG1530753
Ethylbenzene	0.00234	J	0.00191	0.00650	1.2	08/22/2020 22:07	WG1530753
Hexachloro-1,3-butadiene	U	UJ JO	0.0156	0.0650	1.2	08/22/2020 22:07	WG1530753
2-Hexanone	U		0.00873	0.0650	1.2	08/22/2020 22:07	WG1530753
n-Hexane	U		0.00587	0.0130	1.2	08/22/2020 22:07	WG1530753
Iodomethane	U		0.00602	0.0325	1.2	08/22/2020 22:07	WG1530753
Isopropylbenzene	U		0.00110	0.00650	1.2	08/22/2020 22:07	WG1530753
p-Isopropyltoluene	U		0.00663	0.0130	1.2	08/22/2020 22:07	WG1530753
2-Butanone (MEK)	U		0.165	0.260	1.2	08/22/2020 22:07	WG1530753
Methylene Chloride	U		0.0173	0.0650	1.2	08/22/2020 22:07	WG1530753
4-Methyl-2-pentanone (MIBK)	U		0.00593	0.0650	1.2	08/22/2020 22:07	WG1530753

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Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.000909	0.00260	1.2	08/22/2020 22:07	WG1530753
Naphthalene	U	UJ J0	0.0127	0.0325	1.2	08/22/2020 22:07	WG1530753
n-Propylbenzene	U		0.00247	0.0130	1.2	08/22/2020 22:07	WG1530753
Styrene	U		0.000595	0.0325	1.2	08/22/2020 22:07	WG1530753
1,1,1,2-Tetrachloroethane	U	UJ J0	0.00247	0.00650	1.2	08/22/2020 22:07	WG1530753
1,1,2,2-Tetrachloroethane	U		0.00181	0.00650	1.2	08/22/2020 22:07	WG1530753
1,1,2-Trichlorotrifluoroethane	U		0.00196	0.00650	1.2	08/22/2020 22:07	WG1530753
Tetrachloroethene	0.00422	J	0.00234	0.00650	1.2	08/22/2020 22:07	WG1530753
Toluene	0.0100	J	0.00338	0.0130	1.2	08/22/2020 22:07	WG1530753
1,2,3-Trichlorobenzene	U	UJ J0	0.0191	0.0325	1.2	08/22/2020 22:07	WG1530753
1,2,4-Trichlorobenzene	U	UJ J0	0.0114	0.0325	1.2	08/22/2020 22:07	WG1530753
1,1,1-Trichloroethane	U		0.00240	0.00650	1.2	08/22/2020 22:07	WG1530753
1,1,2-Trichloroethane	U		0.00155	0.00650	1.2	08/22/2020 22:07	WG1530753
Trichloroethene	U		0.00152	0.00260	1.2	08/22/2020 22:07	WG1530753
Trichlorofluoromethane	U		0.00215	0.00650	1.2	08/22/2020 22:07	WG1530753
1,2,3-Trichloropropane	U		0.00420	0.0325	1.2	08/22/2020 22:07	WG1530753
1,2,4-Trimethylbenzene	U		0.00411	0.0130	1.2	08/22/2020 22:07	WG1530753
1,2,3-Trimethylbenzene	U		0.00411	0.0130	1.2	08/22/2020 22:07	WG1530753
1,3,5-Trimethylbenzene	U		0.00520	0.0130	1.2	08/22/2020 22:07	WG1530753
Vinyl acetate	U		0.00660	0.0325	1.2	08/22/2020 22:07	WG1530753
Vinyl chloride	U		0.00301	0.00650	1.2	08/22/2020 22:07	WG1530753
Xylenes, Total	0.0105	J	0.00230	0.0169	1.2	08/22/2020 22:07	WG1530753
(S) Toluene-d8	*92.3*			*75.0-131*		*08/22/2020 22:07*	WG1530753
(S) 4-Bromofluorobenzene	*95.9*			*67.0-138*		*08/22/2020 22:07*	WG1530753
(S) 1,2-Dichloroethane-d4	*93.3*			*70.0-130*		*08/22/2020 22:07*	WG1530753

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Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	92.7		1	08/24/2020 12:58	WG1530653

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	0.0708	J	0.0576	0.0789	1.39	08/22/2020 22:26	WG1530753
Acrylonitrile	U		0.00570	0.0198	1.39	08/22/2020 22:26	WG1530753
Benzene	0.00628		0.000737	0.00158	1.39	08/22/2020 22:26	WG1530753
Bromobenzene	U		0.00142	0.0198	1.39	08/22/2020 22:26	WG1530753
Bromodichloromethane	U		0.00115	0.00395	1.39	08/22/2020 22:26	WG1530753
Bromochloromethane	U		0.000890	0.00789	1.39	08/22/2020 22:26	WG1530753
Bromoform	U		0.00185	0.0395	1.39	08/22/2020 22:26	WG1530753
Bromomethane	U		0.00311	0.0198	1.39	08/22/2020 22:26	WG1530753
n-Butylbenzene	U		0.00829	0.0198	1.39	08/22/2020 22:26	WG1530753
sec-Butylbenzene	U		0.00454	0.0198	1.39	08/22/2020 22:26	WG1530753
tert-Butylbenzene	U		0.00308	0.00789	1.39	08/22/2020 22:26	WG1530753
Carbon disulfide	U		0.00110	0.0198	1.39	08/22/2020 22:26	WG1530753
Carbon tetrachloride	U		0.00142	0.00789	1.39	08/22/2020 22:26	WG1530753
Chlorobenzene	U		0.000331	0.00395	1.39	08/22/2020 22:26	WG1530753
Chlorodibromomethane	U		0.000966	0.00395	1.39	08/22/2020 22:26	WG1530753
Chloroethane	U		0.00268	0.00789	1.39	08/22/2020 22:26	WG1530753
Chloroform	U		0.00162	0.00395	1.39	08/22/2020 22:26	WG1530753
Chloromethane	U		0.00687	0.0198	1.39	08/22/2020 22:26	WG1530753
2-Chlorotoluene	U		0.00136	0.00395	1.39	08/22/2020 22:26	WG1530753
4-Chlorotoluene	U		0.000711	0.00789	1.39	08/22/2020 22:26	WG1530753
1,2-Dibromo-3-Chloropropane	U		0.00615	0.0395	1.39	08/22/2020 22:26	WG1530753
1,2-Dibromoethane	U		0.00102	0.00395	1.39	08/22/2020 22:26	WG1530753
Dibromomethane	U		0.00118	0.00789	1.39	08/22/2020 22:26	WG1530753
1,2-Dichlorobenzene	U		0.000671	0.00789	1.39	08/22/2020 22:26	WG1530753
1,3-Dichlorobenzene	U		0.000947	0.00789	1.39	08/22/2020 22:26	WG1530753
1,4-Dichlorobenzene	U		0.00110	0.00789	1.39	08/22/2020 22:26	WG1530753
Dichlorodifluoromethane	U		0.00254	0.00395	1.39	08/22/2020 22:26	WG1530753
1,1-Dichloroethane	U		0.000774	0.00395	1.39	08/22/2020 22:26	WG1530753
1,2-Dichloroethane	U		0.00102	0.00395	1.39	08/22/2020 22:26	WG1530753
1,1-Dichloroethene	U		0.000956	0.00395	1.39	08/22/2020 22:26	WG1530753
cis-1,2-Dichloroethene	U		0.00116	0.00395	1.39	08/22/2020 22:26	WG1530753
trans-1,2-Dichloroethene	U		0.00165	0.00789	1.39	08/22/2020 22:26	WG1530753
1,2-Dichloropropane	U		0.00224	0.00789	1.39	08/22/2020 22:26	WG1530753
1,1-Dichloropropene	U		0.00127	0.00395	1.39	08/22/2020 22:26	WG1530753
1,3-Dichloropropane	U		0.000790	0.00789	1.39	08/22/2020 22:26	WG1530753
cis-1,3-Dichloropropene	U		0.00119	0.00395	1.39	08/22/2020 22:26	WG1530753
trans-1,3-Dichloropropene	U		0.00179	0.00789	1.39	08/22/2020 22:26	WG1530753
trans-1,4-Dichloro-2-butene	U		0.00294	0.00789	1.39	08/22/2020 22:26	WG1530753
2,2-Dichloropropane	U		0.00218	0.00395	1.39	08/22/2020 22:26	WG1530753
Di-isopropyl ether	U		0.000647	0.00158	1.39	08/22/2020 22:26	WG1530753
Ethylbenzene	0.00860		0.00116	0.00395	1.39	08/22/2020 22:26	WG1530753
Hexachloro-1,3-butadiene	U UJ	J0	0.00947	0.0395	1.39	08/22/2020 22:26	WG1530753
2-Hexanone	U		0.00530	0.0395	1.39	08/22/2020 22:26	WG1530753
n-Hexane	0.00974		0.00356	0.00789	1.39	08/22/2020 22:26	WG1530753
Iodomethane	U		0.00366	0.0198	1.39	08/22/2020 22:26	WG1530753
Isopropylbenzene	U		0.000671	0.00395	1.39	08/22/2020 22:26	WG1530753
p-Isopropyltoluene	U		0.00402	0.00789	1.39	08/22/2020 22:26	WG1530753
2-Butanone (MEK)	U		0.100	0.158	1.39	08/22/2020 22:26	WG1530753
Methylene Chloride	U		0.0105	0.0395	1.39	08/22/2020 22:26	WG1530753
4-Methyl-2-pentanone (MIBK)	U		0.00360	0.0395	1.39	08/22/2020 22:26	WG1530753

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1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.000553	0.00158	1.39	08/22/2020 22:26	WG1530753
Naphthalene	U	UJ J0	0.00770	0.0198	1.39	08/22/2020 22:26	WG1530753
n-Propylbenzene	0.00225	J	0.00150	0.00789	1.39	08/22/2020 22:26	WG1530753
Styrene	0.00169	J	0.000361	0.0198	1.39	08/22/2020 22:26	WG1530753
1,1,1,2-Tetrachloroethane	U	UJ J0	0.00150	0.00395	1.39	08/22/2020 22:26	WG1530753
1,1,2,2-Tetrachloroethane	U		0.00110	0.00395	1.39	08/22/2020 22:26	WG1530753
1,1,2-Trichlorotrifluoroethane	U		0.00119	0.00395	1.39	08/22/2020 22:26	WG1530753
Tetrachloroethene	0.00142	J	0.00142	0.00395	1.39	08/22/2020 22:26	WG1530753
Toluene	0.0690		0.00205	0.00789	1.39	08/22/2020 22:26	WG1530753
1,2,3-Trichlorobenzene	U	UJ J0	0.0116	0.0198	1.39	08/22/2020 22:26	WG1530753
1,2,4-Trichlorobenzene	U	UJ J0	0.00695	0.0198	1.39	08/22/2020 22:26	WG1530753
1,1,1-Trichloroethane	U		0.00145	0.00395	1.39	08/22/2020 22:26	WG1530753
1,1,2-Trichloroethane	U		0.000942	0.00395	1.39	08/22/2020 22:26	WG1530753
Trichloroethene	U		0.000922	0.00158	1.39	08/22/2020 22:26	WG1530753
Trichlorofluoromethane	U		0.00131	0.00395	1.39	08/22/2020 22:26	WG1530753
1,2,3-Trichloropropane	U		0.00255	0.0198	1.39	08/22/2020 22:26	WG1530753
1,2,4-Trimethylbenzene	0.0108		0.00250	0.00789	1.39	08/22/2020 22:26	WG1530753
1,2,3-Trimethylbenzene	0.00591	J	0.00250	0.00789	1.39	08/22/2020 22:26	WG1530753
1,3,5-Trimethylbenzene	0.00367	J	0.00316	0.00789	1.39	08/22/2020 22:26	WG1530753
Vinyl acetate	U		0.00401	0.0198	1.39	08/22/2020 22:26	WG1530753
Vinyl chloride	U		0.00183	0.00395	1.39	08/22/2020 22:26	WG1530753
Xylenes, Total	0.0439		0.00138	0.0103	1.39	08/22/2020 22:26	WG1530753
(S) Toluene-d8	*92.4*			*75.0-131*		*08/22/2020 22:26*	WG1530753
(S) 4-Bromofluorobenzene	*95.1*			*67.0-138*		*08/22/2020 22:26*	WG1530753
(S) 1,2-Dichloroethane-d4	*96.5*			*70.0-130*		*08/22/2020 22:26*	WG1530753

JC 9/17/2020

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	94.7		1	08/24/2020 12:58	WG1530653

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	U		0.0495	0.0678	1.23	08/22/2020 22:45	WG1530753
Acrylonitrile	U		0.00489	0.0170	1.23	08/22/2020 22:45	WG1530753
Benzene	0.00302		0.000633	0.00136	1.23	08/22/2020 22:45	WG1530753
Bromobenzene	U		0.00122	0.0170	1.23	08/22/2020 22:45	WG1530753
Bromodichloromethane	U		0.000983	0.00339	1.23	08/22/2020 22:45	WG1530753
Bromochloromethane	U		0.000765	0.00678	1.23	08/22/2020 22:45	WG1530753
Bromoform	U		0.00159	0.0339	1.23	08/22/2020 22:45	WG1530753
Bromomethane	U		0.00267	0.0170	1.23	08/22/2020 22:45	WG1530753
n-Butylbenzene	U		0.00712	0.0170	1.23	08/22/2020 22:45	WG1530753
sec-Butylbenzene	U		0.00390	0.0170	1.23	08/22/2020 22:45	WG1530753
tert-Butylbenzene	U		0.00264	0.00678	1.23	08/22/2020 22:45	WG1530753
Carbon disulfide	U		0.000949	0.0170	1.23	08/22/2020 22:45	WG1530753
Carbon tetrachloride	U		0.00121	0.00678	1.23	08/22/2020 22:45	WG1530753
Chlorobenzene	U		0.000284	0.00339	1.23	08/22/2020 22:45	WG1530753
Chlorodibromomethane	U		0.000830	0.00339	1.23	08/22/2020 22:45	WG1530753
Chloroethane	U		0.00230	0.00678	1.23	08/22/2020 22:45	WG1530753
Chloroform	U		0.00140	0.00339	1.23	08/22/2020 22:45	WG1530753
Chloromethane	U		0.00590	0.0170	1.23	08/22/2020 22:45	WG1530753
2-Chlorotoluene	U		0.00117	0.00339	1.23	08/22/2020 22:45	WG1530753
4-Chlorotoluene	U		0.000610	0.00678	1.23	08/22/2020 22:45	WG1530753
1,2-Dibromo-3-Chloropropane	U		0.00529	0.0339	1.23	08/22/2020 22:45	WG1530753
1,2-Dibromoethane	U		0.000878	0.00339	1.23	08/22/2020 22:45	WG1530753
Dibromomethane	U		0.00102	0.00678	1.23	08/22/2020 22:45	WG1530753
1,2-Dichlorobenzene	U		0.000576	0.00678	1.23	08/22/2020 22:45	WG1530753
1,3-Dichlorobenzene	U		0.000813	0.00678	1.23	08/22/2020 22:45	WG1530753
1,4-Dichlorobenzene	U		0.000949	0.00678	1.23	08/22/2020 22:45	WG1530753
Dichlorodifluoromethane	U		0.00218	0.00339	1.23	08/22/2020 22:45	WG1530753
1,1-Dichloroethane	U		0.000666	0.00339	1.23	08/22/2020 22:45	WG1530753
1,2-Dichloroethane	U		0.000879	0.00339	1.23	08/22/2020 22:45	WG1530753
1,1-Dichloroethene	U		0.000821	0.00339	1.23	08/22/2020 22:45	WG1530753
cis-1,2-Dichloroethene	U		0.000995	0.00339	1.23	08/22/2020 22:45	WG1530753
trans-1,2-Dichloroethene	U		0.00141	0.00678	1.23	08/22/2020 22:45	WG1530753
1,2-Dichloropropane	U		0.00193	0.00678	1.23	08/22/2020 22:45	WG1530753
1,1-Dichloropropene	U		0.00110	0.00339	1.23	08/22/2020 22:45	WG1530753
1,3-Dichloropropane	U		0.000679	0.00678	1.23	08/22/2020 22:45	WG1530753
cis-1,3-Dichloropropene	U		0.00103	0.00339	1.23	08/22/2020 22:45	WG1530753
trans-1,3-Dichloropropene	U		0.00154	0.00678	1.23	08/22/2020 22:45	WG1530753
trans-1,4-Dichloro-2-butene	U		0.00252	0.00678	1.23	08/22/2020 22:45	WG1530753
2,2-Dichloropropane	U		0.00187	0.00339	1.23	08/22/2020 22:45	WG1530753
Di-isopropyl ether	U		0.000555	0.00136	1.23	08/22/2020 22:45	WG1530753
Ethylbenzene	0.00268	J	0.000999	0.00339	1.23	08/22/2020 22:45	WG1530753
Hexachloro-1,3-butadiene	U	UJ J0	0.00813	0.0339	1.23	08/22/2020 22:45	WG1530753
2-Hexanone	U		0.00455	0.0339	1.23	08/22/2020 22:45	WG1530753
n-Hexane	U		0.00306	0.00678	1.23	08/22/2020 22:45	WG1530753
Iodomethane	U		0.00314	0.0170	1.23	08/22/2020 22:45	WG1530753
Isopropylbenzene	U		0.000576	0.00339	1.23	08/22/2020 22:45	WG1530753
p-Isopropyltoluene	U		0.00346	0.00678	1.23	08/22/2020 22:45	WG1530753
2-Butanone (MEK)	U		0.0861	0.136	1.23	08/22/2020 22:45	WG1530753
Methylene Chloride	U		0.00900	0.0339	1.23	08/22/2020 22:45	WG1530753
4-Methyl-2-pentanone (MIBK)	U		0.00309	0.0339	1.23	08/22/2020 22:45	WG1530753

JC 9/17/2020

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg		Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U			0.000475	0.00136	1.23	08/22/2020 22:45	WG1530753
Naphthalene	0.0130	J	J J0	0.00661	0.0170	1.23	08/22/2020 22:45	WG1530753
n-Propylbenzene	U			0.00129	0.00678	1.23	08/22/2020 22:45	WG1530753
Styrene	0.000813		J	0.000311	0.0170	1.23	08/22/2020 22:45	WG1530753
1,1,1,2-Tetrachloroethane	U	UJ	J0	0.00129	0.00339	1.23	08/22/2020 22:45	WG1530753
1,1,2,2-Tetrachloroethane	U			0.000942	0.00339	1.23	08/22/2020 22:45	WG1530753
1,1,2-Trichlorotrifluoroethane	U			0.00102	0.00339	1.23	08/22/2020 22:45	WG1530753
Tetrachloroethene	U			0.00121	0.00339	1.23	08/22/2020 22:45	WG1530753
Toluene	0.0252			0.00176	0.00678	1.23	08/22/2020 22:45	WG1530753
1,2,3-Trichlorobenzene	U	UJ	J0	0.00994	0.0170	1.23	08/22/2020 22:45	WG1530753
1,2,4-Trichlorobenzene	U	UJ	J0	0.00596	0.0170	1.23	08/22/2020 22:45	WG1530753
1,1,1-Trichloroethane	U			0.00126	0.00339	1.23	08/22/2020 22:45	WG1530753
1,1,2-Trichloroethane	U			0.000809	0.00339	1.23	08/22/2020 22:45	WG1530753
Trichloroethene	U			0.000791	0.00136	1.23	08/22/2020 22:45	WG1530753
Trichlorofluoromethane	U			0.00112	0.00339	1.23	08/22/2020 22:45	WG1530753
1,2,3-Trichloropropane	U			0.00219	0.0170	1.23	08/22/2020 22:45	WG1530753
1,2,4-Trimethylbenzene	0.00441		J	0.00214	0.00678	1.23	08/22/2020 22:45	WG1530753
1,2,3-Trimethylbenzene	0.00299		J	0.00214	0.00678	1.23	08/22/2020 22:45	WG1530753
1,3,5-Trimethylbenzene	U			0.00271	0.00678	1.23	08/22/2020 22:45	WG1530753
Vinyl acetate	U			0.00344	0.0170	1.23	08/22/2020 22:45	WG1530753
Vinyl chloride	U			0.00158	0.00339	1.23	08/22/2020 22:45	WG1530753
Xylenes, Total	0.0159			0.00119	0.00882	1.23	08/22/2020 22:45	WG1530753
(S) Toluene-d8	*94.4*				*75.0-131*		*08/22/2020 22:45*	WG1530753
(S) 4-Bromofluorobenzene	*96.9*				*67.0-138*		*08/22/2020 22:45*	WG1530753
(S) 1,2-Dichloroethane-d4	*95.9*				*70.0-130*		*08/22/2020 22:45*	WG1530753

JC 9/17/2020

B-292-3

Collected date/time: 08/22/20 11:00

SAMPLE RESULTS - 01

L1253974

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	89.5		1	08/25/2020 12:52	WG1531939

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	U		0.0459	0.0629	1	08/25/2020 21:46	WG1532013
Acrylonitrile	U		0.00454	0.0157	1	08/25/2020 21:46	WG1532013
Benzene	U		0.000588	0.00126	1	08/25/2020 21:46	WG1532013
Bromobenzene	U		0.00113	0.0157	1	08/25/2020 21:46	WG1532013
Bromodichloromethane	U		0.000912	0.00315	1	08/25/2020 21:46	WG1532013
Bromochloromethane	U		0.000710	0.00629	1	08/25/2020 21:46	WG1532013
Bromoform	U		0.00147	0.0315	1	08/25/2020 21:46	WG1532013
Bromomethane	U		0.00248	0.0157	1	08/25/2020 21:46	WG1532013
n-Butylbenzene	U		0.00661	0.0157	1	08/25/2020 21:46	WG1532013
sec-Butylbenzene	U		0.00362	0.0157	1	08/25/2020 21:46	WG1532013
tert-Butylbenzene	U		0.00245	0.00629	1	08/25/2020 21:46	WG1532013
Carbon disulfide	U		0.000881	0.0157	1	08/25/2020 21:46	WG1532013
Carbon tetrachloride	U		0.00113	0.00629	1	08/25/2020 21:46	WG1532013
Chlorobenzene	U		0.000264	0.00315	1	08/25/2020 21:46	WG1532013
Chlorodibromomethane	U		0.000770	0.00315	1	08/25/2020 21:46	WG1532013
Chloroethane	U		0.00214	0.00629	1	08/25/2020 21:46	WG1532013
Chloroform	U		0.00130	0.00315	1	08/25/2020 21:46	WG1532013
Chloromethane	U		0.00547	0.0157	1	08/25/2020 21:46	WG1532013
2-Chlorotoluene	U		0.00109	0.00315	1	08/25/2020 21:46	WG1532013
4-Chlorotoluene	U		0.000566	0.00629	1	08/25/2020 21:46	WG1532013
1,2-Dibromo-3-Chloropropane	U		0.00491	0.0315	1	08/25/2020 21:46	WG1532013
1,2-Dibromoethane	U		0.000815	0.00315	1	08/25/2020 21:46	WG1532013
Dibromomethane	U		0.000944	0.00629	1	08/25/2020 21:46	WG1532013
1,2-Dichlorobenzene	U		0.000535	0.00629	1	08/25/2020 21:46	WG1532013
1,3-Dichlorobenzene	U		0.000755	0.00629	1	08/25/2020 21:46	WG1532013
1,4-Dichlorobenzene	U		0.000881	0.00629	1	08/25/2020 21:46	WG1532013
Dichlorodifluoromethane	U		0.00203	0.00315	1	08/25/2020 21:46	WG1532013
1,1-Dichloroethane	U		0.000618	0.00315	1	08/25/2020 21:46	WG1532013
1,2-Dichloroethane	U		0.000817	0.00315	1	08/25/2020 21:46	WG1532013
1,1-Dichloroethene	U		0.000763	0.00315	1	08/25/2020 21:46	WG1532013
cis-1,2-Dichloroethene	U		0.000924	0.00315	1	08/25/2020 21:46	WG1532013
trans-1,2-Dichloroethene	U		0.00131	0.00629	1	08/25/2020 21:46	WG1532013
1,2-Dichloropropane	U		0.00179	0.00629	1	08/25/2020 21:46	WG1532013
1,1-Dichloropropene	U		0.00102	0.00315	1	08/25/2020 21:46	WG1532013
1,3-Dichloropropane	U		0.000630	0.00629	1	08/25/2020 21:46	WG1532013
cis-1,3-Dichloropropene	U		0.000953	0.00315	1	08/25/2020 21:46	WG1532013
trans-1,3-Dichloropropene	U		0.00143	0.00629	1	08/25/2020 21:46	WG1532013
trans-1,4-Dichloro-2-butene	U		0.00234	0.00629	1	08/25/2020 21:46	WG1532013
2,2-Dichloropropane	U		0.00174	0.00315	1	08/25/2020 21:46	WG1532013
Di-isopropyl ether	U		0.000516	0.00126	1	08/25/2020 21:46	WG1532013
Ethylbenzene	U		0.000927	0.00315	1	08/25/2020 21:46	WG1532013
Hexachloro-1,3-butadiene	U		0.00755	0.0315	1	08/25/2020 21:46	WG1532013
2-Hexanone	U		0.00423	0.0315	1	08/25/2020 21:46	WG1532013
n-Hexane	U		0.00284	0.00629	1	08/25/2020 21:46	WG1532013
Iodomethane	U		0.00292	0.0157	1	08/25/2020 21:46	WG1532013
Isopropylbenzene	U		0.000535	0.00315	1	08/25/2020 21:46	WG1532013
p-Isopropyltoluene	U		0.00321	0.00629	1	08/25/2020 21:46	WG1532013
2-Butanone (MEK)	U		0.0799	0.126	1	08/25/2020 21:46	WG1532013
Methylene Chloride	U		0.00836	0.0315	1	08/25/2020 21:46	WG1532013
4-Methyl-2-pentanone (MIBK)	U		0.00287	0.0315	1	08/25/2020 21:46	WG1532013

JC 9/17/2020

B-292-3

Collected date/time: 08/22/20 11:00

SAMPLE RESULTS - 01

L1253974

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.000440	0.00126	1	08/25/2020 21:46	WG1532013
Naphthalene	U UJ	J0	0.00614	0.0157	1	08/25/2020 21:46	WG1532013
n-Propylbenzene	U		0.00120	0.00629	1	08/25/2020 21:46	WG1532013
Styrene	U		0.000288	0.0157	1	08/25/2020 21:46	WG1532013
1,1,1,2-Tetrachloroethane	U		0.00119	0.00315	1	08/25/2020 21:46	WG1532013
1,1,2,2-Tetrachloroethane	U		0.000875	0.00315	1	08/25/2020 21:46	WG1532013
1,1,2-Trichlorotrifluoroethane	U		0.000949	0.00315	1	08/25/2020 21:46	WG1532013
Tetrachloroethene	0.00258	J	0.00113	0.00315	1	08/25/2020 21:46	WG1532013
Toluene	U		0.00164	0.00629	1	08/25/2020 21:46	WG1532013
1,2,3-Trichlorobenzene	U UJ	J0	0.00922	0.0157	1	08/25/2020 21:46	WG1532013
1,2,4-Trichlorobenzene	U UJ	J0	0.00554	0.0157	1	08/25/2020 21:46	WG1532013
1,1,1-Trichloroethane	U		0.00116	0.00315	1	08/25/2020 21:46	WG1532013
1,1,2-Trichloroethane	U		0.000751	0.00315	1	08/25/2020 21:46	WG1532013
Trichloroethene	U		0.000735	0.00126	1	08/25/2020 21:46	WG1532013
Trichlorofluoromethane	U		0.00104	0.00315	1	08/25/2020 21:46	WG1532013
1,2,3-Trichloropropane	U		0.00204	0.0157	1	08/25/2020 21:46	WG1532013
1,2,4-Trimethylbenzene	U		0.00199	0.00629	1	08/25/2020 21:46	WG1532013
1,2,3-Trimethylbenzene	U		0.00199	0.00629	1	08/25/2020 21:46	WG1532013
1,3,5-Trimethylbenzene	U		0.00252	0.00629	1	08/25/2020 21:46	WG1532013
Vinyl acetate	U		0.00320	0.0157	1	08/25/2020 21:46	WG1532013
Vinyl chloride	U		0.00146	0.00315	1	08/25/2020 21:46	WG1532013
Xylenes, Total	U		0.00111	0.00818	1	08/25/2020 21:46	WG1532013
(S) Toluene-d8	*91.9*			*75.0-131*		*08/25/2020 21:46*	WG1532013
(S) 4-Bromofluorobenzene	*97.4*			*67.0-138*		*08/25/2020 21:46*	WG1532013
(S) 1,2-Dichloroethane-d4	*95.8*			*70.0-130*		*08/25/2020 21:46*	WG1532013

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Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	88.4		1	08/25/2020 12:52	WG1531939

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	U		0.0475	0.0650	1	08/25/2020 22:05	WG1532013
Acrylonitrile	U		0.00469	0.0163	1	08/25/2020 22:05	WG1532013
Benzene	U		0.000607	0.00130	1	08/25/2020 22:05	WG1532013
Bromobenzene	U		0.00117	0.0163	1	08/25/2020 22:05	WG1532013
Bromodichloromethane	U		0.000943	0.00325	1	08/25/2020 22:05	WG1532013
Bromochloromethane	U		0.000733	0.00650	1	08/25/2020 22:05	WG1532013
Bromoform	U		0.00152	0.0325	1	08/25/2020 22:05	WG1532013
Bromomethane	U		0.00256	0.0163	1	08/25/2020 22:05	WG1532013
n-Butylbenzene	U		0.00683	0.0163	1	08/25/2020 22:05	WG1532013
sec-Butylbenzene	U		0.00374	0.0163	1	08/25/2020 22:05	WG1532013
tert-Butylbenzene	U		0.00254	0.00650	1	08/25/2020 22:05	WG1532013
Carbon disulfide	U		0.000910	0.0163	1	08/25/2020 22:05	WG1532013
Carbon tetrachloride	U		0.00117	0.00650	1	08/25/2020 22:05	WG1532013
Chlorobenzene	U		0.000273	0.00325	1	08/25/2020 22:05	WG1532013
Chlorodibromomethane	U		0.000796	0.00325	1	08/25/2020 22:05	WG1532013
Chloroethane	U		0.00221	0.00650	1	08/25/2020 22:05	WG1532013
Chloroform	U		0.00134	0.00325	1	08/25/2020 22:05	WG1532013
Chloromethane	U		0.00566	0.0163	1	08/25/2020 22:05	WG1532013
2-Chlorotoluene	U		0.00112	0.00325	1	08/25/2020 22:05	WG1532013
4-Chlorotoluene	U		0.000585	0.00650	1	08/25/2020 22:05	WG1532013
1,2-Dibromo-3-Chloropropane	U		0.00507	0.0325	1	08/25/2020 22:05	WG1532013
1,2-Dibromoethane	U		0.000842	0.00325	1	08/25/2020 22:05	WG1532013
Dibromomethane	U		0.000975	0.00650	1	08/25/2020 22:05	WG1532013
1,2-Dichlorobenzene	U		0.000553	0.00650	1	08/25/2020 22:05	WG1532013
1,3-Dichlorobenzene	U		0.000780	0.00650	1	08/25/2020 22:05	WG1532013
1,4-Dichlorobenzene	U		0.000910	0.00650	1	08/25/2020 22:05	WG1532013
Dichlorodifluoromethane	U		0.00209	0.00325	1	08/25/2020 22:05	WG1532013
1,1-Dichloroethane	U		0.000638	0.00325	1	08/25/2020 22:05	WG1532013
1,2-Dichloroethane	U		0.000844	0.00325	1	08/25/2020 22:05	WG1532013
1,1-Dichloroethene	U		0.000788	0.00325	1	08/25/2020 22:05	WG1532013
cis-1,2-Dichloroethene	U		0.000954	0.00325	1	08/25/2020 22:05	WG1532013
trans-1,2-Dichloroethene	U		0.00135	0.00650	1	08/25/2020 22:05	WG1532013
1,2-Dichloropropane	U		0.00185	0.00650	1	08/25/2020 22:05	WG1532013
1,1-Dichloropropene	U		0.00105	0.00325	1	08/25/2020 22:05	WG1532013
1,3-Dichloropropane	U		0.000651	0.00650	1	08/25/2020 22:05	WG1532013
cis-1,3-Dichloropropene	U		0.000984	0.00325	1	08/25/2020 22:05	WG1532013
trans-1,3-Dichloropropene	U		0.00148	0.00650	1	08/25/2020 22:05	WG1532013
trans-1,4-Dichloro-2-butene	U		0.00242	0.00650	1	08/25/2020 22:05	WG1532013
2,2-Dichloropropane	U		0.00179	0.00325	1	08/25/2020 22:05	WG1532013
Di-isopropyl ether	U		0.000533	0.00130	1	08/25/2020 22:05	WG1532013
Ethylbenzene	U		0.000958	0.00325	1	08/25/2020 22:05	WG1532013
Hexachloro-1,3-butadiene	U		0.00780	0.0325	1	08/25/2020 22:05	WG1532013
2-Hexanone	U		0.00437	0.0325	1	08/25/2020 22:05	WG1532013
n-Hexane	U		0.00294	0.00650	1	08/25/2020 22:05	WG1532013
Iodomethane	U		0.00302	0.0163	1	08/25/2020 22:05	WG1532013
Isopropylbenzene	U		0.000553	0.00325	1	08/25/2020 22:05	WG1532013
p-Isopropyltoluene	U		0.00332	0.00650	1	08/25/2020 22:05	WG1532013
2-Butanone (MEK)	U		0.0826	0.130	1	08/25/2020 22:05	WG1532013
Methylene Chloride	U		0.00863	0.0325	1	08/25/2020 22:05	WG1532013
4-Methyl-2-pentanone (MIBK)	U		0.00296	0.0325	1	08/25/2020 22:05	WG1532013

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Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg		Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U			0.000455	0.00130	1	08/25/2020 22:05	WG1532013
Naphthalene	U	UJ	J0	0.00634	0.0163	1	08/25/2020 22:05	WG1532013
n-Propylbenzene	U			0.00124	0.00650	1	08/25/2020 22:05	WG1532013
Styrene	U			0.000298	0.0163	1	08/25/2020 22:05	WG1532013
1,1,1,2-Tetrachloroethane	U			0.00123	0.00325	1	08/25/2020 22:05	WG1532013
1,1,2,2-Tetrachloroethane	U			0.000904	0.00325	1	08/25/2020 22:05	WG1532013
1,1,2-Trichlorotrifluoroethane	U			0.000980	0.00325	1	08/25/2020 22:05	WG1532013
Tetrachloroethene	0.00315		J	0.00116	0.00325	1	08/25/2020 22:05	WG1532013
Toluene	U			0.00169	0.00650	1	08/25/2020 22:05	WG1532013
1,2,3-Trichlorobenzene	U	UJ	J0	0.00953	0.0163	1	08/25/2020 22:05	WG1532013
1,2,4-Trichlorobenzene	U	UJ	J0	0.00572	0.0163	1	08/25/2020 22:05	WG1532013
1,1,1-Trichloroethane	U			0.00120	0.00325	1	08/25/2020 22:05	WG1532013
1,1,2-Trichloroethane	U			0.000776	0.00325	1	08/25/2020 22:05	WG1532013
Trichloroethene	U			0.000759	0.00130	1	08/25/2020 22:05	WG1532013
Trichlorofluoromethane	U			0.00108	0.00325	1	08/25/2020 22:05	WG1532013
1,2,3-Trichloropropane	U			0.00211	0.0163	1	08/25/2020 22:05	WG1532013
1,2,4-Trimethylbenzene	U			0.00205	0.00650	1	08/25/2020 22:05	WG1532013
1,2,3-Trimethylbenzene	U			0.00205	0.00650	1	08/25/2020 22:05	WG1532013
1,3,5-Trimethylbenzene	U			0.00260	0.00650	1	08/25/2020 22:05	WG1532013
Vinyl acetate	U			0.00330	0.0163	1	08/25/2020 22:05	WG1532013
Vinyl chloride	U			0.00151	0.00325	1	08/25/2020 22:05	WG1532013
Xylenes, Total	U			0.00114	0.00845	1	08/25/2020 22:05	WG1532013
(S) Toluene-d8	*91.6*				*75.0-131*		*08/25/2020 22:05*	WG1532013
(S) 4-Bromofluorobenzene	*95.6*				*67.0-138*		*08/25/2020 22:05*	WG1532013
(S) 1,2-Dichloroethane-d4	*92.7*				*70.0-130*		*08/25/2020 22:05*	WG1532013

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1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	92.6		1	08/25/2020 12:52	WG1531939

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	U		0.0431	0.0591	1	08/25/2020 22:23	WG1532013
Acrylonitrile	U		0.00427	0.0148	1	08/25/2020 22:23	WG1532013
Benzene	U		0.000552	0.00118	1	08/25/2020 22:23	WG1532013
Bromobenzene	U		0.00106	0.0148	1	08/25/2020 22:23	WG1532013
Bromodichloromethane	U		0.000857	0.00295	1	08/25/2020 22:23	WG1532013
Bromochloromethane	U		0.000667	0.00591	1	08/25/2020 22:23	WG1532013
Bromoform	U		0.00138	0.0295	1	08/25/2020 22:23	WG1532013
Bromomethane	U		0.00233	0.0148	1	08/25/2020 22:23	WG1532013
n-Butylbenzene	U		0.00620	0.0148	1	08/25/2020 22:23	WG1532013
sec-Butylbenzene	U		0.00340	0.0148	1	08/25/2020 22:23	WG1532013
tert-Butylbenzene	U		0.00230	0.00591	1	08/25/2020 22:23	WG1532013
Carbon disulfide	U		0.000827	0.0148	1	08/25/2020 22:23	WG1532013
Carbon tetrachloride	U		0.00106	0.00591	1	08/25/2020 22:23	WG1532013
Chlorobenzene	U		0.000248	0.00295	1	08/25/2020 22:23	WG1532013
Chlorodibromomethane	U		0.000723	0.00295	1	08/25/2020 22:23	WG1532013
Chloroethane	U		0.00201	0.00591	1	08/25/2020 22:23	WG1532013
Chloroform	U		0.00122	0.00295	1	08/25/2020 22:23	WG1532013
Chloromethane	U		0.00514	0.0148	1	08/25/2020 22:23	WG1532013
2-Chlorotoluene	U		0.00102	0.00295	1	08/25/2020 22:23	WG1532013
4-Chlorotoluene	U		0.000532	0.00591	1	08/25/2020 22:23	WG1532013
1,2-Dibromo-3-Chloropropane	U		0.00461	0.0295	1	08/25/2020 22:23	WG1532013
1,2-Dibromoethane	U		0.000766	0.00295	1	08/25/2020 22:23	WG1532013
Dibromomethane	U		0.000886	0.00591	1	08/25/2020 22:23	WG1532013
1,2-Dichlorobenzene	U		0.000502	0.00591	1	08/25/2020 22:23	WG1532013
1,3-Dichlorobenzene	U		0.000709	0.00591	1	08/25/2020 22:23	WG1532013
1,4-Dichlorobenzene	U		0.000827	0.00591	1	08/25/2020 22:23	WG1532013
Dichlorodifluoromethane	U		0.00190	0.00295	1	08/25/2020 22:23	WG1532013
1,1-Dichloroethane	U		0.000580	0.00295	1	08/25/2020 22:23	WG1532013
1,2-Dichloroethane	U		0.000767	0.00295	1	08/25/2020 22:23	WG1532013
1,1-Dichloroethene	U		0.000716	0.00295	1	08/25/2020 22:23	WG1532013
cis-1,2-Dichloroethene	U		0.000867	0.00295	1	08/25/2020 22:23	WG1532013
trans-1,2-Dichloroethene	U		0.00123	0.00591	1	08/25/2020 22:23	WG1532013
1,2-Dichloropropane	U		0.00168	0.00591	1	08/25/2020 22:23	WG1532013
1,1-Dichloropropene	U		0.000956	0.00295	1	08/25/2020 22:23	WG1532013
1,3-Dichloropropane	U		0.000592	0.00591	1	08/25/2020 22:23	WG1532013
cis-1,3-Dichloropropene	U		0.000895	0.00295	1	08/25/2020 22:23	WG1532013
trans-1,3-Dichloropropene	U		0.00135	0.00591	1	08/25/2020 22:23	WG1532013
trans-1,4-Dichloro-2-butene	U		0.00220	0.00591	1	08/25/2020 22:23	WG1532013
2,2-Dichloropropane	U		0.00163	0.00295	1	08/25/2020 22:23	WG1532013
Di-isopropyl ether	U		0.000485	0.00118	1	08/25/2020 22:23	WG1532013
Ethylbenzene	U		0.000871	0.00295	1	08/25/2020 22:23	WG1532013
Hexachloro-1,3-butadiene	U		0.00709	0.0295	1	08/25/2020 22:23	WG1532013
2-Hexanone	U		0.00397	0.0295	1	08/25/2020 22:23	WG1532013
n-Hexane	U		0.00267	0.00591	1	08/25/2020 22:23	WG1532013
Iodomethane	U		0.00274	0.0148	1	08/25/2020 22:23	WG1532013
Isopropylbenzene	U		0.000502	0.00295	1	08/25/2020 22:23	WG1532013
p-Isopropyltoluene	U		0.00301	0.00591	1	08/25/2020 22:23	WG1532013
2-Butanone (MEK)	U		0.0750	0.118	1	08/25/2020 22:23	WG1532013
Methylene Chloride	U		0.00785	0.0295	1	08/25/2020 22:23	WG1532013
4-Methyl-2-pentanone (MIBK)	U		0.00269	0.0295	1	08/25/2020 22:23	WG1532013

JC 9/17/2020

Volatile Organic Compounds (GC/MS) by Method 8260D

	Result (dry)		Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg			mg/kg	mg/kg		date / time	
Methyl tert-butyl ether	U			0.000414	0.00118	1	08/25/2020 22:23	WG1532013
Naphthalene	U	UJ	J0	0.00577	0.0148	1	08/25/2020 22:23	WG1532013
n-Propylbenzene	U			0.00112	0.00591	1	08/25/2020 22:23	WG1532013
Styrene	U			0.000271	0.0148	1	08/25/2020 22:23	WG1532013
1,1,1,2-Tetrachloroethane	U			0.00112	0.00295	1	08/25/2020 22:23	WG1532013
1,1,2,2-Tetrachloroethane	U			0.000821	0.00295	1	08/25/2020 22:23	WG1532013
1,1,2-Trichlorotrifluoroethane	U			0.000891	0.00295	1	08/25/2020 22:23	WG1532013
Tetrachloroethene	0.00273		J	0.00106	0.00295	1	08/25/2020 22:23	WG1532013
Toluene	U			0.00154	0.00591	1	08/25/2020 22:23	WG1532013
1,2,3-Trichlorobenzene	U	UJ	J0	0.00866	0.0148	1	08/25/2020 22:23	WG1532013
1,2,4-Trichlorobenzene	U	UJ	J0	0.00520	0.0148	1	08/25/2020 22:23	WG1532013
1,1,1-Trichloroethane	U			0.00109	0.00295	1	08/25/2020 22:23	WG1532013
1,1,2-Trichloroethane	U			0.000706	0.00295	1	08/25/2020 22:23	WG1532013
Trichloroethene	U			0.000690	0.00118	1	08/25/2020 22:23	WG1532013
Trichlorofluoromethane	U			0.000977	0.00295	1	08/25/2020 22:23	WG1532013
1,2,3-Trichloropropane	U			0.00191	0.0148	1	08/25/2020 22:23	WG1532013
1,2,4-Trimethylbenzene	U			0.00187	0.00591	1	08/25/2020 22:23	WG1532013
1,2,3-Trimethylbenzene	U			0.00187	0.00591	1	08/25/2020 22:23	WG1532013
1,3,5-Trimethylbenzene	U			0.00236	0.00591	1	08/25/2020 22:23	WG1532013
Vinyl acetate	U			0.00300	0.0148	1	08/25/2020 22:23	WG1532013
Vinyl chloride	U			0.00137	0.00295	1	08/25/2020 22:23	WG1532013
Xylenes, Total	U			0.00104	0.00768	1	08/25/2020 22:23	WG1532013
(S) Toluene-d8	*93.0*				*75.0-131*		*08/25/2020 22:23*	WG1532013
(S) 4-Bromofluorobenzene	*97.0*				*67.0-138*		*08/25/2020 22:23*	WG1532013
(S) 1,2-Dichloroethane-d4	*95.9*				*70.0-130*		*08/25/2020 22:23*	WG1532013

JC 9/17/2020

B-292-12

Collected date/time: 08/22/20 11:20

SAMPLE RESULTS - 04

L1253974

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	87.0		1	08/25/2020 12:52	WG1531939

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	U		0.0479	0.0656	1	08/25/2020 22:42	WG1532013
Acrylonitrile	U		0.00474	0.0164	1	08/25/2020 22:42	WG1532013
Benzene	U		0.000613	0.00131	1	08/25/2020 22:42	WG1532013
Bromobenzene	U		0.00118	0.0164	1	08/25/2020 22:42	WG1532013
Bromodichloromethane	U		0.000952	0.00328	1	08/25/2020 22:42	WG1532013
Bromochloromethane	U		0.000740	0.00656	1	08/25/2020 22:42	WG1532013
Bromoform	U		0.00154	0.0328	1	08/25/2020 22:42	WG1532013
Bromomethane	U		0.00259	0.0164	1	08/25/2020 22:42	WG1532013
n-Butylbenzene	U		0.00689	0.0164	1	08/25/2020 22:42	WG1532013
sec-Butylbenzene	U		0.00378	0.0164	1	08/25/2020 22:42	WG1532013
tert-Butylbenzene	U		0.00256	0.00656	1	08/25/2020 22:42	WG1532013
Carbon disulfide	U		0.000919	0.0164	1	08/25/2020 22:42	WG1532013
Carbon tetrachloride	U		0.00118	0.00656	1	08/25/2020 22:42	WG1532013
Chlorobenzene	U		0.000276	0.00328	1	08/25/2020 22:42	WG1532013
Chlorodibromomethane	U		0.000803	0.00328	1	08/25/2020 22:42	WG1532013
Chloroethane	U		0.00223	0.00656	1	08/25/2020 22:42	WG1532013
Chloroform	U		0.00135	0.00328	1	08/25/2020 22:42	WG1532013
Chloromethane	U		0.00571	0.0164	1	08/25/2020 22:42	WG1532013
2-Chlorotoluene	U		0.00114	0.00328	1	08/25/2020 22:42	WG1532013
4-Chlorotoluene	U		0.000591	0.00656	1	08/25/2020 22:42	WG1532013
1,2-Dibromo-3-Chloropropane	U		0.00512	0.0328	1	08/25/2020 22:42	WG1532013
1,2-Dibromoethane	U		0.000851	0.00328	1	08/25/2020 22:42	WG1532013
Dibromomethane	U		0.000984	0.00656	1	08/25/2020 22:42	WG1532013
1,2-Dichlorobenzene	U		0.000558	0.00656	1	08/25/2020 22:42	WG1532013
1,3-Dichlorobenzene	U		0.000788	0.00656	1	08/25/2020 22:42	WG1532013
1,4-Dichlorobenzene	U		0.000919	0.00656	1	08/25/2020 22:42	WG1532013
Dichlorodifluoromethane	U		0.00211	0.00328	1	08/25/2020 22:42	WG1532013
1,1-Dichloroethane	U		0.000645	0.00328	1	08/25/2020 22:42	WG1532013
1,2-Dichloroethane	U		0.000852	0.00328	1	08/25/2020 22:42	WG1532013
1,1-Dichloroethene	U		0.000795	0.00328	1	08/25/2020 22:42	WG1532013
cis-1,2-Dichloroethene	U		0.000963	0.00328	1	08/25/2020 22:42	WG1532013
trans-1,2-Dichloroethene	U		0.00137	0.00656	1	08/25/2020 22:42	WG1532013
1,2-Dichloropropane	U		0.00186	0.00656	1	08/25/2020 22:42	WG1532013
1,1-Dichloropropene	U		0.00106	0.00328	1	08/25/2020 22:42	WG1532013
1,3-Dichloropropane	U		0.000658	0.00656	1	08/25/2020 22:42	WG1532013
cis-1,3-Dichloropropene	U		0.000994	0.00328	1	08/25/2020 22:42	WG1532013
trans-1,3-Dichloropropene	U		0.00150	0.00656	1	08/25/2020 22:42	WG1532013
trans-1,4-Dichloro-2-butene	U		0.00244	0.00656	1	08/25/2020 22:42	WG1532013
2,2-Dichloropropane	U		0.00181	0.00328	1	08/25/2020 22:42	WG1532013
Di-isopropyl ether	U		0.000538	0.00131	1	08/25/2020 22:42	WG1532013
Ethylbenzene	U		0.000967	0.00328	1	08/25/2020 22:42	WG1532013
Hexachloro-1,3-butadiene	U		0.00788	0.0328	1	08/25/2020 22:42	WG1532013
2-Hexanone	U		0.00441	0.0328	1	08/25/2020 22:42	WG1532013
n-Hexane	U		0.00297	0.00656	1	08/25/2020 22:42	WG1532013
Iodomethane	U		0.00305	0.0164	1	08/25/2020 22:42	WG1532013
Isopropylbenzene	U		0.000558	0.00328	1	08/25/2020 22:42	WG1532013
p-Isopropyltoluene	U		0.00335	0.00656	1	08/25/2020 22:42	WG1532013
2-Butanone (MEK)	U		0.0834	0.131	1	08/25/2020 22:42	WG1532013
Methylene Chloride	U		0.00872	0.0328	1	08/25/2020 22:42	WG1532013
4-Methyl-2-pentanone (MIBK)	U		0.00299	0.0328	1	08/25/2020 22:42	WG1532013

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Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.000459	0.00131	1	08/25/2020 22:42	WG1532013
Naphthalene	U	UJ J0	0.00641	0.0164	1	08/25/2020 22:42	WG1532013
n-Propylbenzene	U		0.00125	0.00656	1	08/25/2020 22:42	WG1532013
Styrene	U		0.000301	0.0164	1	08/25/2020 22:42	WG1532013
1,1,1,2-Tetrachloroethane	U		0.00124	0.00328	1	08/25/2020 22:42	WG1532013
1,1,2,2-Tetrachloroethane	U		0.000912	0.00328	1	08/25/2020 22:42	WG1532013
1,1,2-Trichlorotrifluoroethane	U		0.000990	0.00328	1	08/25/2020 22:42	WG1532013
Tetrachloroethene	0.00158	J	0.00118	0.00328	1	08/25/2020 22:42	WG1532013
Toluene	U		0.00171	0.00656	1	08/25/2020 22:42	WG1532013
1,2,3-Trichlorobenzene	U	UJ J0	0.00962	0.0164	1	08/25/2020 22:42	WG1532013
1,2,4-Trichlorobenzene	U	UJ J0	0.00578	0.0164	1	08/25/2020 22:42	WG1532013
1,1,1-Trichloroethane	U		0.00121	0.00328	1	08/25/2020 22:42	WG1532013
1,1,2-Trichloroethane	U		0.000784	0.00328	1	08/25/2020 22:42	WG1532013
Trichloroethene	U		0.000767	0.00131	1	08/25/2020 22:42	WG1532013
Trichlorofluoromethane	U		0.00109	0.00328	1	08/25/2020 22:42	WG1532013
1,2,3-Trichloropropane	U		0.00213	0.0164	1	08/25/2020 22:42	WG1532013
1,2,4-Trimethylbenzene	U		0.00207	0.00656	1	08/25/2020 22:42	WG1532013
1,2,3-Trimethylbenzene	U		0.00207	0.00656	1	08/25/2020 22:42	WG1532013
1,3,5-Trimethylbenzene	U		0.00263	0.00656	1	08/25/2020 22:42	WG1532013
Vinyl acetate	U		0.00333	0.0164	1	08/25/2020 22:42	WG1532013
Vinyl chloride	U		0.00152	0.00328	1	08/25/2020 22:42	WG1532013
Xylenes, Total	0.00130	J	0.00116	0.00853	1	08/25/2020 22:42	WG1532013
(S) Toluene-d8	*91.4*			*75.0-131*		*08/25/2020 22:42*	WG1532013
(S) 4-Bromofluorobenzene	*97.1*			*67.0-138*		*08/25/2020 22:42*	WG1532013
(S) 1,2-Dichloroethane-d4	*94.9*			*70.0-130*		*08/25/2020 22:42*	WG1532013

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Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	84.0		1	08/31/2020 14:11	WG1534424

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	U		0.0512	0.0702	1	08/28/2020 22:05	WG1534490
Acrylonitrile	U		0.00507	0.0175	1	08/28/2020 22:05	WG1534490
Benzene	0.125		0.000655	0.00140	1	08/28/2020 22:05	WG1534490
Bromobenzene	U		0.00126	0.0175	1	08/28/2020 22:05	WG1534490
Bromodichloromethane	U		0.00102	0.00351	1	08/28/2020 22:05	WG1534490
Bromochloromethane	U		0.000792	0.00702	1	08/28/2020 22:05	WG1534490
Bromoform	U		0.00164	0.0351	1	08/28/2020 22:05	WG1534490
Bromomethane	U	~~J3~~	0.00277	0.0175	1	08/28/2020 22:05	WG1534490
n-Butylbenzene	U	~~J3~~	0.00737	0.0175	1	08/28/2020 22:05	WG1534490
sec-Butylbenzene	U	~~J3~~	0.00404	0.0175	1	08/28/2020 22:05	WG1534490
tert-Butylbenzene	U	~~J3~~	0.00274	0.00702	1	08/28/2020 22:05	WG1534490
Carbon disulfide	U	~~J3~~	0.000983	0.0175	1	08/28/2020 22:05	WG1534490
Carbon tetrachloride	U	~~J3~~	0.00126	0.00702	1	08/28/2020 22:05	WG1534490
Chlorobenzene	U		0.000295	0.00351	1	08/28/2020 22:05	WG1534490
Chlorodibromomethane	U		0.000859	0.00351	1	08/28/2020 22:05	WG1534490
Chloroethane	U	~~J3~~	0.00239	0.00702	1	08/28/2020 22:05	WG1534490
Chloroform	U	~~J3~~	0.00145	0.00351	1	08/28/2020 22:05	WG1534490
Chloromethane	U	~~J3~~	0.00611	0.0175	1	08/28/2020 22:05	WG1534490
2-Chlorotoluene	U		0.00121	0.00351	1	08/28/2020 22:05	WG1534490
4-Chlorotoluene	U		0.000632	0.00702	1	08/28/2020 22:05	WG1534490
1,2-Dibromo-3-Chloropropane	U		0.00547	0.0351	1	08/28/2020 22:05	WG1534490
1,2-Dibromoethane	U		0.000910	0.00351	1	08/28/2020 22:05	WG1534490
Dibromomethane	U		0.00105	0.00702	1	08/28/2020 22:05	WG1534490
1,2-Dichlorobenzene	U		0.000597	0.00702	1	08/28/2020 22:05	WG1534490
1,3-Dichlorobenzene	U		0.000842	0.00702	1	08/28/2020 22:05	WG1534490
1,4-Dichlorobenzene	U		0.000983	0.00702	1	08/28/2020 22:05	WG1534490
Dichlorodifluoromethane	U		0.00226	0.00351	1	08/28/2020 22:05	WG1534490
1,1-Dichloroethane	U	~~J3~~	0.000689	0.00351	1	08/28/2020 22:05	WG1534490
1,2-Dichloroethane	U		0.000911	0.00351	1	08/28/2020 22:05	WG1534490
1,1-Dichloroethene	U	~~J3~~	0.000851	0.00351	1	08/28/2020 22:05	WG1534490
cis-1,2-Dichloroethene	U		0.00103	0.00351	1	08/28/2020 22:05	WG1534490
trans-1,2-Dichloroethene	U	~~J3~~	0.00146	0.00702	1	08/28/2020 22:05	WG1534490
1,2-Dichloropropane	U		0.00199	0.00702	1	08/28/2020 22:05	WG1534490
1,1-Dichloropropene	U		0.00114	0.00351	1	08/28/2020 22:05	WG1534490
1,3-Dichloropropane	U		0.000703	0.00702	1	08/28/2020 22:05	WG1534490
cis-1,3-Dichloropropene	U		0.00106	0.00351	1	08/28/2020 22:05	WG1534490
trans-1,3-Dichloropropene	U		0.00160	0.00702	1	08/28/2020 22:05	WG1534490
trans-1,4-Dichloro-2-butene	U		0.00261	0.00702	1	08/28/2020 22:05	WG1534490
2,2-Dichloropropane	U		0.00194	0.00351	1	08/28/2020 22:05	WG1534490
Di-isopropyl ether	U		0.000575	0.00140	1	08/28/2020 22:05	WG1534490
Ethylbenzene	0.00438		0.00103	0.00351	1	08/28/2020 22:05	WG1534490
Hexachloro-1,3-butadiene	U	~~J3~~	0.00842	0.0351	1	08/28/2020 22:05	WG1534490
2-Hexanone	U		0.00472	0.0351	1	08/28/2020 22:05	WG1534490
n-Hexane	0.0216		0.00317	0.00702	1	08/28/2020 22:05	WG1534490
Iodomethane	U	~~J3~~	0.00326	0.0175	1	08/28/2020 22:05	WG1534490
Isopropylbenzene	0.00199	J ~~J3~~	0.000597	0.00351	1	08/28/2020 22:05	WG1534490
p-Isopropyltoluene	0.0110	~~J3~~	0.00358	0.00702	1	08/28/2020 22:05	WG1534490
2-Butanone (MEK)	U		0.0891	0.140	1	08/28/2020 22:05	WG1534490
Methylene Chloride	U	~~J3~~	0.00932	0.0351	1	08/28/2020 22:05	WG1534490
4-Methyl-2-pentanone (MIBK)	U		0.00320	0.0351	1	08/28/2020 22:05	WG1534490

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Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg		Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U			0.000491	0.00140	1	08/28/2020 22:05	WG1534490
Naphthalene	0.0431	J	J0	0.00685	0.0175	1	08/28/2020 22:05	WG1534490
n-Propylbenzene	0.00222		J ~~J3~~	0.00133	0.00702	1	08/28/2020 22:05	WG1534490
Styrene	U		~~J3~~	0.000321	0.0175	1	08/28/2020 22:05	WG1534490
1,1,1,2-Tetrachloroethane	U			0.00133	0.00351	1	08/28/2020 22:05	WG1534490
1,1,2,2-Tetrachloroethane	U			0.000976	0.00351	1	08/28/2020 22:05	WG1534490
1,1,2-Trichlorotrifluoroethane	U			0.00106	0.00351	1	08/28/2020 22:05	WG1534490
Tetrachloroethene	0.0664			0.00126	0.00351	1	08/28/2020 22:05	WG1534490
Toluene	0.00762			0.00182	0.00702	1	08/28/2020 22:05	WG1534490
1,2,3-Trichlorobenzene	U	UJ	J0	0.0103	0.0175	1	08/28/2020 22:05	WG1534490
1,2,4-Trichlorobenzene	U			0.00618	0.0175	1	08/28/2020 22:05	WG1534490
1,1,1-Trichloroethane	U		~~J3~~	0.00130	0.00351	1	08/28/2020 22:05	WG1534490
1,1,2-Trichloroethane	U			0.000838	0.00351	1	08/28/2020 22:05	WG1534490
Trichloroethene	0.00143			0.000820	0.00140	1	08/28/2020 22:05	WG1534490
Trichlorofluoromethane	U		~~J3~~	0.00116	0.00351	1	08/28/2020 22:05	WG1534490
1,2,3-Trichloropropane	U			0.00227	0.0175	1	08/28/2020 22:05	WG1534490
1,2,4-Trimethylbenzene	0.0136		~~J3~~	0.00222	0.00702	1	08/28/2020 22:05	WG1534490
1,2,3-Trimethylbenzene	0.0107			0.00222	0.00702	1	08/28/2020 22:05	WG1534490
1,3,5-Trimethylbenzene	0.00538		J ~~J3~~	0.00281	0.00702	1	08/28/2020 22:05	WG1534490
Vinyl acetate	U			0.00357	0.0175	1	08/28/2020 22:05	WG1534490
Vinyl chloride	U			0.00163	0.00351	1	08/28/2020 22:05	WG1534490
Xylenes, Total	0.0233		~~J3~~	0.00124	0.00912	1	08/28/2020 22:05	WG1534490
(S) Toluene-d8	*92.6*				*75.0-131*		*08/28/2020 22:05*	WG1534490
(S) 4-Bromofluorobenzene	*96.8*				*67.0-138*		*08/28/2020 22:05*	WG1534490
(S) 1,2-Dichloroethane-d4	*93.1*				*70.0-130*		*08/28/2020 22:05*	WG1534490

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Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	67.8		1	08/31/2020 13:48	WG1534425

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	U		0.106	0.145	1.65	08/28/2020 22:24	WG1534490
Acrylonitrile	U		0.0105	0.0363	1.65	08/28/2020 22:24	WG1534490
Benzene	3.50		0.00136	0.00291	1.65	08/28/2020 22:24	WG1534490
Bromobenzene	U		0.00261	0.0363	1.65	08/28/2020 22:24	WG1534490
Bromodichloromethane	U		0.00211	0.00727	1.65	08/28/2020 22:24	WG1534490
Bromochloromethane	U		0.00164	0.0145	1.65	08/28/2020 22:24	WG1534490
Bromoform	U		0.00340	0.0727	1.65	08/28/2020 22:24	WG1534490
Bromomethane	U	~~J3~~	0.00572	0.0363	1.65	08/28/2020 22:24	WG1534490
n-Butylbenzene	U	~~J3~~	0.0153	0.0363	1.65	08/28/2020 22:24	WG1534490
sec-Butylbenzene	0.00944	J ~~J3~~	0.00837	0.0363	1.65	08/28/2020 22:24	WG1534490
tert-Butylbenzene	U	~~J3~~	0.00567	0.0145	1.65	08/28/2020 22:24	WG1534490
Carbon disulfide	U	~~J3~~	0.00203	0.0363	1.65	08/28/2020 22:24	WG1534490
Carbon tetrachloride	U	~~J3~~	0.00261	0.0145	1.65	08/28/2020 22:24	WG1534490
Chlorobenzene	U		0.000611	0.00727	1.65	08/28/2020 22:24	WG1534490
Chlorodibromomethane	U		0.00178	0.00727	1.65	08/28/2020 22:24	WG1534490
Chloroethane	U	~~J3~~	0.00495	0.0145	1.65	08/28/2020 22:24	WG1534490
Chloroform	U	~~J3~~	0.00299	0.00727	1.65	08/28/2020 22:24	WG1534490
Chloromethane	U	~~J3~~	0.0126	0.0363	1.65	08/28/2020 22:24	WG1534490
2-Chlorotoluene	U		0.00252	0.00727	1.65	08/28/2020 22:24	WG1534490
4-Chlorotoluene	U		0.00131	0.0145	1.65	08/28/2020 22:24	WG1534490
1,2-Dibromo-3-Chloropropane	U		0.0113	0.0727	1.65	08/28/2020 22:24	WG1534490
1,2-Dibromoethane	U		0.00188	0.00727	1.65	08/28/2020 22:24	WG1534490
Dibromomethane	U		0.00218	0.0145	1.65	08/28/2020 22:24	WG1534490
1,2-Dichlorobenzene	U		0.00123	0.0145	1.65	08/28/2020 22:24	WG1534490
1,3-Dichlorobenzene	U		0.00174	0.0145	1.65	08/28/2020 22:24	WG1534490
1,4-Dichlorobenzene	U		0.00203	0.0145	1.65	08/28/2020 22:24	WG1534490
Dichlorodifluoromethane	U		0.00468	0.00727	1.65	08/28/2020 22:24	WG1534490
1,1-Dichloroethane	U	~~J3~~	0.00143	0.00727	1.65	08/28/2020 22:24	WG1534490
1,2-Dichloroethane	U		0.00188	0.00727	1.65	08/28/2020 22:24	WG1534490
1,1-Dichloroethene	U	~~J3~~	0.00176	0.00727	1.65	08/28/2020 22:24	WG1534490
cis-1,2-Dichloroethene	U		0.00213	0.00727	1.65	08/28/2020 22:24	WG1534490
trans-1,2-Dichloroethene	U	~~J3~~	0.00303	0.0145	1.65	08/28/2020 22:24	WG1534490
1,2-Dichloropropane	U		0.00412	0.0145	1.65	08/28/2020 22:24	WG1534490
1,1-Dichloropropene	U		0.00234	0.00727	1.65	08/28/2020 22:24	WG1534490
1,3-Dichloropropane	U		0.00146	0.0145	1.65	08/28/2020 22:24	WG1534490
cis-1,3-Dichloropropene	U		0.00220	0.00727	1.65	08/28/2020 22:24	WG1534490
trans-1,3-Dichloropropene	U		0.00331	0.0145	1.65	08/28/2020 22:24	WG1534490
trans-1,4-Dichloro-2-butene	U		0.00541	0.0145	1.65	08/28/2020 22:24	WG1534490
2,2-Dichloropropane	U		0.00402	0.00727	1.65	08/28/2020 22:24	WG1534490
Di-isopropyl ether	U		0.00119	0.00291	1.65	08/28/2020 22:24	WG1534490
Ethylbenzene	0.0277		0.00215	0.00727	1.65	08/28/2020 22:24	WG1534490
Hexachloro-1,3-butadiene	U	~~J3~~	0.0174	0.0727	1.65	08/28/2020 22:24	WG1534490
2-Hexanone	U		0.00976	0.0727	1.65	08/28/2020 22:24	WG1534490
n-Hexane	0.159		0.00657	0.0145	1.65	08/28/2020 22:24	WG1534490
Iodomethane	U	~~J3~~	0.00675	0.0363	1.65	08/28/2020 22:24	WG1534490
Isopropylbenzene	0.0105	~~J3~~	0.00123	0.00727	1.65	08/28/2020 22:24	WG1534490
p-Isopropyltoluene	0.0298	~~J3~~	0.00741	0.0145	1.65	08/28/2020 22:24	WG1534490
2-Butanone (MEK)	U		0.185	0.291	1.65	08/28/2020 22:24	WG1534490
Methylene Chloride	U	~~J3~~	0.0194	0.0727	1.65	08/28/2020 22:24	WG1534490
4-Methyl-2-pentanone (MIBK)	U		0.00662	0.0727	1.65	08/28/2020 22:24	WG1534490

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Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.00102	0.00291	1.65	08/28/2020 22:24	WG1534490
Naphthalene	0.110 J	J0	0.0142	0.0363	1.65	08/28/2020 22:24	WG1534490
n-Propylbenzene	0.0224	~~J3~~	0.00277	0.0145	1.65	08/28/2020 22:24	WG1534490
Styrene	U	~~J3~~	0.000666	0.0363	1.65	08/28/2020 22:24	WG1534490
1,1,1,2-Tetrachloroethane	U		0.00275	0.00727	1.65	08/28/2020 22:24	WG1534490
1,1,2,2-Tetrachloroethane	U		0.00203	0.00727	1.65	08/28/2020 22:24	WG1534490
1,1,2-Trichlorotrifluoroethane	U		0.00218	0.00727	1.65	08/28/2020 22:24	WG1534490
Tetrachloroethene	0.518		0.00261	0.00727	1.65	08/28/2020 22:24	WG1534490
Toluene	0.0692		0.00379	0.0145	1.65	08/28/2020 22:24	WG1534490
1,2,3-Trichlorobenzene	U UJ	J0	0.0213	0.0363	1.65	08/28/2020 22:24	WG1534490
1,2,4-Trichlorobenzene	U		0.0128	0.0363	1.65	08/28/2020 22:24	WG1534490
1,1,1-Trichloroethane	U	~~J3~~	0.00268	0.00727	1.65	08/28/2020 22:24	WG1534490
1,1,2-Trichloroethane	U		0.00173	0.00727	1.65	08/28/2020 22:24	WG1534490
Trichloroethene	U		0.00170	0.00291	1.65	08/28/2020 22:24	WG1534490
Trichlorofluoromethane	U	~~J3~~	0.00240	0.00727	1.65	08/28/2020 22:24	WG1534490
1,2,3-Trichloropropane	U		0.00470	0.0363	1.65	08/28/2020 22:24	WG1534490
1,2,4-Trimethylbenzene	0.0590	~~J3~~	0.00460	0.0145	1.65	08/28/2020 22:24	WG1534490
1,2,3-Trimethylbenzene	0.0592		0.00460	0.0145	1.65	08/28/2020 22:24	WG1534490
1,3,5-Trimethylbenzene	0.0278	~~J3~~	0.00581	0.0145	1.65	08/28/2020 22:24	WG1534490
Vinyl acetate	U		0.00738	0.0363	1.65	08/28/2020 22:24	WG1534490
Vinyl chloride	U		0.00336	0.00727	1.65	08/28/2020 22:24	WG1534490
Xylenes, Total	0.139	~~J3~~	0.00255	0.0188	1.65	08/28/2020 22:24	WG1534490
(S) Toluene-d8	*92.2*			*75.0-131*		*08/28/2020 22:24*	WG1534490
(S) 4-Bromofluorobenzene	*100*			*67.0-138*		*08/28/2020 22:24*	WG1534490
(S) 1,2-Dichloroethane-d4	*95.8*			*70.0-130*		*08/28/2020 22:24*	WG1534490

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Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	61.8		1	08/31/2020 13:48	WG1534425

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	U		0.104	0.143	1.38	08/28/2020 22:43	WG1534490
Acrylonitrile	U		0.0103	0.0358	1.38	08/28/2020 22:43	WG1534490
Benzene	0.0800		0.00133	0.00285	1.38	08/28/2020 22:43	WG1534490
Bromobenzene	U		0.00256	0.0358	1.38	08/28/2020 22:43	WG1534490
Bromodichloromethane	U		0.00207	0.00713	1.38	08/28/2020 22:43	WG1534490
Bromochloromethane	U		0.00161	0.0143	1.38	08/28/2020 22:43	WG1534490
Bromoform	U		0.00333	0.0713	1.38	08/28/2020 22:43	WG1534490
Bromomethane	U	~~J3~~	0.00562	0.0358	1.38	08/28/2020 22:43	WG1534490
n-Butylbenzene	U	~~J3~~	0.0150	0.0358	1.38	08/28/2020 22:43	WG1534490
sec-Butylbenzene	U	~~J3~~	0.00821	0.0358	1.38	08/28/2020 22:43	WG1534490
tert-Butylbenzene	U	~~J3~~	0.00556	0.0143	1.38	08/28/2020 22:43	WG1534490
Carbon disulfide	U	~~J3~~	0.00200	0.0358	1.38	08/28/2020 22:43	WG1534490
Carbon tetrachloride	U	~~J3~~	0.00256	0.0143	1.38	08/28/2020 22:43	WG1534490
Chlorobenzene	U		0.000600	0.00713	1.38	08/28/2020 22:43	WG1534490
Chlorodibromomethane	U		0.00175	0.00713	1.38	08/28/2020 22:43	WG1534490
Chloroethane	U	~~J3~~	0.00486	0.0143	1.38	08/28/2020 22:43	WG1534490
Chloroform	U	~~J3~~	0.00294	0.00713	1.38	08/28/2020 22:43	WG1534490
Chloromethane	U	~~J3~~	0.0124	0.0358	1.38	08/28/2020 22:43	WG1534490
2-Chlorotoluene	U		0.00246	0.00713	1.38	08/28/2020 22:43	WG1534490
4-Chlorotoluene	U		0.00128	0.0143	1.38	08/28/2020 22:43	WG1534490
1,2-Dibromo-3-Chloropropane	U		0.0111	0.0713	1.38	08/28/2020 22:43	WG1534490
1,2-Dibromoethane	U		0.00185	0.00713	1.38	08/28/2020 22:43	WG1534490
Dibromomethane	U		0.00215	0.0143	1.38	08/28/2020 22:43	WG1534490
1,2-Dichlorobenzene	U		0.00121	0.0143	1.38	08/28/2020 22:43	WG1534490
1,3-Dichlorobenzene	U		0.00171	0.0143	1.38	08/28/2020 22:43	WG1534490
1,4-Dichlorobenzene	U		0.00200	0.0143	1.38	08/28/2020 22:43	WG1534490
Dichlorodifluoromethane	U		0.00459	0.00713	1.38	08/28/2020 22:43	WG1534490
1,1-Dichloroethane	U	~~J3~~	0.00140	0.00713	1.38	08/28/2020 22:43	WG1534490
1,2-Dichloroethane	U		0.00185	0.00713	1.38	08/28/2020 22:43	WG1534490
1,1-Dichloroethene	U	~~J3~~	0.00173	0.00713	1.38	08/28/2020 22:43	WG1534490
cis-1,2-Dichloroethene	U		0.00209	0.00713	1.38	08/28/2020 22:43	WG1534490
trans-1,2-Dichloroethene	U	~~J3~~	0.00298	0.0143	1.38	08/28/2020 22:43	WG1534490
1,2-Dichloropropane	U		0.00405	0.0143	1.38	08/28/2020 22:43	WG1534490
1,1-Dichloropropene	U		0.00232	0.00713	1.38	08/28/2020 22:43	WG1534490
1,3-Dichloropropane	U		0.00143	0.0143	1.38	08/28/2020 22:43	WG1534490
cis-1,3-Dichloropropene	U		0.00215	0.00713	1.38	08/28/2020 22:43	WG1534490
trans-1,3-Dichloropropene	U		0.00325	0.0143	1.38	08/28/2020 22:43	WG1534490
trans-1,4-Dichloro-2-butene	U		0.00531	0.0143	1.38	08/28/2020 22:43	WG1534490
2,2-Dichloropropane	U		0.00393	0.00713	1.38	08/28/2020 22:43	WG1534490
Di-isopropyl ether	U		0.00117	0.00285	1.38	08/28/2020 22:43	WG1534490
Ethylbenzene	0.00250	J	0.00211	0.00713	1.38	08/28/2020 22:43	WG1534490
Hexachloro-1,3-butadiene	U	~~J3~~	0.0171	0.0713	1.38	08/28/2020 22:43	WG1534490
2-Hexanone	U		0.00959	0.0713	1.38	08/28/2020 22:43	WG1534490
n-Hexane	0.00827	J	0.00645	0.0143	1.38	08/28/2020 22:43	WG1534490
Iodomethane	U	~~J3~~	0.00662	0.0358	1.38	08/28/2020 22:43	WG1534490
Isopropylbenzene	U	~~J3~~	0.00121	0.00713	1.38	08/28/2020 22:43	WG1534490
p-Isopropyltoluene	U	~~J3~~	0.00728	0.0143	1.38	08/28/2020 22:43	WG1534490
2-Butanone (MEK)	U		0.181	0.285	1.38	08/28/2020 22:43	WG1534490
Methylene Chloride	U	~~J3~~	0.0189	0.0713	1.38	08/28/2020 22:43	WG1534490
4-Methyl-2-pentanone (MIBK)	U		0.00651	0.0713	1.38	08/28/2020 22:43	WG1534490

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Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg		Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U			0.000999	0.00285	1.38	08/28/2020 22:43	WG1534490
Naphthalene	0.0792	J	J0	0.0139	0.0358	1.38	08/28/2020 22:43	WG1534490
n-Propylbenzene	U		~~J3~~	0.00271	0.0143	1.38	08/28/2020 22:43	WG1534490
Styrene	U		~~J3~~	0.000653	0.0358	1.38	08/28/2020 22:43	WG1534490
1,1,1,2-Tetrachloroethane	U			0.00271	0.00713	1.38	08/28/2020 22:43	WG1534490
1,1,2,2-Tetrachloroethane	U			0.00198	0.00713	1.38	08/28/2020 22:43	WG1534490
1,1,2-Trichlorotrifluoroethane	U			0.00215	0.00713	1.38	08/28/2020 22:43	WG1534490
Tetrachloroethene	0.0748			0.00256	0.00713	1.38	08/28/2020 22:43	WG1534490
Toluene	0.00449	U	~~J~~	0.00370	0.0143	1.38	08/28/2020 22:43	WG1534490
1,2,3-Trichlorobenzene	U	UJ	J0	0.0209	0.0358	1.38	08/28/2020 22:43	WG1534490
1,2,4-Trichlorobenzene	U			0.0126	0.0358	1.38	08/28/2020 22:43	WG1534490
1,1,1-Trichloroethane	U		~~J3~~	0.00263	0.00713	1.38	08/28/2020 22:43	WG1534490
1,1,2-Trichloroethane	U			0.00170	0.00713	1.38	08/28/2020 22:43	WG1534490
Trichloroethene	U			0.00167	0.00285	1.38	08/28/2020 22:43	WG1534490
Trichlorofluoromethane	U		~~J3~~	0.00236	0.00713	1.38	08/28/2020 22:43	WG1534490
1,2,3-Trichloropropane	U			0.00463	0.0358	1.38	08/28/2020 22:43	WG1534490
1,2,4-Trimethylbenzene	0.00463		J ~~J3~~	0.00451	0.0143	1.38	08/28/2020 22:43	WG1534490
1,2,3-Trimethylbenzene	U			0.00451	0.0143	1.38	08/28/2020 22:43	WG1534490
1,3,5-Trimethylbenzene	U		~~J3~~	0.00571	0.0143	1.38	08/28/2020 22:43	WG1534490
Vinyl acetate	U			0.00726	0.0358	1.38	08/28/2020 22:43	WG1534490
Vinyl chloride	U			0.00331	0.00713	1.38	08/28/2020 22:43	WG1534490
Xylenes, Total	0.0106	U	~~J J3~~	0.00250	0.0185	1.38	08/28/2020 22:43	WG1534490
(S) Toluene-d8	*94.0*				*75.0-131*		*08/28/2020 22:43*	WG1534490
(S) 4-Bromofluorobenzene	*96.9*				*67.0-138*		*08/28/2020 22:43*	WG1534490
(S) 1,2-Dichloroethane-d4	*94.3*				*70.0-130*		*08/28/2020 22:43*	WG1534490

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Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	85.6		1	08/31/2020 13:48	WG1534425

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	U		0.0491	0.0673	1	08/28/2020 23:02	WG1534490
Acrylonitrile	U		0.00486	0.0168	1	08/28/2020 23:02	WG1534490
Benzene	0.00115	J	0.000629	0.00135	1	08/28/2020 23:02	WG1534490
Bromobenzene	U		0.00121	0.0168	1	08/28/2020 23:02	WG1534490
Bromodichloromethane	U		0.000976	0.00336	1	08/28/2020 23:02	WG1534490
Bromochloromethane	U		0.000759	0.00673	1	08/28/2020 23:02	WG1534490
Bromoform	U		0.00157	0.0336	1	08/28/2020 23:02	WG1534490
Bromomethane	U	~~J3~~	0.00265	0.0168	1	08/28/2020 23:02	WG1534490
n-Butylbenzene	U	~~J3~~	0.00707	0.0168	1	08/28/2020 23:02	WG1534490
sec-Butylbenzene	U	~~J3~~	0.00388	0.0168	1	08/28/2020 23:02	WG1534490
tert-Butylbenzene	U	~~J3~~	0.00262	0.00673	1	08/28/2020 23:02	WG1534490
Carbon disulfide	U	~~J3~~	0.000942	0.0168	1	08/28/2020 23:02	WG1534490
Carbon tetrachloride	U	~~J3~~	0.00121	0.00673	1	08/28/2020 23:02	WG1534490
Chlorobenzene	U		0.000283	0.00336	1	08/28/2020 23:02	WG1534490
Chlorodibromomethane	U		0.000824	0.00336	1	08/28/2020 23:02	WG1534490
Chloroethane	U	~~J3~~	0.00229	0.00673	1	08/28/2020 23:02	WG1534490
Chloroform	U	~~J3~~	0.00139	0.00336	1	08/28/2020 23:02	WG1534490
Chloromethane	U	~~J3~~	0.00585	0.0168	1	08/28/2020 23:02	WG1534490
2-Chlorotoluene	U		0.00116	0.00336	1	08/28/2020 23:02	WG1534490
4-Chlorotoluene	U		0.000606	0.00673	1	08/28/2020 23:02	WG1534490
1,2-Dibromo-3-Chloropropane	U		0.00525	0.0336	1	08/28/2020 23:02	WG1534490
1,2-Dibromoethane	U		0.000872	0.00336	1	08/28/2020 23:02	WG1534490
Dibromomethane	U		0.00101	0.00673	1	08/28/2020 23:02	WG1534490
1,2-Dichlorobenzene	U		0.000572	0.00673	1	08/28/2020 23:02	WG1534490
1,3-Dichlorobenzene	U		0.000808	0.00673	1	08/28/2020 23:02	WG1534490
1,4-Dichlorobenzene	U		0.000942	0.00673	1	08/28/2020 23:02	WG1534490
Dichlorodifluoromethane	U		0.00217	0.00336	1	08/28/2020 23:02	WG1534490
1,1-Dichloroethane	U	~~J3~~	0.000661	0.00336	1	08/28/2020 23:02	WG1534490
1,2-Dichloroethane	U		0.000873	0.00336	1	08/28/2020 23:02	WG1534490
1,1-Dichloroethene	U	~~J3~~	0.000816	0.00336	1	08/28/2020 23:02	WG1534490
cis-1,2-Dichloroethene	U		0.000988	0.00336	1	08/28/2020 23:02	WG1534490
trans-1,2-Dichloroethene	U	~~J3~~	0.00140	0.00673	1	08/28/2020 23:02	WG1534490
1,2-Dichloropropane	U		0.00191	0.00673	1	08/28/2020 23:02	WG1534490
1,1-Dichloropropene	U		0.00109	0.00336	1	08/28/2020 23:02	WG1534490
1,3-Dichloropropane	U		0.000674	0.00673	1	08/28/2020 23:02	WG1534490
cis-1,3-Dichloropropene	U		0.00102	0.00336	1	08/28/2020 23:02	WG1534490
trans-1,3-Dichloropropene	U		0.00153	0.00673	1	08/28/2020 23:02	WG1534490
trans-1,4-Dichloro-2-butene	U		0.00250	0.00673	1	08/28/2020 23:02	WG1534490
2,2-Dichloropropane	U		0.00186	0.00336	1	08/28/2020 23:02	WG1534490
Di-isopropyl ether	U		0.000552	0.00135	1	08/28/2020 23:02	WG1534490
Ethylbenzene	U		0.000992	0.00336	1	08/28/2020 23:02	WG1534490
Hexachloro-1,3-butadiene	U	~~J3~~	0.00808	0.0336	1	08/28/2020 23:02	WG1534490
2-Hexanone	U		0.00452	0.0336	1	08/28/2020 23:02	WG1534490
n-Hexane	U		0.00304	0.00673	1	08/28/2020 23:02	WG1534490
Iodomethane	U	~~J3~~	0.00312	0.0168	1	08/28/2020 23:02	WG1534490
Isopropylbenzene	U	~~J3~~	0.000572	0.00336	1	08/28/2020 23:02	WG1534490
p-Isopropyltoluene	U	~~J3~~	0.00343	0.00673	1	08/28/2020 23:02	WG1534490
2-Butanone (MEK)	0.0995 U	~~J~~	0.0855	0.135	1	08/28/2020 23:02	WG1534490
Methylene Chloride	U	~~J3~~	0.00894	0.0336	1	08/28/2020 23:02	WG1534490
4-Methyl-2-pentanone (MIBK)	U		0.00307	0.0336	1	08/28/2020 23:02	WG1534490

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B-294-10

Collected date/time: 08/26/20 09:30

SAMPLE RESULTS - 04

L1255238

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.000471	0.00135	1	08/28/2020 23:02	WG1534490
Naphthalene	0.0304	U ~~J0~~	0.00657	0.0168	1	08/28/2020 23:02	WG1534490
n-Propylbenzene	U	~~J3~~	0.00128	0.00673	1	08/28/2020 23:02	WG1534490
Styrene	U	~~J3~~	0.000308	0.0168	1	08/28/2020 23:02	WG1534490
1,1,1,2-Tetrachloroethane	U		0.00128	0.00336	1	08/28/2020 23:02	WG1534490
1,1,2,2-Tetrachloroethane	U		0.000935	0.00336	1	08/28/2020 23:02	WG1534490
1,1,2-Trichlorotrifluoroethane	U		0.00101	0.00336	1	08/28/2020 23:02	WG1534490
Tetrachloroethene	U		0.00121	0.00336	1	08/28/2020 23:02	WG1534490
Toluene	0.00672	U ~~J~~	0.00175	0.00673	1	08/28/2020 23:02	WG1534490
1,2,3-Trichlorobenzene	U	UJ J0	0.00987	0.0168	1	08/28/2020 23:02	WG1534490
1,2,4-Trichlorobenzene	U		0.00592	0.0168	1	08/28/2020 23:02	WG1534490
1,1,1-Trichloroethane	U	~~J3~~	0.00124	0.00336	1	08/28/2020 23:02	WG1534490
1,1,2-Trichloroethane	U		0.000803	0.00336	1	08/28/2020 23:02	WG1534490
Trichloroethene	U		0.000786	0.00135	1	08/28/2020 23:02	WG1534490
Trichlorofluoromethane	U	~~J3~~	0.00111	0.00336	1	08/28/2020 23:02	WG1534490
1,2,3-Trichloropropane	U		0.00218	0.0168	1	08/28/2020 23:02	WG1534490
1,2,4-Trimethylbenzene	U	~~J3~~	0.00213	0.00673	1	08/28/2020 23:02	WG1534490
1,2,3-Trimethylbenzene	U		0.00213	0.00673	1	08/28/2020 23:02	WG1534490
1,3,5-Trimethylbenzene	U	~~J3~~	0.00269	0.00673	1	08/28/2020 23:02	WG1534490
Vinyl acetate	U		0.00342	0.0168	1	08/28/2020 23:02	WG1534490
Vinyl chloride	U		0.00156	0.00336	1	08/28/2020 23:02	WG1534490
Xylenes, Total	0.00191	U ~~J J3~~	0.00118	0.00875	1	08/28/2020 23:02	WG1534490
(S) Toluene-d8	*92.4*			*75.0-131*		*08/28/2020 23:02*	WG1534490
(S) 4-Bromofluorobenzene	*97.6*			*67.0-138*		*08/28/2020 23:02*	WG1534490
(S) 1,2-Dichloroethane-d4	*95.6*			*70.0-130*		*08/28/2020 23:02*	WG1534490

JC 9/17/2020

SAMPLE RESULTS - 05

L1255238

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	91.5		1	08/31/2020 13:48	WG1534425

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	U		0.0439	0.0602	1	08/28/2020 23:21	WG1534490
Acrylonitrile	U		0.00434	0.0150	1	08/28/2020 23:21	WG1534490
Benzene	U		0.000562	0.00120	1	08/28/2020 23:21	WG1534490
Bromobenzene	U		0.00108	0.0150	1	08/28/2020 23:21	WG1534490
Bromodichloromethane	U		0.000873	0.00301	1	08/28/2020 23:21	WG1534490
Bromochloromethane	U		0.000679	0.00602	1	08/28/2020 23:21	WG1534490
Bromoform	U		0.00141	0.0301	1	08/28/2020 23:21	WG1534490
Bromomethane	U	~~J3~~	0.00237	0.0150	1	08/28/2020 23:21	WG1534490
n-Butylbenzene	U	~~J3~~	0.00632	0.0150	1	08/28/2020 23:21	WG1534490
sec-Butylbenzene	U	~~J3~~	0.00347	0.0150	1	08/28/2020 23:21	WG1534490
tert-Butylbenzene	U	~~J3~~	0.00235	0.00602	1	08/28/2020 23:21	WG1534490
Carbon disulfide	U	~~J3~~	0.000843	0.0150	1	08/28/2020 23:21	WG1534490
Carbon tetrachloride	U	~~J3~~	0.00108	0.00602	1	08/28/2020 23:21	WG1534490
Chlorobenzene	U		0.000253	0.00301	1	08/28/2020 23:21	WG1534490
Chlorodibromomethane	U		0.000737	0.00301	1	08/28/2020 23:21	WG1534490
Chloroethane	U	~~J3~~	0.00205	0.00602	1	08/28/2020 23:21	WG1534490
Chloroform	U	~~J3~~	0.00124	0.00301	1	08/28/2020 23:21	WG1534490
Chloromethane	U	~~J3~~	0.00524	0.0150	1	08/28/2020 23:21	WG1534490
2-Chlorotoluene	U		0.00104	0.00301	1	08/28/2020 23:21	WG1534490
4-Chlorotoluene	U		0.000542	0.00602	1	08/28/2020 23:21	WG1534490
1,2-Dibromo-3-Chloropropane	U		0.00469	0.0301	1	08/28/2020 23:21	WG1534490
1,2-Dibromoethane	U		0.000780	0.00301	1	08/28/2020 23:21	WG1534490
Dibromomethane	U		0.000903	0.00602	1	08/28/2020 23:21	WG1534490
1,2-Dichlorobenzene	U		0.000512	0.00602	1	08/28/2020 23:21	WG1534490
1,3-Dichlorobenzene	U		0.000722	0.00602	1	08/28/2020 23:21	WG1534490
1,4-Dichlorobenzene	U		0.000843	0.00602	1	08/28/2020 23:21	WG1534490
Dichlorodifluoromethane	U		0.00194	0.00301	1	08/28/2020 23:21	WG1534490
1,1-Dichloroethane	U	~~J3~~	0.000591	0.00301	1	08/28/2020 23:21	WG1534490
1,2-Dichloroethane	U		0.000781	0.00301	1	08/28/2020 23:21	WG1534490
1,1-Dichloroethene	U	~~J3~~	0.000729	0.00301	1	08/28/2020 23:21	WG1534490
cis-1,2-Dichloroethene	U		0.000883	0.00301	1	08/28/2020 23:21	WG1534490
trans-1,2-Dichloroethene	U	~~J3~~	0.00125	0.00602	1	08/28/2020 23:21	WG1534490
1,2-Dichloropropane	U		0.00171	0.00602	1	08/28/2020 23:21	WG1534490
1,1-Dichloropropene	U		0.000974	0.00301	1	08/28/2020 23:21	WG1534490
1,3-Dichloropropane	U		0.000603	0.00602	1	08/28/2020 23:21	WG1534490
cis-1,3-Dichloropropene	U		0.000911	0.00301	1	08/28/2020 23:21	WG1534490
trans-1,3-Dichloropropene	U		0.00137	0.00602	1	08/28/2020 23:21	WG1534490
trans-1,4-Dichloro-2-butene	U		0.00224	0.00602	1	08/28/2020 23:21	WG1534490
2,2-Dichloropropane	U		0.00166	0.00301	1	08/28/2020 23:21	WG1534490
Di-isopropyl ether	U		0.000493	0.00120	1	08/28/2020 23:21	WG1534490
Ethylbenzene	U		0.000887	0.00301	1	08/28/2020 23:21	WG1534490
Hexachloro-1,3-butadiene	U	~~J3~~	0.00722	0.0301	1	08/28/2020 23:21	WG1534490
2-Hexanone	U		0.00404	0.0301	1	08/28/2020 23:21	WG1534490
n-Hexane	U		0.00272	0.00602	1	08/28/2020 23:21	WG1534490
Iodomethane	U	~~J3~~	0.00279	0.0150	1	08/28/2020 23:21	WG1534490
Isopropylbenzene	U	~~J3~~	0.000512	0.00301	1	08/28/2020 23:21	WG1534490
p-Isopropyltoluene	U	~~J3~~	0.00307	0.00602	1	08/28/2020 23:21	WG1534490
2-Butanone (MEK)	U		0.0764	0.120	1	08/28/2020 23:21	WG1534490
Methylene Chloride	U	~~J3~~	0.00799	0.0301	1	08/28/2020 23:21	WG1534490
4-Methyl-2-pentanone (MIBK)	U		0.00274	0.0301	1	08/28/2020 23:21	WG1534490

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Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.000421	0.00120	1	08/28/2020 23:21	WG1534490
Naphthalene	0.0250	U ~~J0~~	0.00587	0.0150	1	08/28/2020 23:21	WG1534490
n-Propylbenzene	U	~~J3~~	0.00114	0.00602	1	08/28/2020 23:21	WG1534490
Styrene	U	~~J3~~	0.000276	0.0150	1	08/28/2020 23:21	WG1534490
1,1,1,2-Tetrachloroethane	U		0.00114	0.00301	1	08/28/2020 23:21	WG1534490
1,1,2,2-Tetrachloroethane	U		0.000837	0.00301	1	08/28/2020 23:21	WG1534490
1,1,2-Trichlorotrifluoroethane	U		0.000908	0.00301	1	08/28/2020 23:21	WG1534490
Tetrachloroethene	0.00220	J	0.00108	0.00301	1	08/28/2020 23:21	WG1534490
Toluene	U		0.00156	0.00602	1	08/28/2020 23:21	WG1534490
1,2,3-Trichlorobenzene	U	UJ J0	0.00882	0.0150	1	08/28/2020 23:21	WG1534490
1,2,4-Trichlorobenzene	U		0.00530	0.0150	1	08/28/2020 23:21	WG1534490
1,1,1-Trichloroethane	U	~~J3~~	0.00111	0.00301	1	08/28/2020 23:21	WG1534490
1,1,2-Trichloroethane	U		0.000719	0.00301	1	08/28/2020 23:21	WG1534490
Trichloroethene	U		0.000703	0.00120	1	08/28/2020 23:21	WG1534490
Trichlorofluoromethane	U	~~J3~~	0.000995	0.00301	1	08/28/2020 23:21	WG1534490
1,2,3-Trichloropropane	U		0.00195	0.0150	1	08/28/2020 23:21	WG1534490
1,2,4-Trimethylbenzene	U	~~J3~~	0.00190	0.00602	1	08/28/2020 23:21	WG1534490
1,2,3-Trimethylbenzene	U		0.00190	0.00602	1	08/28/2020 23:21	WG1534490
1,3,5-Trimethylbenzene	U	~~J3~~	0.00241	0.00602	1	08/28/2020 23:21	WG1534490
Vinyl acetate	U		0.00306	0.0150	1	08/28/2020 23:21	WG1534490
Vinyl chloride	U		0.00140	0.00301	1	08/28/2020 23:21	WG1534490
Xylenes, Total	0.00140	U ~~J J3~~	0.00106	0.00782	1	08/28/2020 23:21	WG1534490
(S) Toluene-d8	*91.6*			*75.0-131*		*08/28/2020 23:21*	WG1534490
(S) 4-Bromofluorobenzene	*95.1*			*67.0-138*		*08/28/2020 23:21*	WG1534490
(S) 1,2-Dichloroethane-d4	*95.1*			*70.0-130*		*08/28/2020 23:21*	WG1534490

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1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	74.0		1	08/31/2020 13:48	WG1534425

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	U		0.0651	0.0892	1	08/28/2020 23:40	WG1534490
Acrylonitrile	U		0.00644	0.0223	1	08/28/2020 23:40	WG1534490
Benzene	0.00155	J	0.000833	0.00178	1	08/28/2020 23:40	WG1534490
Bromobenzene	U		0.00161	0.0223	1	08/28/2020 23:40	WG1534490
Bromodichloromethane	U		0.00129	0.00446	1	08/28/2020 23:40	WG1534490
Bromochloromethane	U		0.00101	0.00892	1	08/28/2020 23:40	WG1534490
Bromoform	U		0.00209	0.0446	1	08/28/2020 23:40	WG1534490
Bromomethane	U	~~J3~~	0.00351	0.0223	1	08/28/2020 23:40	WG1534490
n-Butylbenzene	U	~~J3~~	0.00937	0.0223	1	08/28/2020 23:40	WG1534490
sec-Butylbenzene	U	~~J3~~	0.00514	0.0223	1	08/28/2020 23:40	WG1534490
tert-Butylbenzene	U	~~J3~~	0.00348	0.00892	1	08/28/2020 23:40	WG1534490
Carbon disulfide	U	~~J3~~	0.00125	0.0223	1	08/28/2020 23:40	WG1534490
Carbon tetrachloride	U	~~J3~~	0.00160	0.00892	1	08/28/2020 23:40	WG1534490
Chlorobenzene	U		0.000375	0.00446	1	08/28/2020 23:40	WG1534490
Chlorodibromomethane	U		0.00109	0.00446	1	08/28/2020 23:40	WG1534490
Chloroethane	U	~~J3~~	0.00303	0.00892	1	08/28/2020 23:40	WG1534490
Chloroform	U	~~J3~~	0.00184	0.00446	1	08/28/2020 23:40	WG1534490
Chloromethane	U	~~J3~~	0.00776	0.0223	1	08/28/2020 23:40	WG1534490
2-Chlorotoluene	U		0.00154	0.00446	1	08/28/2020 23:40	WG1534490
4-Chlorotoluene	U		0.000803	0.00892	1	08/28/2020 23:40	WG1534490
1,2-Dibromo-3-Chloropropane	U		0.00696	0.0446	1	08/28/2020 23:40	WG1534490
1,2-Dibromoethane	U		0.00116	0.00446	1	08/28/2020 23:40	WG1534490
Dibromomethane	U		0.00134	0.00892	1	08/28/2020 23:40	WG1534490
1,2-Dichlorobenzene	U		0.000758	0.00892	1	08/28/2020 23:40	WG1534490
1,3-Dichlorobenzene	U		0.00107	0.00892	1	08/28/2020 23:40	WG1534490
1,4-Dichlorobenzene	U		0.00125	0.00892	1	08/28/2020 23:40	WG1534490
Dichlorodifluoromethane	U		0.00287	0.00446	1	08/28/2020 23:40	WG1534490
1,1-Dichloroethane	U	~~J3~~	0.000876	0.00446	1	08/28/2020 23:40	WG1534490
1,2-Dichloroethane	U		0.00116	0.00446	1	08/28/2020 23:40	WG1534490
1,1-Dichloroethene	U	~~J3~~	0.00108	0.00446	1	08/28/2020 23:40	WG1534490
cis-1,2-Dichloroethene	U		0.00131	0.00446	1	08/28/2020 23:40	WG1534490
trans-1,2-Dichloroethene	U	~~J3~~	0.00186	0.00892	1	08/28/2020 23:40	WG1534490
1,2-Dichloropropane	U		0.00253	0.00892	1	08/28/2020 23:40	WG1534490
1,1-Dichloropropene	U		0.00144	0.00446	1	08/28/2020 23:40	WG1534490
1,3-Dichloropropane	U		0.000894	0.00892	1	08/28/2020 23:40	WG1534490
cis-1,3-Dichloropropene	U		0.00135	0.00446	1	08/28/2020 23:40	WG1534490
trans-1,3-Dichloropropene	U		0.00203	0.00892	1	08/28/2020 23:40	WG1534490
trans-1,4-Dichloro-2-butene	U		0.00332	0.00892	1	08/28/2020 23:40	WG1534490
2,2-Dichloropropane	U		0.00246	0.00446	1	08/28/2020 23:40	WG1534490
Di-isopropyl ether	U		0.000731	0.00178	1	08/28/2020 23:40	WG1534490
Ethylbenzene	U		0.00131	0.00446	1	08/28/2020 23:40	WG1534490
Hexachloro-1,3-butadiene	U	~~J3~~	0.0107	0.0446	1	08/28/2020 23:40	WG1534490
2-Hexanone	U		0.00599	0.0446	1	08/28/2020 23:40	WG1534490
n-Hexane	0.00567	J	0.00403	0.00892	1	08/28/2020 23:40	WG1534490
Iodomethane	U	~~J3~~	0.00414	0.0223	1	08/28/2020 23:40	WG1534490
Isopropylbenzene	U	~~J3~~	0.000758	0.00446	1	08/28/2020 23:40	WG1534490
p-Isopropyltoluene	U	~~J3~~	0.00455	0.00892	1	08/28/2020 23:40	WG1534490
2-Butanone (MEK)	U		0.113	0.178	1	08/28/2020 23:40	WG1534490
Methylene Chloride	U	~~J3~~	0.0118	0.0446	1	08/28/2020 23:40	WG1534490
4-Methyl-2-pentanone (MIBK)	U		0.00407	0.0446	1	08/28/2020 23:40	WG1534490

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Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.000624	0.00178	1	08/28/2020 23:40	WG1534490
Naphthalene	0.0432 J	J0	0.00871	0.0223	1	08/28/2020 23:40	WG1534490
n-Propylbenzene	U	~~J3~~	0.00169	0.00892	1	08/28/2020 23:40	WG1534490
Styrene	U	~~J3~~	0.000409	0.0223	1	08/28/2020 23:40	WG1534490
1,1,1,2-Tetrachloroethane	U		0.00169	0.00446	1	08/28/2020 23:40	WG1534490
1,1,2,2-Tetrachloroethane	U		0.00124	0.00446	1	08/28/2020 23:40	WG1534490
1,1,2-Trichlorotrifluoroethane	U		0.00135	0.00446	1	08/28/2020 23:40	WG1534490
Tetrachloroethene	0.129		0.00160	0.00446	1	08/28/2020 23:40	WG1534490
Toluene	0.00232 U	~~J~~	0.00232	0.00892	1	08/28/2020 23:40	WG1534490
1,2,3-Trichlorobenzene	U UJ	J0	0.0131	0.0223	1	08/28/2020 23:40	WG1534490
1,2,4-Trichlorobenzene	U		0.00785	0.0223	1	08/28/2020 23:40	WG1534490
1,1,1-Trichloroethane	U	~~J3~~	0.00165	0.00446	1	08/28/2020 23:40	WG1534490
1,1,2-Trichloroethane	U		0.00107	0.00446	1	08/28/2020 23:40	WG1534490
Trichloroethene	U		0.00104	0.00178	1	08/28/2020 23:40	WG1534490
Trichlorofluoromethane	U	~~J3~~	0.00148	0.00446	1	08/28/2020 23:40	WG1534490
1,2,3-Trichloropropane	U		0.00289	0.0223	1	08/28/2020 23:40	WG1534490
1,2,4-Trimethylbenzene	U	~~J3~~	0.00282	0.00892	1	08/28/2020 23:40	WG1534490
1,2,3-Trimethylbenzene	U		0.00282	0.00892	1	08/28/2020 23:40	WG1534490
1,3,5-Trimethylbenzene	U	~~J3~~	0.00357	0.00892	1	08/28/2020 23:40	WG1534490
Vinyl acetate	U		0.00453	0.0223	1	08/28/2020 23:40	WG1534490
Vinyl chloride	U		0.00207	0.00446	1	08/28/2020 23:40	WG1534490
Xylenes, Total	0.00466 U	~~J J3~~	0.00157	0.0116	1	08/28/2020 23:40	WG1534490
(S) Toluene-d8	*89.4*			*75.0-131*		*08/28/2020 23:40*	WG1534490
(S) 4-Bromofluorobenzene	*95.0*			*67.0-138*		*08/28/2020 23:40*	WG1534490
(S) 1,2-Dichloroethane-d4	*95.8*			*70.0-130*		*08/28/2020 23:40*	WG1534490

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1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	81.6		1	08/31/2020 13:48	WG1534425

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	U		0.0547	0.0749	1	08/28/2020 23:59	WG1534490
Acrylonitrile	U		0.00541	0.0187	1	08/28/2020 23:59	WG1534490
Benzene	0.00187		0.000700	0.00150	1	08/28/2020 23:59	WG1534490
Bromobenzene	U		0.00135	0.0187	1	08/28/2020 23:59	WG1534490
Bromodichloromethane	U		0.00109	0.00375	1	08/28/2020 23:59	WG1534490
Bromochloromethane	U		0.000845	0.00749	1	08/28/2020 23:59	WG1534490
Bromoform	U		0.00175	0.0375	1	08/28/2020 23:59	WG1534490
Bromomethane	U	J3	0.00295	0.0187	1	08/28/2020 23:59	WG1534490
n-Butylbenzene	U	J3	0.00787	0.0187	1	08/28/2020 23:59	WG1534490
sec-Butylbenzene	U	J3	0.00432	0.0187	1	08/28/2020 23:59	WG1534490
tert-Butylbenzene	U	J3	0.00292	0.00749	1	08/28/2020 23:59	WG1534490
Carbon disulfide	U	J3	0.00105	0.0187	1	08/28/2020 23:59	WG1534490
Carbon tetrachloride	U	J3	0.00135	0.00749	1	08/28/2020 23:59	WG1534490
Chlorobenzene	U		0.000315	0.00375	1	08/28/2020 23:59	WG1534490
Chlorodibromomethane	U		0.000917	0.00375	1	08/28/2020 23:59	WG1534490
Chloroethane	U	J3	0.00255	0.00749	1	08/28/2020 23:59	WG1534490
Chloroform	U	J3	0.00154	0.00375	1	08/28/2020 23:59	WG1534490
Chloromethane	U	J3	0.00652	0.0187	1	08/28/2020 23:59	WG1534490
2-Chlorotoluene	U		0.00130	0.00375	1	08/28/2020 23:59	WG1534490
4-Chlorotoluene	U		0.000674	0.00749	1	08/28/2020 23:59	WG1534490
1,2-Dibromo-3-Chloropropane	U		0.00584	0.0375	1	08/28/2020 23:59	WG1534490
1,2-Dibromoethane	U		0.000971	0.00375	1	08/28/2020 23:59	WG1534490
Dibromomethane	U		0.00112	0.00749	1	08/28/2020 23:59	WG1534490
1,2-Dichlorobenzene	U		0.000637	0.00749	1	08/28/2020 23:59	WG1534490
1,3-Dichlorobenzene	U		0.000899	0.00749	1	08/28/2020 23:59	WG1534490
1,4-Dichlorobenzene	U		0.00105	0.00749	1	08/28/2020 23:59	WG1534490
Dichlorodifluoromethane	U		0.00241	0.00375	1	08/28/2020 23:59	WG1534490
1,1-Dichloroethane	U	~~J3~~	0.000736	0.00375	1	08/28/2020 23:59	WG1534490
1,2-Dichloroethane	U		0.000972	0.00375	1	08/28/2020 23:59	WG1534490
1,1-Dichloroethene	U	~~J3~~	0.000908	0.00375	1	08/28/2020 23:59	WG1534490
cis-1,2-Dichloroethene	U		0.00110	0.00375	1	08/28/2020 23:59	WG1534490
trans-1,2-Dichloroethene	U	~~J3~~	0.00156	0.00749	1	08/28/2020 23:59	WG1534490
1,2-Dichloropropane	U		0.00213	0.00749	1	08/28/2020 23:59	WG1534490
1,1-Dichloropropene	U		0.00121	0.00375	1	08/28/2020 23:59	WG1534490
1,3-Dichloropropane	U		0.000751	0.00749	1	08/28/2020 23:59	WG1534490
cis-1,3-Dichloropropene	U		0.00113	0.00375	1	08/28/2020 23:59	WG1534490
trans-1,3-Dichloropropene	U		0.00171	0.00749	1	08/28/2020 23:59	WG1534490
trans-1,4-Dichloro-2-butene	U		0.00279	0.00749	1	08/28/2020 23:59	WG1534490
2,2-Dichloropropane	U		0.00207	0.00375	1	08/28/2020 23:59	WG1534490
Di-isopropyl ether	U		0.000614	0.00150	1	08/28/2020 23:59	WG1534490
Ethylbenzene	U		0.00110	0.00375	1	08/28/2020 23:59	WG1534490
Hexachloro-1,3-butadiene	U	~~J3~~	0.00899	0.0375	1	08/28/2020 23:59	WG1534490
2-Hexanone	U		0.00503	0.0375	1	08/28/2020 23:59	WG1534490
n-Hexane	0.0150		0.00339	0.00749	1	08/28/2020 23:59	WG1534490
Iodomethane	U	~~J3~~	0.00348	0.0187	1	08/28/2020 23:59	WG1534490
Isopropylbenzene	U	~~J3~~	0.000637	0.00375	1	08/28/2020 23:59	WG1534490
p-Isopropyltoluene	U	~~J3~~	0.00382	0.00749	1	08/28/2020 23:59	WG1534490
2-Butanone (MEK)	U		0.0951	0.150	1	08/28/2020 23:59	WG1534490
Methylene Chloride	U	~~J3~~	0.00995	0.0375	1	08/28/2020 23:59	WG1534490
4-Methyl-2-pentanone (MIBK)	U		0.00342	0.0375	1	08/28/2020 23:59	WG1534490

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Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.000524	0.00150	1	08/28/2020 23:59	WG1534490
Naphthalene	0.0334	U ~~J0~~	0.00731	0.0187	1	08/28/2020 23:59	WG1534490
n-Propylbenzene	U	~~J3~~	0.00142	0.00749	1	08/28/2020 23:59	WG1534490
Styrene	U	~~J3~~	0.000343	0.0187	1	08/28/2020 23:59	WG1534490
1,1,1,2-Tetrachloroethane	U		0.00142	0.00375	1	08/28/2020 23:59	WG1534490
1,1,2,2-Tetrachloroethane	U		0.00104	0.00375	1	08/28/2020 23:59	WG1534490
1,1,2-Trichlorotrifluoroethane	U		0.00113	0.00375	1	08/28/2020 23:59	WG1534490
Tetrachloroethene	0.0995		0.00134	0.00375	1	08/28/2020 23:59	WG1534490
Toluene	0.00361	U ~~J~~	0.00195	0.00749	1	08/28/2020 23:59	WG1534490
1,2,3-Trichlorobenzene	U	UJ J0	0.0110	0.0187	1	08/28/2020 23:59	WG1534490
1,2,4-Trichlorobenzene	U		0.00659	0.0187	1	08/28/2020 23:59	WG1534490
1,1,1-Trichloroethane	U	~~J3~~	0.00138	0.00375	1	08/28/2020 23:59	WG1534490
1,1,2-Trichloroethane	U		0.000895	0.00375	1	08/28/2020 23:59	WG1534490
Trichloroethene	U		0.000875	0.00150	1	08/28/2020 23:59	WG1534490
Trichlorofluoromethane	U	~~J3~~	0.00124	0.00375	1	08/28/2020 23:59	WG1534490
1,2,3-Trichloropropane	U		0.00243	0.0187	1	08/28/2020 23:59	WG1534490
1,2,4-Trimethylbenzene	0.00348	J ~~J3~~	0.00237	0.00749	1	08/28/2020 23:59	WG1534490
1,2,3-Trimethylbenzene	U		0.00237	0.00749	1	08/28/2020 23:59	WG1534490
1,3,5-Trimethylbenzene	U	~~J3~~	0.00300	0.00749	1	08/28/2020 23:59	WG1534490
Vinyl acetate	U		0.00381	0.0187	1	08/28/2020 23:59	WG1534490
Vinyl chloride	U		0.00174	0.00375	1	08/28/2020 23:59	WG1534490
Xylenes, Total	0.00811	U ~~J J3~~	0.00132	0.00974	1	08/28/2020 23:59	WG1534490
(S) Toluene-d8	*92.5*			*75.0-131*		*08/28/2020 23:59*	WG1534490
(S) 4-Bromofluorobenzene	*93.9*			*67.0-138*		*08/28/2020 23:59*	WG1534490
(S) 1,2-Dichloroethane-d4	*92.4*			*70.0-130*		*08/28/2020 23:59*	WG1534490

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Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	84.5		1	08/31/2020 13:48	WG1534425

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	U		0.0513	0.0703	1	08/29/2020 00:18	WG1534490
Acrylonitrile	U		0.00507	0.0176	1	08/29/2020 00:18	WG1534490
Benzene	0.000922	J	0.000656	0.00141	1	08/29/2020 00:18	WG1534490
Bromobenzene	U		0.00127	0.0176	1	08/29/2020 00:18	WG1534490
Bromodichloromethane	U		0.00102	0.00351	1	08/29/2020 00:18	WG1534490
Bromochloromethane	U		0.000793	0.00703	1	08/29/2020 00:18	WG1534490
Bromoform	U		0.00164	0.0351	1	08/29/2020 00:18	WG1534490
Bromomethane	U	~~J3~~	0.00277	0.0176	1	08/29/2020 00:18	WG1534490
n-Butylbenzene	U	~~J3~~	0.00738	0.0176	1	08/29/2020 00:18	WG1534490
sec-Butylbenzene	U	~~J3~~	0.00405	0.0176	1	08/29/2020 00:18	WG1534490
tert-Butylbenzene	U	~~J3~~	0.00274	0.00703	1	08/29/2020 00:18	WG1534490
Carbon disulfide	U	~~J3~~	0.000984	0.0176	1	08/29/2020 00:18	WG1534490
Carbon tetrachloride	U	~~J3~~	0.00126	0.00703	1	08/29/2020 00:18	WG1534490
Chlorobenzene	U		0.000295	0.00351	1	08/29/2020 00:18	WG1534490
Chlorodibromomethane	U		0.000860	0.00351	1	08/29/2020 00:18	WG1534490
Chloroethane	U	~~J3~~	0.00239	0.00703	1	08/29/2020 00:18	WG1534490
Chloroform	U	~~J3~~	0.00145	0.00351	1	08/29/2020 00:18	WG1534490
Chloromethane	U	~~J3~~	0.00611	0.0176	1	08/29/2020 00:18	WG1534490
2-Chlorotoluene	U		0.00122	0.00351	1	08/29/2020 00:18	WG1534490
4-Chlorotoluene	U		0.000633	0.00703	1	08/29/2020 00:18	WG1534490
1,2-Dibromo-3-Chloropropane	U		0.00548	0.0351	1	08/29/2020 00:18	WG1534490
1,2-Dibromoethane	U		0.000911	0.00351	1	08/29/2020 00:18	WG1534490
Dibromomethane	U		0.00105	0.00703	1	08/29/2020 00:18	WG1534490
1,2-Dichlorobenzene	U		0.000597	0.00703	1	08/29/2020 00:18	WG1534490
1,3-Dichlorobenzene	U		0.000843	0.00703	1	08/29/2020 00:18	WG1534490
1,4-Dichlorobenzene	U		0.000984	0.00703	1	08/29/2020 00:18	WG1534490
Dichlorodifluoromethane	U		0.00226	0.00351	1	08/29/2020 00:18	WG1534490
1,1-Dichloroethane	U	~~J3~~	0.000690	0.00351	1	08/29/2020 00:18	WG1534490
1,2-Dichloroethane	U		0.000912	0.00351	1	08/29/2020 00:18	WG1534490
1,1-Dichloroethene	U	~~J3~~	0.000852	0.00351	1	08/29/2020 00:18	WG1534490
cis-1,2-Dichloroethene	0.00423		0.00103	0.00351	1	08/29/2020 00:18	WG1534490
trans-1,2-Dichloroethene	U	~~J3~~	0.00146	0.00703	1	08/29/2020 00:18	WG1534490
1,2-Dichloropropane	U		0.00200	0.00703	1	08/29/2020 00:18	WG1534490
1,1-Dichloropropene	U		0.00114	0.00351	1	08/29/2020 00:18	WG1534490
1,3-Dichloropropane	U		0.000704	0.00703	1	08/29/2020 00:18	WG1534490
cis-1,3-Dichloropropene	U		0.00106	0.00351	1	08/29/2020 00:18	WG1534490
trans-1,3-Dichloropropene	U		0.00160	0.00703	1	08/29/2020 00:18	WG1534490
trans-1,4-Dichloro-2-butene	U		0.00261	0.00703	1	08/29/2020 00:18	WG1534490
2,2-Dichloropropane	U		0.00194	0.00351	1	08/29/2020 00:18	WG1534490
Di-isopropyl ether	U		0.000576	0.00141	1	08/29/2020 00:18	WG1534490
Ethylbenzene	U		0.00104	0.00351	1	08/29/2020 00:18	WG1534490
Hexachloro-1,3-butadiene	U	~~J3~~	0.00843	0.0351	1	08/29/2020 00:18	WG1534490
2-Hexanone	U		0.00472	0.0351	1	08/29/2020 00:18	WG1534490
n-Hexane	0.0170		0.00318	0.00703	1	08/29/2020 00:18	WG1534490
Iodomethane	U	~~J3~~	0.00326	0.0176	1	08/29/2020 00:18	WG1534490
Isopropylbenzene	U	~~J3~~	0.000597	0.00351	1	08/29/2020 00:18	WG1534490
p-Isopropyltoluene	U	~~J3~~	0.00358	0.00703	1	08/29/2020 00:18	WG1534490
2-Butanone (MEK)	U		0.0893	0.141	1	08/29/2020 00:18	WG1534490
Methylene Chloride	U	~~J3~~	0.00933	0.0351	1	08/29/2020 00:18	WG1534490
4-Methyl-2-pentanone (MIBK)	U		0.00320	0.0351	1	08/29/2020 00:18	WG1534490

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1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg		Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U			0.000492	0.00141	1	08/29/2020 00:18	WG1534490
Naphthalene	0.0287	U	~~J0~~	0.00686	0.0176	1	08/29/2020 00:18	WG1534490
n-Propylbenzene	U		~~J3~~	0.00134	0.00703	1	08/29/2020 00:18	WG1534490
Styrene	U		~~J3~~	0.000322	0.0176	1	08/29/2020 00:18	WG1534490
1,1,1,2-Tetrachloroethane	U			0.00133	0.00351	1	08/29/2020 00:18	WG1534490
1,1,2,2-Tetrachloroethane	U			0.000977	0.00351	1	08/29/2020 00:18	WG1534490
1,1,2-Trichlorotrifluoroethane	U			0.00106	0.00351	1	08/29/2020 00:18	WG1534490
Tetrachloroethene	U			0.00126	0.00351	1	08/29/2020 00:18	WG1534490
Toluene	0.00703	U	~~J~~	0.00183	0.00703	1	08/29/2020 00:18	WG1534490
1,2,3-Trichlorobenzene	U	UJ	J0	0.0103	0.0176	1	08/29/2020 00:18	WG1534490
1,2,4-Trichlorobenzene	U			0.00618	0.0176	1	08/29/2020 00:18	WG1534490
1,1,1-Trichloroethane	U		~~J3~~	0.00130	0.00351	1	08/29/2020 00:18	WG1534490
1,1,2-Trichloroethane	U			0.000839	0.00351	1	08/29/2020 00:18	WG1534490
Trichloroethene	U			0.000821	0.00141	1	08/29/2020 00:18	WG1534490
Trichlorofluoromethane	U		~~J3~~	0.00116	0.00351	1	08/29/2020 00:18	WG1534490
1,2,3-Trichloropropane	U			0.00228	0.0176	1	08/29/2020 00:18	WG1534490
1,2,4-Trimethylbenzene	U		~~J3~~	0.00222	0.00703	1	08/29/2020 00:18	WG1534490
1,2,3-Trimethylbenzene	U			0.00222	0.00703	1	08/29/2020 00:18	WG1534490
1,3,5-Trimethylbenzene	U		~~J3~~	0.00281	0.00703	1	08/29/2020 00:18	WG1534490
Vinyl acetate	U			0.00357	0.0176	1	08/29/2020 00:18	WG1534490
Vinyl chloride	U			0.00163	0.00351	1	08/29/2020 00:18	WG1534490
Xylenes, Total	0.00231	U	~~J J3~~	0.00124	0.00914	1	08/29/2020 00:18	WG1534490
(S) Toluene-d8	*92.5*				*75.0-131*		*08/29/2020 00:18*	WG1534490
(S) 4-Bromofluorobenzene	*96.3*				*67.0-138*		*08/29/2020 00:18*	WG1534490
(S) 1,2-Dichloroethane-d4	*92.6*				*70.0-130*		*08/29/2020 00:18*	WG1534490

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1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	93.9		1	08/31/2020 13:48	WG1534425

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	U		0.0415	0.0568	1	08/29/2020 00:37	WG1534490
Acrylonitrile	U		0.00410	0.0142	1	08/29/2020 00:37	WG1534490
Benzene	U		0.000531	0.00114	1	08/29/2020 00:37	WG1534490
Bromobenzene	U		0.00102	0.0142	1	08/29/2020 00:37	WG1534490
Bromodichloromethane	U		0.000824	0.00284	1	08/29/2020 00:37	WG1534490
Bromochloromethane	U		0.000641	0.00568	1	08/29/2020 00:37	WG1534490
Bromoform	U		0.00133	0.0284	1	08/29/2020 00:37	WG1534490
Bromomethane	U	~~J3~~	0.00224	0.0142	1	08/29/2020 00:37	WG1534490
n-Butylbenzene	U	~~J3~~	0.00596	0.0142	1	08/29/2020 00:37	WG1534490
sec-Butylbenzene	U	~~J3~~	0.00327	0.0142	1	08/29/2020 00:37	WG1534490
tert-Butylbenzene	U	~~J3~~	0.00222	0.00568	1	08/29/2020 00:37	WG1534490
Carbon disulfide	U	~~J3~~	0.000795	0.0142	1	08/29/2020 00:37	WG1534490
Carbon tetrachloride	U	~~J3~~	0.00102	0.00568	1	08/29/2020 00:37	WG1534490
Chlorobenzene	U		0.000239	0.00284	1	08/29/2020 00:37	WG1534490
Chlorodibromomethane	U		0.000695	0.00284	1	08/29/2020 00:37	WG1534490
Chloroethane	U	~~J3~~	0.00193	0.00568	1	08/29/2020 00:37	WG1534490
Chloroform	U	~~J3~~	0.00117	0.00284	1	08/29/2020 00:37	WG1534490
Chloromethane	U	~~J3~~	0.00494	0.0142	1	08/29/2020 00:37	WG1534490
2-Chlorotoluene	U		0.000983	0.00284	1	08/29/2020 00:37	WG1534490
4-Chlorotoluene	U		0.000511	0.00568	1	08/29/2020 00:37	WG1534490
1,2-Dibromo-3-Chloropropane	U		0.00443	0.0284	1	08/29/2020 00:37	WG1534490
1,2-Dibromoethane	U		0.000736	0.00284	1	08/29/2020 00:37	WG1534490
Dibromomethane	U		0.000852	0.00568	1	08/29/2020 00:37	WG1534490
1,2-Dichlorobenzene	U		0.000483	0.00568	1	08/29/2020 00:37	WG1534490
1,3-Dichlorobenzene	U		0.000682	0.00568	1	08/29/2020 00:37	WG1534490
1,4-Dichlorobenzene	U		0.000795	0.00568	1	08/29/2020 00:37	WG1534490
Dichlorodifluoromethane	U		0.00183	0.00284	1	08/29/2020 00:37	WG1534490
1,1-Dichloroethane	U	~~J3~~	0.000558	0.00284	1	08/29/2020 00:37	WG1534490
1,2-Dichloroethane	U		0.000737	0.00284	1	08/29/2020 00:37	WG1534490
1,1-Dichloroethene	U	~~J3~~	0.000688	0.00284	1	08/29/2020 00:37	WG1534490
cis-1,2-Dichloroethene	U		0.000834	0.00284	1	08/29/2020 00:37	WG1534490
trans-1,2-Dichloroethene	U	~~J3~~	0.00118	0.00568	1	08/29/2020 00:37	WG1534490
1,2-Dichloropropane	U		0.00161	0.00568	1	08/29/2020 00:37	WG1534490
1,1-Dichloropropene	U		0.000919	0.00284	1	08/29/2020 00:37	WG1534490
1,3-Dichloropropane	U		0.000569	0.00568	1	08/29/2020 00:37	WG1534490
cis-1,3-Dichloropropene	U		0.000860	0.00284	1	08/29/2020 00:37	WG1534490
trans-1,3-Dichloropropene	U		0.00130	0.00568	1	08/29/2020 00:37	WG1534490
trans-1,4-Dichloro-2-butene	U		0.00211	0.00568	1	08/29/2020 00:37	WG1534490
2,2-Dichloropropane	U		0.00157	0.00284	1	08/29/2020 00:37	WG1534490
Di-isopropyl ether	U		0.000466	0.00114	1	08/29/2020 00:37	WG1534490
Ethylbenzene	U		0.000837	0.00284	1	08/29/2020 00:37	WG1534490
Hexachloro-1,3-butadiene	U	~~J3~~	0.00682	0.0284	1	08/29/2020 00:37	WG1534490
2-Hexanone	U		0.00382	0.0284	1	08/29/2020 00:37	WG1534490
n-Hexane	U		0.00257	0.00568	1	08/29/2020 00:37	WG1534490
Iodomethane	U	~~J3~~	0.00264	0.0142	1	08/29/2020 00:37	WG1534490
Isopropylbenzene	U	~~J3~~	0.000483	0.00284	1	08/29/2020 00:37	WG1534490
p-Isopropyltoluene	U	~~J3~~	0.00290	0.00568	1	08/29/2020 00:37	WG1534490
2-Butanone (MEK)	U		0.0721	0.114	1	08/29/2020 00:37	WG1534490
Methylene Chloride	U	~~J3~~	0.00754	0.0284	1	08/29/2020 00:37	WG1534490
4-Methyl-2-pentanone (MIBK)	U		0.00259	0.0284	1	08/29/2020 00:37	WG1534490

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Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.000398	0.00114	1	08/29/2020 00:37	WG1534490
Naphthalene	0.0307	U ~~J0~~	0.00554	0.0142	1	08/29/2020 00:37	WG1534490
n-Propylbenzene	U	~~J3~~	0.00108	0.00568	1	08/29/2020 00:37	WG1534490
Styrene	U	~~J3~~	0.000260	0.0142	1	08/29/2020 00:37	WG1534490
1,1,1,2-Tetrachloroethane	U		0.00108	0.00284	1	08/29/2020 00:37	WG1534490
1,1,2,2-Tetrachloroethane	U		0.000790	0.00284	1	08/29/2020 00:37	WG1534490
1,1,2-Trichlorotrifluoroethane	U		0.000857	0.00284	1	08/29/2020 00:37	WG1534490
Tetrachloroethene	U		0.00102	0.00284	1	08/29/2020 00:37	WG1534490
Toluene	U		0.00148	0.00568	1	08/29/2020 00:37	WG1534490
1,2,3-Trichlorobenzene	U	UJ J0	0.00833	0.0142	1	08/29/2020 00:37	WG1534490
1,2,4-Trichlorobenzene	U		0.00500	0.0142	1	08/29/2020 00:37	WG1534490
1,1,1-Trichloroethane	U	~~J3~~	0.00105	0.00284	1	08/29/2020 00:37	WG1534490
1,1,2-Trichloroethane	U		0.000678	0.00284	1	08/29/2020 00:37	WG1534490
Trichloroethene	U		0.000663	0.00114	1	08/29/2020 00:37	WG1534490
Trichlorofluoromethane	U	~~J3~~	0.000939	0.00284	1	08/29/2020 00:37	WG1534490
1,2,3-Trichloropropane	U		0.00184	0.0142	1	08/29/2020 00:37	WG1534490
1,2,4-Trimethylbenzene	0.00306	J ~~J3~~	0.00179	0.00568	1	08/29/2020 00:37	WG1534490
1,2,3-Trimethylbenzene	0.00245	J	0.00179	0.00568	1	08/29/2020 00:37	WG1534490
1,3,5-Trimethylbenzene	U	~~J3~~	0.00227	0.00568	1	08/29/2020 00:37	WG1534490
Vinyl acetate	U		0.00289	0.0142	1	08/29/2020 00:37	WG1534490
Vinyl chloride	U		0.00132	0.00284	1	08/29/2020 00:37	WG1534490
Xylenes, Total	0.00362	U ~~J J3~~	0.00100	0.00738	1	08/29/2020 00:37	WG1534490
(S) Toluene-d8	*92.3*			*75.0-131*		*08/29/2020 00:37*	WG1534490
(S) 4-Bromofluorobenzene	*101*			*67.0-138*		*08/29/2020 00:37*	WG1534490
(S) 1,2-Dichloroethane-d4	*96.1*			*70.0-130*		*08/29/2020 00:37*	WG1534490

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Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	94.9		1	08/31/2020 13:48	WG1534425

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	U		0.0405	0.0554	1	08/29/2020 00:56	WG1534490
Acrylonitrile	U		0.00400	0.0139	1	08/29/2020 00:56	WG1534490
Benzene	0.000933	J	0.000518	0.00111	1	08/29/2020 00:56	WG1534490
Bromobenzene	U		0.000998	0.0139	1	08/29/2020 00:56	WG1534490
Bromodichloromethane	U		0.000804	0.00277	1	08/29/2020 00:56	WG1534490
Bromochloromethane	U		0.000625	0.00554	1	08/29/2020 00:56	WG1534490
Bromoform	U		0.00130	0.0277	1	08/29/2020 00:56	WG1534490
Bromomethane	U	~~J3~~	0.00218	0.0139	1	08/29/2020 00:56	WG1534490
n-Butylbenzene	U	~~J3~~	0.00582	0.0139	1	08/29/2020 00:56	WG1534490
sec-Butylbenzene	U	~~J3~~	0.00319	0.0139	1	08/29/2020 00:56	WG1534490
tert-Butylbenzene	U	~~J3~~	0.00216	0.00554	1	08/29/2020 00:56	WG1534490
Carbon disulfide	U	~~J3~~	0.000776	0.0139	1	08/29/2020 00:56	WG1534490
Carbon tetrachloride	U	~~J3~~	0.000995	0.00554	1	08/29/2020 00:56	WG1534490
Chlorobenzene	U		0.000233	0.00277	1	08/29/2020 00:56	WG1534490
Chlorodibromomethane	U		0.000678	0.00277	1	08/29/2020 00:56	WG1534490
Chloroethane	U	~~J3~~	0.00188	0.00554	1	08/29/2020 00:56	WG1534490
Chloroform	U	~~J3~~	0.00114	0.00277	1	08/29/2020 00:56	WG1534490
Chloromethane	U	~~J3~~	0.00482	0.0139	1	08/29/2020 00:56	WG1534490
2-Chlorotoluene	U		0.000959	0.00277	1	08/29/2020 00:56	WG1534490
4-Chlorotoluene	U		0.000499	0.00554	1	08/29/2020 00:56	WG1534490
1,2-Dibromo-3-Chloropropane	U		0.00432	0.0277	1	08/29/2020 00:56	WG1534490
1,2-Dibromoethane	U		0.000718	0.00277	1	08/29/2020 00:56	WG1534490
Dibromomethane	U		0.000831	0.00554	1	08/29/2020 00:56	WG1534490
1,2-Dichlorobenzene	U		0.000471	0.00554	1	08/29/2020 00:56	WG1534490
1,3-Dichlorobenzene	U		0.000665	0.00554	1	08/29/2020 00:56	WG1534490
1,4-Dichlorobenzene	U		0.000776	0.00554	1	08/29/2020 00:56	WG1534490
Dichlorodifluoromethane	U		0.00178	0.00277	1	08/29/2020 00:56	WG1534490
1,1-Dichloroethane	U	~~J3~~	0.000544	0.00277	1	08/29/2020 00:56	WG1534490
1,2-Dichloroethane	U		0.000719	0.00277	1	08/29/2020 00:56	WG1534490
1,1-Dichloroethene	U	~~J3~~	0.000672	0.00277	1	08/29/2020 00:56	WG1534490
cis-1,2-Dichloroethene	U		0.000814	0.00277	1	08/29/2020 00:56	WG1534490
trans-1,2-Dichloroethene	U	~~J3~~	0.00115	0.00554	1	08/29/2020 00:56	WG1534490
1,2-Dichloropropane	U		0.00157	0.00554	1	08/29/2020 00:56	WG1534490
1,1-Dichloropropene	U		0.000897	0.00277	1	08/29/2020 00:56	WG1534490
1,3-Dichloropropane	U		0.000555	0.00554	1	08/29/2020 00:56	WG1534490
cis-1,3-Dichloropropene	U		0.000839	0.00277	1	08/29/2020 00:56	WG1534490
trans-1,3-Dichloropropene	U		0.00126	0.00554	1	08/29/2020 00:56	WG1534490
trans-1,4-Dichloro-2-butene	U		0.00206	0.00554	1	08/29/2020 00:56	WG1534490
2,2-Dichloropropane	U		0.00153	0.00277	1	08/29/2020 00:56	WG1534490
Di-isopropyl ether	U		0.000454	0.00111	1	08/29/2020 00:56	WG1534490
Ethylbenzene	U		0.000817	0.00277	1	08/29/2020 00:56	WG1534490
Hexachloro-1,3-butadiene	U	~~J3~~	0.00665	0.0277	1	08/29/2020 00:56	WG1534490
2-Hexanone	U		0.00372	0.0277	1	08/29/2020 00:56	WG1534490
n-Hexane	U		0.00251	0.00554	1	08/29/2020 00:56	WG1534490
Iodomethane	U	~~J3~~	0.00257	0.0139	1	08/29/2020 00:56	WG1534490
Isopropylbenzene	U	~~J3~~	0.000471	0.00277	1	08/29/2020 00:56	WG1534490
p-Isopropyltoluene	U	~~J3~~	0.00283	0.00554	1	08/29/2020 00:56	WG1534490
2-Butanone (MEK)	U		0.0704	0.111	1	08/29/2020 00:56	WG1534490
Methylene Chloride	U	~~J3~~	0.00736	0.0277	1	08/29/2020 00:56	WG1534490
4-Methyl-2-pentanone (MIBK)	U		0.00253	0.0277	1	08/29/2020 00:56	WG1534490

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Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.000388	0.00111	1	08/29/2020 00:56	WG1534490
Naphthalene	0.0286 U	~~J0~~	0.00541	0.0139	1	08/29/2020 00:56	WG1534490
n-Propylbenzene	U	~~J3~~	0.00105	0.00554	1	08/29/2020 00:56	WG1534490
Styrene	U	~~J3~~	0.000254	0.0139	1	08/29/2020 00:56	WG1534490
1,1,1,2-Tetrachloroethane	U		0.00105	0.00277	1	08/29/2020 00:56	WG1534490
1,1,2,2-Tetrachloroethane	U		0.000770	0.00277	1	08/29/2020 00:56	WG1534490
1,1,2-Trichlorotrifluoroethane	U		0.000836	0.00277	1	08/29/2020 00:56	WG1534490
Tetrachloroethene	0.00365		0.000993	0.00277	1	08/29/2020 00:56	WG1534490
Toluene	0.00351 U	~~J~~	0.00144	0.00554	1	08/29/2020 00:56	WG1534490
1,2,3-Trichlorobenzene	U UJ	J0	0.00813	0.0139	1	08/29/2020 00:56	WG1534490
1,2,4-Trichlorobenzene	U		0.00488	0.0139	1	08/29/2020 00:56	WG1534490
1,1,1-Trichloroethane	U	~~J3~~	0.00102	0.00277	1	08/29/2020 00:56	WG1534490
1,1,2-Trichloroethane	U		0.000662	0.00277	1	08/29/2020 00:56	WG1534490
Trichloroethene	U		0.000647	0.00111	1	08/29/2020 00:56	WG1534490
Trichlorofluoromethane	U	~~J3~~	0.000917	0.00277	1	08/29/2020 00:56	WG1534490
1,2,3-Trichloropropane	U		0.00180	0.0139	1	08/29/2020 00:56	WG1534490
1,2,4-Trimethylbenzene	U	~~J3~~	0.00175	0.00554	1	08/29/2020 00:56	WG1534490
1,2,3-Trimethylbenzene	U		0.00175	0.00554	1	08/29/2020 00:56	WG1534490
1,3,5-Trimethylbenzene	U	~~J3~~	0.00222	0.00554	1	08/29/2020 00:56	WG1534490
Vinyl acetate	U		0.00282	0.0139	1	08/29/2020 00:56	WG1534490
Vinyl chloride	U		0.00129	0.00277	1	08/29/2020 00:56	WG1534490
Xylenes, Total	0.00154 U	~~J~~ J3	0.000975	0.00721	1	08/29/2020 00:56	WG1534490
(S) Toluene-d8	*95.3*			*75.0-131*		*08/29/2020 00:56*	WG1534490
(S) 4-Bromofluorobenzene	*97.4*			*67.0-138*		*08/29/2020 00:56*	WG1534490
(S) 1,2-Dichloroethane-d4	*97.8*			*70.0-130*		*08/29/2020 00:56*	WG1534490

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1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	90.5		1	08/31/2020 13:48	WG1534425

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	U		0.0450	0.0616	1	08/29/2020 01:15	WG1534490
Acrylonitrile	U		0.00445	0.0154	1	08/29/2020 01:15	WG1534490
Benzene	U		0.000575	0.00123	1	08/29/2020 01:15	WG1534490
Bromobenzene	U		0.00111	0.0154	1	08/29/2020 01:15	WG1534490
Bromodichloromethane	U		0.000893	0.00308	1	08/29/2020 01:15	WG1534490
Bromochloromethane	U		0.000695	0.00616	1	08/29/2020 01:15	WG1534490
Bromoform	U		0.00144	0.0308	1	08/29/2020 01:15	WG1534490
Bromomethane	U	~~J3~~	0.00243	0.0154	1	08/29/2020 01:15	WG1534490
n-Butylbenzene	U	~~J3~~	0.00647	0.0154	1	08/29/2020 01:15	WG1534490
sec-Butylbenzene	U	~~J3~~	0.00355	0.0154	1	08/29/2020 01:15	WG1534490
tert-Butylbenzene	U	~~J3~~	0.00240	0.00616	1	08/29/2020 01:15	WG1534490
Carbon disulfide	U	~~J3~~	0.000862	0.0154	1	08/29/2020 01:15	WG1534490
Carbon tetrachloride	U	~~J3~~	0.00111	0.00616	1	08/29/2020 01:15	WG1534490
Chlorobenzene	U		0.000259	0.00308	1	08/29/2020 01:15	WG1534490
Chlorodibromomethane	U		0.000754	0.00308	1	08/29/2020 01:15	WG1534490
Chloroethane	U	~~J3~~	0.00209	0.00616	1	08/29/2020 01:15	WG1534490
Chloroform	U	~~J3~~	0.00127	0.00308	1	08/29/2020 01:15	WG1534490
Chloromethane	U	~~J3~~	0.00536	0.0154	1	08/29/2020 01:15	WG1534490
2-Chlorotoluene	U		0.00107	0.00308	1	08/29/2020 01:15	WG1534490
4-Chlorotoluene	U		0.000554	0.00616	1	08/29/2020 01:15	WG1534490
1,2-Dibromo-3-Chloropropane	U		0.00480	0.0308	1	08/29/2020 01:15	WG1534490
1,2-Dibromoethane	U		0.000798	0.00308	1	08/29/2020 01:15	WG1534490
Dibromomethane	U		0.000924	0.00616	1	08/29/2020 01:15	WG1534490
1,2-Dichlorobenzene	U		0.000524	0.00616	1	08/29/2020 01:15	WG1534490
1,3-Dichlorobenzene	U		0.000739	0.00616	1	08/29/2020 01:15	WG1534490
1,4-Dichlorobenzene	U		0.000862	0.00616	1	08/29/2020 01:15	WG1534490
Dichlorodifluoromethane	U		0.00198	0.00308	1	08/29/2020 01:15	WG1534490
1,1-Dichloroethane	U	~~J3~~	0.000605	0.00308	1	08/29/2020 01:15	WG1534490
1,2-Dichloroethane	U		0.000800	0.00308	1	08/29/2020 01:15	WG1534490
1,1-Dichloroethene	U	~~J3~~	0.000747	0.00308	1	08/29/2020 01:15	WG1534490
cis-1,2-Dichloroethene	U		0.000904	0.00308	1	08/29/2020 01:15	WG1534490
trans-1,2-Dichloroethene	U	~~J3~~	0.00128	0.00616	1	08/29/2020 01:15	WG1534490
1,2-Dichloropropane	U		0.00175	0.00616	1	08/29/2020 01:15	WG1534490
1,1-Dichloropropene	U		0.000997	0.00308	1	08/29/2020 01:15	WG1534490
1,3-Dichloropropane	U		0.000617	0.00616	1	08/29/2020 01:15	WG1534490
cis-1,3-Dichloropropene	U		0.000933	0.00308	1	08/29/2020 01:15	WG1534490
trans-1,3-Dichloropropene	U		0.00140	0.00616	1	08/29/2020 01:15	WG1534490
trans-1,4-Dichloro-2-butene	U		0.00229	0.00616	1	08/29/2020 01:15	WG1534490
2,2-Dichloropropane	U		0.00170	0.00308	1	08/29/2020 01:15	WG1534490
Di-isopropyl ether	U		0.000505	0.00123	1	08/29/2020 01:15	WG1534490
Ethylbenzene	U		0.000908	0.00308	1	08/29/2020 01:15	WG1534490
Hexachloro-1,3-butadiene	U	~~J3~~	0.00739	0.0308	1	08/29/2020 01:15	WG1534490
2-Hexanone	U		0.00414	0.0308	1	08/29/2020 01:15	WG1534490
n-Hexane	U		0.00278	0.00616	1	08/29/2020 01:15	WG1534490
Iodomethane	U	~~J3~~	0.00286	0.0154	1	08/29/2020 01:15	WG1534490
Isopropylbenzene	U	~~J3~~	0.000524	0.00308	1	08/29/2020 01:15	WG1534490
p-Isopropyltoluene	U	~~J3~~	0.00314	0.00616	1	08/29/2020 01:15	WG1534490
2-Butanone (MEK)	U		0.0782	0.123	1	08/29/2020 01:15	WG1534490
Methylene Chloride	U	~~J3~~	0.00818	0.0308	1	08/29/2020 01:15	WG1534490
4-Methyl-2-pentanone (MIBK)	U		0.00281	0.0308	1	08/29/2020 01:15	WG1534490

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Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.000431	0.00123	1	08/29/2020 01:15	WG1534490
Naphthalene	U	UJ J0	0.00601	0.0154	1	08/29/2020 01:15	WG1534490
n-Propylbenzene	U	~~J3~~	0.00117	0.00616	1	08/29/2020 01:15	WG1534490
Styrene	U	~~J3~~	0.000282	0.0154	1	08/29/2020 01:15	WG1534490
1,1,1,2-Tetrachloroethane	U		0.00117	0.00308	1	08/29/2020 01:15	WG1534490
1,1,2,2-Tetrachloroethane	U		0.000856	0.00308	1	08/29/2020 01:15	WG1534490
1,1,2-Trichlorotrifluoroethane	U		0.000929	0.00308	1	08/29/2020 01:15	WG1534490
Tetrachloroethene	0.00839		0.00110	0.00308	1	08/29/2020 01:15	WG1534490
Toluene	U		0.00160	0.00616	1	08/29/2020 01:15	WG1534490
1,2,3-Trichlorobenzene	U	UJ J0	0.00903	0.0154	1	08/29/2020 01:15	WG1534490
1,2,4-Trichlorobenzene	U		0.00542	0.0154	1	08/29/2020 01:15	WG1534490
1,1,1-Trichloroethane	U	~~J3~~	0.00114	0.00308	1	08/29/2020 01:15	WG1534490
1,1,2-Trichloroethane	U		0.000735	0.00308	1	08/29/2020 01:15	WG1534490
Trichloroethene	U		0.000719	0.00123	1	08/29/2020 01:15	WG1534490
Trichlorofluoromethane	U	~~J3~~	0.00102	0.00308	1	08/29/2020 01:15	WG1534490
1,2,3-Trichloropropane	U		0.00200	0.0154	1	08/29/2020 01:15	WG1534490
1,2,4-Trimethylbenzene	U	~~J3~~	0.00195	0.00616	1	08/29/2020 01:15	WG1534490
1,2,3-Trimethylbenzene	U		0.00195	0.00616	1	08/29/2020 01:15	WG1534490
1,3,5-Trimethylbenzene	U	~~J3~~	0.00246	0.00616	1	08/29/2020 01:15	WG1534490
Vinyl acetate	U		0.00313	0.0154	1	08/29/2020 01:15	WG1534490
Vinyl chloride	U		0.00143	0.00308	1	08/29/2020 01:15	WG1534490
Xylenes, Total	U	~~J3~~	0.00108	0.00801	1	08/29/2020 01:15	WG1534490
(S) Toluene-d8	*92.1*			*75.0-131*		*08/29/2020 01:15*	WG1534490
(S) 4-Bromofluorobenzene	*97.0*			*67.0-138*		*08/29/2020 01:15*	WG1534490
(S) 1,2-Dichloroethane-d4	*92.6*			*70.0-130*		*08/29/2020 01:15*	WG1534490

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Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	93.7		1	08/31/2020 14:00	WG1534426

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	U		0.0419	0.0574	1	08/29/2020 01:34	WG1534490
Acrylonitrile	U		0.00415	0.0144	1	08/29/2020 01:34	WG1534490
Benzene	0.00116		0.000536	0.00115	1	08/29/2020 01:34	WG1534490
Bromobenzene	U		0.00103	0.0144	1	08/29/2020 01:34	WG1534490
Bromodichloromethane	U		0.000833	0.00287	1	08/29/2020 01:34	WG1534490
Bromochloromethane	U		0.000648	0.00574	1	08/29/2020 01:34	WG1534490
Bromoform	U		0.00134	0.0287	1	08/29/2020 01:34	WG1534490
Bromomethane	U	~~J3~~	0.00226	0.0144	1	08/29/2020 01:34	WG1534490
n-Butylbenzene	U	~~J3~~	0.00603	0.0144	1	08/29/2020 01:34	WG1534490
sec-Butylbenzene	U	~~J3~~	0.00331	0.0144	1	08/29/2020 01:34	WG1534490
tert-Butylbenzene	U	~~J3~~	0.00224	0.00574	1	08/29/2020 01:34	WG1534490
Carbon disulfide	U	~~J3~~	0.000804	0.0144	1	08/29/2020 01:34	WG1534490
Carbon tetrachloride	U	~~J3~~	0.00103	0.00574	1	08/29/2020 01:34	WG1534490
Chlorobenzene	U		0.000241	0.00287	1	08/29/2020 01:34	WG1534490
Chlorodibromomethane	U		0.000703	0.00287	1	08/29/2020 01:34	WG1534490
Chloroethane	U	~~J3~~	0.00195	0.00574	1	08/29/2020 01:34	WG1534490
Chloroform	U	~~J3~~	0.00118	0.00287	1	08/29/2020 01:34	WG1534490
Chloromethane	U	~~J3~~	0.00500	0.0144	1	08/29/2020 01:34	WG1534490
2-Chlorotoluene	U		0.000994	0.00287	1	08/29/2020 01:34	WG1534490
4-Chlorotoluene	U		0.000517	0.00574	1	08/29/2020 01:34	WG1534490
1,2-Dibromo-3-Chloropropane	U		0.00448	0.0287	1	08/29/2020 01:34	WG1534490
1,2-Dibromoethane	U		0.000744	0.00287	1	08/29/2020 01:34	WG1534490
Dibromomethane	U		0.000862	0.00574	1	08/29/2020 01:34	WG1534490
1,2-Dichlorobenzene	U		0.000488	0.00574	1	08/29/2020 01:34	WG1534490
1,3-Dichlorobenzene	U		0.000689	0.00574	1	08/29/2020 01:34	WG1534490
1,4-Dichlorobenzene	U		0.000804	0.00574	1	08/29/2020 01:34	WG1534490
Dichlorodifluoromethane	U		0.00185	0.00287	1	08/29/2020 01:34	WG1534490
1,1-Dichloroethane	U	~~J3~~	0.000564	0.00287	1	08/29/2020 01:34	WG1534490
1,2-Dichloroethane	U		0.000746	0.00287	1	08/29/2020 01:34	WG1534490
1,1-Dichloroethene	U	~~J3~~	0.000696	0.00287	1	08/29/2020 01:34	WG1534490
cis-1,2-Dichloroethene	U		0.000843	0.00287	1	08/29/2020 01:34	WG1534490
trans-1,2-Dichloroethene	U	J3	0.00119	0.00574	1	08/29/2020 01:34	WG1534490
1,2-Dichloropropane	U		0.00163	0.00574	1	08/29/2020 01:34	WG1534490
1,1-Dichloropropene	U		0.000929	0.00287	1	08/29/2020 01:34	WG1534490
1,3-Dichloropropane	U		0.000576	0.00574	1	08/29/2020 01:34	WG1534490
cis-1,3-Dichloropropene	U		0.000870	0.00287	1	08/29/2020 01:34	WG1534490
trans-1,3-Dichloropropene	U		0.00131	0.00574	1	08/29/2020 01:34	WG1534490
trans-1,4-Dichloro-2-butene	U		0.00214	0.00574	1	08/29/2020 01:34	WG1534490
2,2-Dichloropropane	U		0.00159	0.00287	1	08/29/2020 01:34	WG1534490
Di-isopropyl ether	U		0.000471	0.00115	1	08/29/2020 01:34	WG1534490
Ethylbenzene	U		0.000847	0.00287	1	08/29/2020 01:34	WG1534490
Hexachloro-1,3-butadiene	U	~~J3~~	0.00689	0.0287	1	08/29/2020 01:34	WG1534490
2-Hexanone	U		0.00386	0.0287	1	08/29/2020 01:34	WG1534490
n-Hexane	0.00335	J	0.00260	0.00574	1	08/29/2020 01:34	WG1534490
Iodomethane	U	~~J3~~	0.00267	0.0144	1	08/29/2020 01:34	WG1534490
Isopropylbenzene	U	~~J3~~	0.000488	0.00287	1	08/29/2020 01:34	WG1534490
p-Isopropyltoluene	U	~~J3~~	0.00293	0.00574	1	08/29/2020 01:34	WG1534490
2-Butanone (MEK)	U		0.0729	0.115	1	08/29/2020 01:34	WG1534490
Methylene Chloride	U	~~J3~~	0.00763	0.0287	1	08/29/2020 01:34	WG1534490
4-Methyl-2-pentanone (MIBK)	U		0.00262	0.0287	1	08/29/2020 01:34	WG1534490

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Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg		Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U			0.000402	0.00115	1	08/29/2020 01:34	WG1534490
Naphthalene	U	UJ	J0	0.00561	0.0144	1	08/29/2020 01:34	WG1534490
n-Propylbenzene	U		~~J3~~	0.00109	0.00574	1	08/29/2020 01:34	WG1534490
Styrene	U		~~J3~~	0.000263	0.0144	1	08/29/2020 01:34	WG1534490
1,1,1,2-Tetrachloroethane	U			0.00109	0.00287	1	08/29/2020 01:34	WG1534490
1,1,2,2-Tetrachloroethane	U			0.000798	0.00287	1	08/29/2020 01:34	WG1534490
1,1,2-Trichlorotrifluoroethane	U			0.000866	0.00287	1	08/29/2020 01:34	WG1534490
Tetrachloroethene	0.0173			0.00103	0.00287	1	08/29/2020 01:34	WG1534490
Toluene	0.00304	U	~~J~~	0.00149	0.00574	1	08/29/2020 01:34	WG1534490
1,2,3-Trichlorobenzene	U	UJ	J0	0.00842	0.0144	1	08/29/2020 01:34	WG1534490
1,2,4-Trichlorobenzene	U			0.00505	0.0144	1	08/29/2020 01:34	WG1534490
1,1,1-Trichloroethane	U		~~J3~~	0.00106	0.00287	1	08/29/2020 01:34	WG1534490
1,1,2-Trichloroethane	U			0.000686	0.00287	1	08/29/2020 01:34	WG1534490
Trichloroethene	U			0.000671	0.00115	1	08/29/2020 01:34	WG1534490
Trichlorofluoromethane	U		~~J3~~	0.000950	0.00287	1	08/29/2020 01:34	WG1534490
1,2,3-Trichloropropane	U			0.00186	0.0144	1	08/29/2020 01:34	WG1534490
1,2,4-Trimethylbenzene	U		~~J3~~	0.00181	0.00574	1	08/29/2020 01:34	WG1534490
1,2,3-Trimethylbenzene	U			0.00181	0.00574	1	08/29/2020 01:34	WG1534490
1,3,5-Trimethylbenzene	U		~~J3~~	0.00230	0.00574	1	08/29/2020 01:34	WG1534490
Vinyl acetate	U			0.00292	0.0144	1	08/29/2020 01:34	WG1534490
Vinyl chloride	U			0.00133	0.00287	1	08/29/2020 01:34	WG1534490
Xylenes, Total	0.00137	U	~~J J3~~	0.00101	0.00747	1	08/29/2020 01:34	WG1534490
(S) Toluene-d8	*92.6*				*75.0-131*		*08/29/2020 01:34*	WG1534490
(S) 4-Bromofluorobenzene	*97.6*				*67.0-138*		*08/29/2020 01:34*	WG1534490
(S) 1,2-Dichloroethane-d4	*93.8*				*70.0-130*		*08/29/2020 01:34*	WG1534490

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B-297-5

Collected date/time: 08/26/20 13:10

SAMPLE RESULTS - 13

L1255238

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	93.5		1	08/31/2020 14:00	WG1534426

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	U	~~J3~~	0.0417	0.0571	1	08/29/2020 22:56	WG1534818
Acrylonitrile	U	~~J3~~	0.00413	0.0143	1	08/29/2020 22:56	WG1534818
Benzene	0.00117		0.000534	0.00114	1	08/29/2020 22:56	WG1534818
Bromobenzene	U		0.00103	0.0143	1	08/29/2020 22:56	WG1534818
Bromodichloromethane	U		0.000828	0.00286	1	08/29/2020 22:56	WG1534818
Bromochloromethane	U		0.000645	0.00571	1	08/29/2020 22:56	WG1534818
Bromoform	U		0.00134	0.0286	1	08/29/2020 22:56	WG1534818
Bromomethane	U		0.00225	0.0143	1	08/29/2020 22:56	WG1534818
n-Butylbenzene	U		0.00600	0.0143	1	08/29/2020 22:56	WG1534818
sec-Butylbenzene	U		0.00329	0.0143	1	08/29/2020 22:56	WG1534818
tert-Butylbenzene	U		0.00223	0.00571	1	08/29/2020 22:56	WG1534818
Carbon disulfide	U		0.000800	0.0143	1	08/29/2020 22:56	WG1534818
Carbon tetrachloride	U		0.00103	0.00571	1	08/29/2020 22:56	WG1534818
Chlorobenzene	U		0.000240	0.00286	1	08/29/2020 22:56	WG1534818
Chlorodibromomethane	U		0.000699	0.00286	1	08/29/2020 22:56	WG1534818
Chloroethane	U		0.00194	0.00571	1	08/29/2020 22:56	WG1534818
Chloroform	U		0.00118	0.00286	1	08/29/2020 22:56	WG1534818
Chloromethane	U		0.00497	0.0143	1	08/29/2020 22:56	WG1534818
2-Chlorotoluene	U		0.000988	0.00286	1	08/29/2020 22:56	WG1534818
4-Chlorotoluene	U		0.000514	0.00571	1	08/29/2020 22:56	WG1534818
1,2-Dibromo-3-Chloropropane	U		0.00446	0.0286	1	08/29/2020 22:56	WG1534818
1,2-Dibromoethane	U		0.000740	0.00286	1	08/29/2020 22:56	WG1534818
Dibromomethane	U		0.000857	0.00571	1	08/29/2020 22:56	WG1534818
1,2-Dichlorobenzene	U		0.000486	0.00571	1	08/29/2020 22:56	WG1534818
1,3-Dichlorobenzene	U		0.000686	0.00571	1	08/29/2020 22:56	WG1534818
1,4-Dichlorobenzene	U		0.000800	0.00571	1	08/29/2020 22:56	WG1534818
Dichlorodifluoromethane	U		0.00184	0.00286	1	08/29/2020 22:56	WG1534818
1,1-Dichloroethane	U		0.000561	0.00286	1	08/29/2020 22:56	WG1534818
1,2-Dichloroethane	U		0.000742	0.00286	1	08/29/2020 22:56	WG1534818
1,1-Dichloroethene	U		0.000692	0.00286	1	08/29/2020 22:56	WG1534818
cis-1,2-Dichloroethene	U		0.000839	0.00286	1	08/29/2020 22:56	WG1534818
trans-1,2-Dichloroethene	U		0.00119	0.00571	1	08/29/2020 22:56	WG1534818
1,2-Dichloropropane	U		0.00162	0.00571	1	08/29/2020 22:56	WG1534818
1,1-Dichloropropene	U		0.000924	0.00286	1	08/29/2020 22:56	WG1534818
1,3-Dichloropropane	U		0.000573	0.00571	1	08/29/2020 22:56	WG1534818
cis-1,3-Dichloropropene	U		0.000865	0.00286	1	08/29/2020 22:56	WG1534818
trans-1,3-Dichloropropene	U		0.00130	0.00571	1	08/29/2020 22:56	WG1534818
trans-1,4-Dichloro-2-butene	U		0.00213	0.00571	1	08/29/2020 22:56	WG1534818
2,2-Dichloropropane	U		0.00158	0.00286	1	08/29/2020 22:56	WG1534818
Di-isopropyl ether	U		0.000469	0.00114	1	08/29/2020 22:56	WG1534818
Ethylbenzene	U		0.000842	0.00286	1	08/29/2020 22:56	WG1534818
Hexachloro-1,3-butadiene	U		0.00686	0.0286	1	08/29/2020 22:56	WG1534818
2-Hexanone	U		0.00384	0.0286	1	08/29/2020 22:56	WG1534818
n-Hexane	0.00429	J	0.00258	0.00571	1	08/29/2020 22:56	WG1534818
Iodomethane	U		0.00265	0.0143	1	08/29/2020 22:56	WG1534818
Isopropylbenzene	U		0.000486	0.00286	1	08/29/2020 22:56	WG1534818
p-Isopropyltoluene	U		0.00291	0.00571	1	08/29/2020 22:56	WG1534818
2-Butanone (MEK)	U		0.0726	0.114	1	08/29/2020 22:56	WG1534818
Methylene Chloride	U		0.00759	0.0286	1	08/29/2020 22:56	WG1534818
4-Methyl-2-pentanone (MIBK)	U		0.00261	0.0286	1	08/29/2020 22:56	WG1534818

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Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.000400	0.00114	1	08/29/2020 22:56	WG1534818
Naphthalene	0.00999	U ~~B J~~	0.00558	0.0143	1	08/29/2020 22:56	WG1534818
n-Propylbenzene	U		0.00109	0.00571	1	08/29/2020 22:56	WG1534818
Styrene	U		0.000262	0.0143	1	08/29/2020 22:56	WG1534818
1,1,1,2-Tetrachloroethane	U	UJ J0	0.00108	0.00286	1	08/29/2020 22:56	WG1534818
1,1,2,2-Tetrachloroethane	U		0.000794	0.00286	1	08/29/2020 22:56	WG1534818
1,1,2-Trichlorotrifluoroethane	U		0.000862	0.00286	1	08/29/2020 22:56	WG1534818
Tetrachloroethene	0.0181		0.00102	0.00286	1	08/29/2020 22:56	WG1534818
Toluene	0.00320	U ~~J~~	0.00149	0.00571	1	08/29/2020 22:56	WG1534818
1,2,3-Trichlorobenzene	U	UJ J0	0.00838	0.0143	1	08/29/2020 22:56	WG1534818
1,2,4-Trichlorobenzene	U	UJ J0	0.00503	0.0143	1	08/29/2020 22:56	WG1534818
1,1,1-Trichloroethane	U		0.00105	0.00286	1	08/29/2020 22:56	WG1534818
1,1,2-Trichloroethane	U		0.000682	0.00286	1	08/29/2020 22:56	WG1534818
Trichloroethene	U		0.000667	0.00114	1	08/29/2020 22:56	WG1534818
Trichlorofluoromethane	U		0.000945	0.00286	1	08/29/2020 22:56	WG1534818
1,2,3-Trichloropropane	U		0.00185	0.0143	1	08/29/2020 22:56	WG1534818
1,2,4-Trimethylbenzene	U		0.00181	0.00571	1	08/29/2020 22:56	WG1534818
1,2,3-Trimethylbenzene	U		0.00181	0.00571	1	08/29/2020 22:56	WG1534818
1,3,5-Trimethylbenzene	U		0.00229	0.00571	1	08/29/2020 22:56	WG1534818
Vinyl acetate	U		0.00290	0.0143	1	08/29/2020 22:56	WG1534818
Vinyl chloride	U		0.00133	0.00286	1	08/29/2020 22:56	WG1534818
Xylenes, Total	0.00179	U ~~J~~	0.00101	0.00743	1	08/29/2020 22:56	WG1534818
(S) Toluene-d8	*92.0*			*75.0-131*		*08/29/2020 22:56*	WG1534818
(S) 4-Bromofluorobenzene	*95.8*			*67.0-138*		*08/29/2020 22:56*	WG1534818
(S) 1,2-Dichloroethane-d4	*94.6*			*70.0-130*		*08/29/2020 22:56*	WG1534818

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Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	97.8		1	08/31/2020 14:00	WG1534426

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	U	~~J3~~	0.0386	0.0528	1.01	08/29/2020 23:15	WG1534818
Acrylonitrile	U	~~J3~~	0.00381	0.0132	1.01	08/29/2020 23:15	WG1534818
Benzene	U		0.000493	0.00106	1.01	08/29/2020 23:15	WG1534818
Bromobenzene	U		0.000950	0.0132	1.01	08/29/2020 23:15	WG1534818
Bromodichloromethane	U		0.000765	0.00264	1.01	08/29/2020 23:15	WG1534818
Bromochloromethane	U		0.000596	0.00528	1.01	08/29/2020 23:15	WG1534818
Bromoform	U		0.00123	0.0264	1.01	08/29/2020 23:15	WG1534818
Bromomethane	U		0.00208	0.0132	1.01	08/29/2020 23:15	WG1534818
n-Butylbenzene	U		0.00554	0.0132	1.01	08/29/2020 23:15	WG1534818
sec-Butylbenzene	U		0.00304	0.0132	1.01	08/29/2020 23:15	WG1534818
tert-Butylbenzene	U		0.00206	0.00528	1.01	08/29/2020 23:15	WG1534818
Carbon disulfide	U		0.000739	0.0132	1.01	08/29/2020 23:15	WG1534818
Carbon tetrachloride	U		0.000948	0.00528	1.01	08/29/2020 23:15	WG1534818
Chlorobenzene	U		0.000222	0.00264	1.01	08/29/2020 23:15	WG1534818
Chlorodibromomethane	U		0.000646	0.00264	1.01	08/29/2020 23:15	WG1534818
Chloroethane	U		0.00180	0.00528	1.01	08/29/2020 23:15	WG1534818
Chloroform	U		0.00109	0.00264	1.01	08/29/2020 23:15	WG1534818
Chloromethane	U		0.00459	0.0132	1.01	08/29/2020 23:15	WG1534818
2-Chlorotoluene	U		0.000913	0.00264	1.01	08/29/2020 23:15	WG1534818
4-Chlorotoluene	U		0.000475	0.00528	1.01	08/29/2020 23:15	WG1534818
1,2-Dibromo-3-Chloropropane	U		0.00412	0.0264	1.01	08/29/2020 23:15	WG1534818
1,2-Dibromoethane	U		0.000683	0.00264	1.01	08/29/2020 23:15	WG1534818
Dibromomethane	U		0.000791	0.00528	1.01	08/29/2020 23:15	WG1534818
1,2-Dichlorobenzene	U		0.000448	0.00528	1.01	08/29/2020 23:15	WG1534818
1,3-Dichlorobenzene	U		0.000633	0.00528	1.01	08/29/2020 23:15	WG1534818
1,4-Dichlorobenzene	U		0.000739	0.00528	1.01	08/29/2020 23:15	WG1534818
Dichlorodifluoromethane	U		0.00170	0.00264	1.01	08/29/2020 23:15	WG1534818
1,1-Dichloroethane	U		0.000518	0.00264	1.01	08/29/2020 23:15	WG1534818
1,2-Dichloroethane	U		0.000684	0.00264	1.01	08/29/2020 23:15	WG1534818
1,1-Dichloroethene	U		0.000639	0.00264	1.01	08/29/2020 23:15	WG1534818
cis-1,2-Dichloroethene	U		0.000774	0.00264	1.01	08/29/2020 23:15	WG1534818
trans-1,2-Dichloroethene	U		0.00110	0.00528	1.01	08/29/2020 23:15	WG1534818
1,2-Dichloropropane	U		0.00149	0.00528	1.01	08/29/2020 23:15	WG1534818
1,1-Dichloropropene	U		0.000854	0.00264	1.01	08/29/2020 23:15	WG1534818
1,3-Dichloropropane	U		0.000529	0.00528	1.01	08/29/2020 23:15	WG1534818
cis-1,3-Dichloropropene	U		0.000799	0.00264	1.01	08/29/2020 23:15	WG1534818
trans-1,3-Dichloropropene	U		0.00120	0.00528	1.01	08/29/2020 23:15	WG1534818
trans-1,4-Dichloro-2-butene	U		0.00196	0.00528	1.01	08/29/2020 23:15	WG1534818
2,2-Dichloropropane	U		0.00145	0.00264	1.01	08/29/2020 23:15	WG1534818
Di-isopropyl ether	U		0.000433	0.00106	1.01	08/29/2020 23:15	WG1534818
Ethylbenzene	U		0.000777	0.00264	1.01	08/29/2020 23:15	WG1534818
Hexachloro-1,3-butadiene	U		0.00633	0.0264	1.01	08/29/2020 23:15	WG1534818
2-Hexanone	U		0.00354	0.0264	1.01	08/29/2020 23:15	WG1534818
n-Hexane	U		0.00238	0.00528	1.01	08/29/2020 23:15	WG1534818
Iodomethane	U		0.00244	0.0132	1.01	08/29/2020 23:15	WG1534818
Isopropylbenzene	U		0.000448	0.00264	1.01	08/29/2020 23:15	WG1534818
p-Isopropyltoluene	U		0.00270	0.00528	1.01	08/29/2020 23:15	WG1534818
2-Butanone (MEK)	U		0.0670	0.106	1.01	08/29/2020 23:15	WG1534818
Methylene Chloride	U		0.00701	0.0264	1.01	08/29/2020 23:15	WG1534818
4-Methyl-2-pentanone (MIBK)	U		0.00240	0.0264	1.01	08/29/2020 23:15	WG1534818

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Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg		Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U			0.000369	0.00106	1.01	08/29/2020 23:15	WG1534818
Naphthalene	0.0322	U	~~B~~	0.00515	0.0132	1.01	08/29/2020 23:15	WG1534818
n-Propylbenzene	U			0.00100	0.00528	1.01	08/29/2020 23:15	WG1534818
Styrene	U			0.000241	0.0132	1.01	08/29/2020 23:15	WG1534818
1,1,1,2-Tetrachloroethane	U	UJ	J0	0.00100	0.00264	1.01	08/29/2020 23:15	WG1534818
1,1,2,2-Tetrachloroethane	U			0.000733	0.00264	1.01	08/29/2020 23:15	WG1534818
1,1,2-Trichlorotrifluoroethane	U			0.000796	0.00264	1.01	08/29/2020 23:15	WG1534818
Tetrachloroethene	U			0.000946	0.00264	1.01	08/29/2020 23:15	WG1534818
Toluene	0.00208	U	~~J~~	0.00137	0.00528	1.01	08/29/2020 23:15	WG1534818
1,2,3-Trichlorobenzene	U		J0	0.00773	0.0132	1.01	08/29/2020 23:15	WG1534818
1,2,4-Trichlorobenzene	U		J0	0.00464	0.0132	1.01	08/29/2020 23:15	WG1534818
1,1,1-Trichloroethane	U			0.000974	0.00264	1.01	08/29/2020 23:15	WG1534818
1,1,2-Trichloroethane	U			0.000630	0.00264	1.01	08/29/2020 23:15	WG1534818
Trichloroethene	U			0.000616	0.00106	1.01	08/29/2020 23:15	WG1534818
Trichlorofluoromethane	U			0.000872	0.00264	1.01	08/29/2020 23:15	WG1534818
1,2,3-Trichloropropane	U			0.00171	0.0132	1.01	08/29/2020 23:15	WG1534818
1,2,4-Trimethylbenzene	U			0.00167	0.00528	1.01	08/29/2020 23:15	WG1534818
1,2,3-Trimethylbenzene	U			0.00167	0.00528	1.01	08/29/2020 23:15	WG1534818
1,3,5-Trimethylbenzene	U			0.00211	0.00528	1.01	08/29/2020 23:15	WG1534818
Vinyl acetate	U			0.00269	0.0132	1.01	08/29/2020 23:15	WG1534818
Vinyl chloride	U			0.00122	0.00264	1.01	08/29/2020 23:15	WG1534818
Xylenes, Total	0.00343	U	~~J~~	0.000929	0.00685	1.01	08/29/2020 23:15	WG1534818
(S) Toluene-d8	*91.9*				*75.0-131*		*08/29/2020 23:15*	WG1534818
(S) 4-Bromofluorobenzene	*98.1*				*67.0-138*		*08/29/2020 23:15*	WG1534818
(S) 1,2-Dichloroethane-d4	*97.8*				*70.0-130*		*08/29/2020 23:15*	WG1534818

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Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	96.1		1	08/31/2020 14:00	WG1534426

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	0.0541	J ~~J3~~	0.0464	0.0635	1.18	08/29/2020 23:34	WG1534818
Acrylonitrile	U	~~J3~~	0.00458	0.0158	1.18	08/29/2020 23:34	WG1534818
Benzene	0.00403		0.000593	0.00127	1.18	08/29/2020 23:34	WG1534818
Bromobenzene	U		0.00114	0.0158	1.18	08/29/2020 23:34	WG1534818
Bromodichloromethane	U		0.000921	0.00317	1.18	08/29/2020 23:34	WG1534818
Bromochloromethane	U		0.000716	0.00635	1.18	08/29/2020 23:34	WG1534818
Bromoform	U		0.00148	0.0317	1.18	08/29/2020 23:34	WG1534818
Bromomethane	U		0.00250	0.0158	1.18	08/29/2020 23:34	WG1534818
n-Butylbenzene	U		0.00666	0.0158	1.18	08/29/2020 23:34	WG1534818
sec-Butylbenzene	U		0.00366	0.0158	1.18	08/29/2020 23:34	WG1534818
tert-Butylbenzene	U		0.00247	0.00635	1.18	08/29/2020 23:34	WG1534818
Carbon disulfide	U		0.000888	0.0158	1.18	08/29/2020 23:34	WG1534818
Carbon tetrachloride	U		0.00114	0.00635	1.18	08/29/2020 23:34	WG1534818
Chlorobenzene	U		0.000267	0.00317	1.18	08/29/2020 23:34	WG1534818
Chlorodibromomethane	U		0.000776	0.00317	1.18	08/29/2020 23:34	WG1534818
Chloroethane	U		0.00216	0.00635	1.18	08/29/2020 23:34	WG1534818
Chloroform	U		0.00131	0.00317	1.18	08/29/2020 23:34	WG1534818
Chloromethane	U		0.00552	0.0158	1.18	08/29/2020 23:34	WG1534818
2-Chlorotoluene	U		0.00110	0.00317	1.18	08/29/2020 23:34	WG1534818
4-Chlorotoluene	U		0.000571	0.00635	1.18	08/29/2020 23:34	WG1534818
1,2-Dibromo-3-Chloropropane	U		0.00495	0.0317	1.18	08/29/2020 23:34	WG1534818
1,2-Dibromoethane	U		0.000823	0.00317	1.18	08/29/2020 23:34	WG1534818
Dibromomethane	U		0.000952	0.00635	1.18	08/29/2020 23:34	WG1534818
1,2-Dichlorobenzene	U		0.000540	0.00635	1.18	08/29/2020 23:34	WG1534818
1,3-Dichlorobenzene	U		0.000761	0.00635	1.18	08/29/2020 23:34	WG1534818
1,4-Dichlorobenzene	U		0.000888	0.00635	1.18	08/29/2020 23:34	WG1534818
Dichlorodifluoromethane	U		0.00204	0.00317	1.18	08/29/2020 23:34	WG1534818
1,1-Dichloroethane	U		0.000623	0.00317	1.18	08/29/2020 23:34	WG1534818
1,2-Dichloroethane	U		0.000824	0.00317	1.18	08/29/2020 23:34	WG1534818
1,1-Dichloroethene	U		0.000769	0.00317	1.18	08/29/2020 23:34	WG1534818
cis-1,2-Dichloroethene	U		0.000931	0.00317	1.18	08/29/2020 23:34	WG1534818
trans-1,2-Dichloroethene	U		0.00132	0.00635	1.18	08/29/2020 23:34	WG1534818
1,2-Dichloropropane	U		0.00181	0.00635	1.18	08/29/2020 23:34	WG1534818
1,1-Dichloropropene	U		0.00103	0.00317	1.18	08/29/2020 23:34	WG1534818
1,3-Dichloropropane	U		0.000636	0.00635	1.18	08/29/2020 23:34	WG1534818
cis-1,3-Dichloropropene	U		0.000960	0.00317	1.18	08/29/2020 23:34	WG1534818
trans-1,3-Dichloropropene	U		0.00145	0.00635	1.18	08/29/2020 23:34	WG1534818
trans-1,4-Dichloro-2-butene	U		0.00236	0.00635	1.18	08/29/2020 23:34	WG1534818
2,2-Dichloropropane	U		0.00175	0.00317	1.18	08/29/2020 23:34	WG1534818
Di-isopropyl ether	U		0.000521	0.00127	1.18	08/29/2020 23:34	WG1534818
Ethylbenzene	0.00898		0.000936	0.00317	1.18	08/29/2020 23:34	WG1534818
Hexachloro-1,3-butadiene	U		0.00761	0.0317	1.18	08/29/2020 23:34	WG1534818
2-Hexanone	U		0.00426	0.0317	1.18	08/29/2020 23:34	WG1534818
n-Hexane	0.0115		0.00287	0.00635	1.18	08/29/2020 23:34	WG1534818
Iodomethane	U		0.00295	0.0158	1.18	08/29/2020 23:34	WG1534818
Isopropylbenzene	U		0.000540	0.00317	1.18	08/29/2020 23:34	WG1534818
p-Isopropyltoluene	U		0.00324	0.00635	1.18	08/29/2020 23:34	WG1534818
2-Butanone (MEK)	U		0.0806	0.127	1.18	08/29/2020 23:34	WG1534818
Methylene Chloride	U		0.00843	0.0317	1.18	08/29/2020 23:34	WG1534818
4-Methyl-2-pentanone (MIBK)	U		0.00289	0.0317	1.18	08/29/2020 23:34	WG1534818

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Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	0.000635	J	0.000444	0.00127	1.18	08/29/2020 23:34	WG1534818
Naphthalene	0.0404	~~B~~	0.00619	0.0158	1.18	08/29/2020 23:34	WG1534818
n-Propylbenzene	0.00156	J	0.00120	0.00635	1.18	08/29/2020 23:34	WG1534818
Styrene	0.00120	J	0.000290	0.0158	1.18	08/29/2020 23:34	WG1534818
1,1,1,2-Tetrachloroethane	U UJ	J0	0.00120	0.00317	1.18	08/29/2020 23:34	WG1534818
1,1,2,2-Tetrachloroethane	U		0.000882	0.00317	1.18	08/29/2020 23:34	WG1534818
1,1,2-Trichlorotrifluoroethane	U		0.000957	0.00317	1.18	08/29/2020 23:34	WG1534818
Tetrachloroethene	0.00352		0.00114	0.00317	1.18	08/29/2020 23:34	WG1534818
Toluene	0.0757		0.00165	0.00635	1.18	08/29/2020 23:34	WG1534818
1,2,3-Trichlorobenzene	U UJ	J0	0.00930	0.0158	1.18	08/29/2020 23:34	WG1534818
1,2,4-Trichlorobenzene	U UJ	J0	0.00558	0.0158	1.18	08/29/2020 23:34	WG1534818
1,1,1-Trichloroethane	U		0.00117	0.00317	1.18	08/29/2020 23:34	WG1534818
1,1,2-Trichloroethane	U		0.000757	0.00317	1.18	08/29/2020 23:34	WG1534818
Trichloroethene	U		0.000741	0.00127	1.18	08/29/2020 23:34	WG1534818
Trichlorofluoromethane	U		0.00105	0.00317	1.18	08/29/2020 23:34	WG1534818
1,2,3-Trichloropropane	U		0.00205	0.0158	1.18	08/29/2020 23:34	WG1534818
1,2,4-Trimethylbenzene	0.00835		0.00200	0.00635	1.18	08/29/2020 23:34	WG1534818
1,2,3-Trimethylbenzene	0.00280	J	0.00200	0.00635	1.18	08/29/2020 23:34	WG1534818
1,3,5-Trimethylbenzene	0.00254	J	0.00254	0.00635	1.18	08/29/2020 23:34	WG1534818
Vinyl acetate	U		0.00323	0.0158	1.18	08/29/2020 23:34	WG1534818
Vinyl chloride	U		0.00147	0.00317	1.18	08/29/2020 23:34	WG1534818
Xylenes, Total	0.0430		0.00112	0.00825	1.18	08/29/2020 23:34	WG1534818
(S) Toluene-d8	*93.8*			*75.0-131*		*08/29/2020 23:34*	WG1534818
(S) 4-Bromofluorobenzene	*96.4*			*67.0-138*		*08/29/2020 23:34*	WG1534818
(S) 1,2-Dichloroethane-d4	*92.5*			*70.0-130*		*08/29/2020 23:34*	WG1534818

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Total Solids by Method 2540 G-2011

	Result	Qualifier	Dilution	Analysis	Batch
Analyte	%			date / time	
Total Solids	92.9		1	08/31/2020 14:00	WG1534426

Volatile Organic Compounds (GC/MS) by Method 8260D

	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg		date / time	
Acetone	U	~~J3~~	0.0428	0.0586	1	08/29/2020 23:53	WG1534818
Acrylonitrile	U	~~J3~~	0.00423	0.0146	1	08/29/2020 23:53	WG1534818
Benzene	U		0.000547	0.00117	1	08/29/2020 23:53	WG1534818
Bromobenzene	U		0.00105	0.0146	1	08/29/2020 23:53	WG1534818
Bromodichloromethane	U		0.000850	0.00293	1	08/29/2020 23:53	WG1534818
Bromochloromethane	U		0.000661	0.00586	1	08/29/2020 23:53	WG1534818
Bromoform	U		0.00137	0.0293	1	08/29/2020 23:53	WG1534818
Bromomethane	U		0.00231	0.0146	1	08/29/2020 23:53	WG1534818
n-Butylbenzene	U		0.00615	0.0146	1	08/29/2020 23:53	WG1534818
sec-Butylbenzene	U		0.00338	0.0146	1	08/29/2020 23:53	WG1534818
tert-Butylbenzene	U		0.00229	0.00586	1	08/29/2020 23:53	WG1534818
Carbon disulfide	U		0.000820	0.0146	1	08/29/2020 23:53	WG1534818
Carbon tetrachloride	U		0.00105	0.00586	1	08/29/2020 23:53	WG1534818
Chlorobenzene	U		0.000246	0.00293	1	08/29/2020 23:53	WG1534818
Chlorodibromomethane	U		0.000717	0.00293	1	08/29/2020 23:53	WG1534818
Chloroethane	U		0.00199	0.00586	1	08/29/2020 23:53	WG1534818
Chloroform	U		0.00121	0.00293	1	08/29/2020 23:53	WG1534818
Chloromethane	U		0.00510	0.0146	1	08/29/2020 23:53	WG1534818
2-Chlorotoluene	U		0.00101	0.00293	1	08/29/2020 23:53	WG1534818
4-Chlorotoluene	U		0.000527	0.00586	1	08/29/2020 23:53	WG1534818
1,2-Dibromo-3-Chloropropane	U		0.00457	0.0293	1	08/29/2020 23:53	WG1534818
1,2-Dibromoethane	U		0.000759	0.00293	1	08/29/2020 23:53	WG1534818
Dibromomethane	U		0.000879	0.00586	1	08/29/2020 23:53	WG1534818
1,2-Dichlorobenzene	U		0.000498	0.00586	1	08/29/2020 23:53	WG1534818
1,3-Dichlorobenzene	U		0.000703	0.00586	1	08/29/2020 23:53	WG1534818
1,4-Dichlorobenzene	U		0.000820	0.00586	1	08/29/2020 23:53	WG1534818
Dichlorodifluoromethane	U		0.00189	0.00293	1	08/29/2020 23:53	WG1534818
1,1-Dichloroethane	U		0.000575	0.00293	1	08/29/2020 23:53	WG1534818
1,2-Dichloroethane	U		0.000761	0.00293	1	08/29/2020 23:53	WG1534818
1,1-Dichloroethene	U		0.000710	0.00293	1	08/29/2020 23:53	WG1534818
cis-1,2-Dichloroethene	U		0.000860	0.00293	1	08/29/2020 23:53	WG1534818
trans-1,2-Dichloroethene	U		0.00122	0.00586	1	08/29/2020 23:53	WG1534818
1,2-Dichloropropane	U		0.00166	0.00586	1	08/29/2020 23:53	WG1534818
1,1-Dichloropropene	U		0.000948	0.00293	1	08/29/2020 23:53	WG1534818
1,3-Dichloropropane	U		0.000587	0.00586	1	08/29/2020 23:53	WG1534818
cis-1,3-Dichloropropene	U		0.000887	0.00293	1	08/29/2020 23:53	WG1534818
trans-1,3-Dichloropropene	U		0.00134	0.00586	1	08/29/2020 23:53	WG1534818
trans-1,4-Dichloro-2-butene	U		0.00218	0.00586	1	08/29/2020 23:53	WG1534818
2,2-Dichloropropane	U		0.00162	0.00293	1	08/29/2020 23:53	WG1534818
Di-isopropyl ether	U		0.000480	0.00117	1	08/29/2020 23:53	WG1534818
Ethylbenzene	U		0.000864	0.00293	1	08/29/2020 23:53	WG1534818
Hexachloro-1,3-butadiene	U		0.00703	0.0293	1	08/29/2020 23:53	WG1534818
2-Hexanone	U		0.00394	0.0293	1	08/29/2020 23:53	WG1534818
n-Hexane	U		0.00265	0.00586	1	08/29/2020 23:53	WG1534818
Iodomethane	U		0.00272	0.0146	1	08/29/2020 23:53	WG1534818
Isopropylbenzene	U		0.000498	0.00293	1	08/29/2020 23:53	WG1534818
p-Isopropyltoluene	U		0.00299	0.00586	1	08/29/2020 23:53	WG1534818
2-Butanone (MEK)	U		0.0744	0.117	1	08/29/2020 23:53	WG1534818
Methylene Chloride	U		0.00778	0.0293	1	08/29/2020 23:53	WG1534818
4-Methyl-2-pentanone (MIBK)	U		0.00267	0.0293	1	08/29/2020 23:53	WG1534818

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B-500-1

Collected date/time: 08/26/20 14:15

SAMPLE RESULTS - 16

L1255238

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.000410	0.00117	1	08/29/2020 23:53	WG1534818
Naphthalene	0.0268	U ~~B~~	0.00572	0.0146	1	08/29/2020 23:53	WG1534818
n-Propylbenzene	U		0.00111	0.00586	1	08/29/2020 23:53	WG1534818
Styrene	U		0.000268	0.0146	1	08/29/2020 23:53	WG1534818
1,1,1,2-Tetrachloroethane	U	UJ J0	0.00111	0.00293	1	08/29/2020 23:53	WG1534818
1,1,2,2-Tetrachloroethane	U		0.000814	0.00293	1	08/29/2020 23:53	WG1534818
1,1,2-Trichlorotrifluoroethane	U		0.000884	0.00293	1	08/29/2020 23:53	WG1534818
Tetrachloroethene	0.0162		0.00105	0.00293	1	08/29/2020 23:53	WG1534818
Toluene	U		0.00152	0.00586	1	08/29/2020 23:53	WG1534818
1,2,3-Trichlorobenzene	U	UJ J0	0.00859	0.0146	1	08/29/2020 23:53	WG1534818
1,2,4-Trichlorobenzene	U	UJ J0	0.00516	0.0146	1	08/29/2020 23:53	WG1534818
1,1,1-Trichloroethane	U		0.00108	0.00293	1	08/29/2020 23:53	WG1534818
1,1,2-Trichloroethane	U		0.000700	0.00293	1	08/29/2020 23:53	WG1534818
Trichloroethene	U		0.000684	0.00117	1	08/29/2020 23:53	WG1534818
Trichlorofluoromethane	U		0.000969	0.00293	1	08/29/2020 23:53	WG1534818
1,2,3-Trichloropropane	U		0.00190	0.0146	1	08/29/2020 23:53	WG1534818
1,2,4-Trimethylbenzene	U		0.00185	0.00586	1	08/29/2020 23:53	WG1534818
1,2,3-Trimethylbenzene	U		0.00185	0.00586	1	08/29/2020 23:53	WG1534818
1,3,5-Trimethylbenzene	U		0.00234	0.00586	1	08/29/2020 23:53	WG1534818
Vinyl acetate	U		0.00298	0.0146	1	08/29/2020 23:53	WG1534818
Vinyl chloride	U		0.00136	0.00293	1	08/29/2020 23:53	WG1534818
Xylenes, Total	0.00214	U ~~J~~	0.00103	0.00762	1	08/29/2020 23:53	WG1534818
(S) Toluene-d8	*92.8*			*75.0-131*		*08/29/2020 23:53*	WG1534818
(S) 4-Bromofluorobenzene	*97.3*			*67.0-138*		*08/29/2020 23:53*	WG1534818
(S) 1,2-Dichloroethane-d4	*94.5*			*70.0-130*		*08/29/2020 23:53*	WG1534818

JC 9/17/2020

MEMORANDUM

TO: Project File **DATE:** October 29, 2020

FROM: Jessie Compeau

SUBJECT: Laboratory Data Validation Review

PROJECT: American Linen Data Validation

PROJECT #: 1413.001.05.601

TASK: EIM Data Validation Level EPA2A for PRB Wells – Groundwater Samples

LAB: Pace Sample Delivery Groups (SDGs): L1261818, L1262257, L1262881, L1263397, L1263961, and L1265092

Thirty (30) groundwater samples including two field duplicates, two equipment blanks, and two trip blanks were collected from the "PRB" wells ("dual completion" injection wells around the perimeter of the property) at the Former American Linen Supply Site, in Seattle, Washington in September 2020. The samples were shipped and delivered to Pace Lab Sciences (Pace) of Mount Juliet, TN for laboratory analysis. Selected samples were analyzed for the following:

- Volatile organic compounds (VOCs) by United States Environmental Protection Agency (USEPA) Method 8260D;
- Total petroleum hydrocarbons as gasoline (TPH-Gx) by NWTPH-Gx per analytical method stipulated by Washington State Department of Ecology;
- VOCs (dissolved gases – methane, ethane, and ethene) by EPA SOP RSK 175;
- Alkalinity by Method 2320 B-2011;
- Anions (chloride, nitrate, and sulfate) by USEPA Method 9056A;
- Total Organic Carbon (TOC) by USEPA Method 9060A; and
- Metals (iron and manganese) by USEPA Method 6020B.

Results are reported in multiple SDGs from Pace. Analytical results are reported in six SDGs L1261818, L1262257, L1262881, L1263397, L1263961, and L1265092. The quality assurance review of the laboratory data is summarized below.

DATA QUALIFICATIONS

Guidelines established by USEPA for a limited data validation review of analytical data along with Pace control limit criteria were used to validate the data. The comments presented in this memorandum refer to the laboratory's performance in meeting the quality control criteria outlined in the USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (USEPA, 2017) and USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Superfund Methods Data Review (USEPA, 2017). Following Guidelines, non-project-specific laboratory duplicates and matrix spike results were not evaluated as part of this data validation.

DATA VALIDATION

Completeness

All samples were collected and analyzed as requested with the following comment:

- ALL SDGs: Per PES's request SDGs were revised and resubmitted for review on October 23, 2020 to re-confirm presence of gasoline range organic detections. For additional information refer to the section on Compound Identification and Quantitation Limits.

Sample Collection and Preservation

Samples were collected in laboratory-supplied sample containers preserved as appropriate for the individual analyses conducted. The samples were packed on ice in coolers and delivered by courier to the analytical laboratory. The laboratory reported that the coolers were received at a cooler temperature less than the recommended temperature preservation of 6°C. Samples were received in good condition. No data were qualified based upon the sample collection and preservation information.

Holding Times

USEPA Method 8260D:
All samples were analyzed for VOCs within the EPA recommended holding time of fourteen days for preserved waters from the date of collection. All holding time criteria are met.

NWTPH-Gx Method:
All samples were analyzed within the WA State recommended holding time of fourteen days for preserved waters from the date of sample collection. All holding time criteria are met.

Dissolved Gases (Methane, Ethane, and Ethene) by RSK 175:
All samples were analyzed within the WA State recommended holding time of fourteen days for preserved waters from the date of sample collection. All holding time criteria are met.

USEPA Method 6020B:
All samples were analyzed within the USEPA recommended holding time for iron and manganese of 180 days for preserved waters from the date of sample collection. All holding time criteria are met.

General Chemistry (Alkalinity, Chloride, Sulfate, Nitrate, and TOC):
All samples were analyzed within the USEPA recommended holding time for alkalinity (14 days), chloride (28 days), sulfate (28 days), and nitrate (48 hours), and TOC (28 days) for preserved waters from the date of sample collection. All holding time criteria are met with the following exceptions:

- SDG L1265092: Sample PRB-D17-092120 was analyzed for nitrate a few hours past the recommended 48-hour holding time. **Sample PRB-D17-092120 nitrate result is estimated (UJ) due to a holding time exceedance.**

Initial and Continuing Calibration

Calibration data for this project are not required for this deliverable however Pace's notes indicate the following:

- Multiple SDGs - *USEPA Method 8260D:* Continuing calibration verification (CCV) issues were noted by Pace for multiple compounds associated with analytical batches in each SDG. These compounds are qualified by the laboratory "J0" to indicate that percent difference CCV is outside of laboratory acceptance criteria. **Associated sample results with laboratory qualified (J0) results are estimated and qualified (J/UJ).**

Method Blank Results

USEPA Method 8260D:
Laboratory method blanks were included with the analytical batches per method requirement. The target analytes were not detected in the method blanks at or above the reporting detection limits (RDLs) with the following exception:

- SDG L1263961 - Analytical batch WG1549409: Low levels of acetone and tetrahydrofuran are detected in the method blank. Low levels of acetone, below the RDL, are detected in three samples (PRB-D20-091820, PRB-D13-091820, and PRB-B19-091820). **Acetone detections in samples PRB-D20-091820, PRB-D13-091820, and PRB-B19-091820 are laboratory qualified (BJ) and qualified as not detected (U) due to blank contamination.** Refer to the Section on Equipment Blanks for further discussion on blank contamination. A low level of tetrahydrofuran, below the RDL is detected in sample PRB-D23-091820 and laboratory qualified (BJ). **The tetrahydrofuran detection in sample PRB-D23-091820 is qualified as not detected (U).** No action is taken for the tetrahydrofuran detection in sample PRB-D20-091820 since the result exceeds the action criteria (RDL).

- SDG L1265092 - Analytical batch WG1553080: A low level of benzene was detected below the RDL in the method blank and detected in the associated sample PRB-D17-092120. No action is taken since the benzene detection in sample PRB-D17-092120 is greater than the RDL.

NWTPH-Gx Method:
Laboratory method blanks were included with the analytical batches per method requirement. The target analyte (gasoline) was not detected in the method blanks at or above the RDLs with the following exceptions:

- SDG L1263397 – Analytical batch WG1547280: Gasoline was detected in the method blank below the RDL. The gasoline detection in associated sample PRB-C14-091720 is laboratory qualified (BJ) to indicate low level blank contamination. **Sample PRB-C14-091720 gasoline result is qualified as not detected (U) due to blank contamination.**

- SDG L1262257 – Analytical batch WG1546048: Gasoline was detected in the method blank below the RDL. The gasoline detections in associated samples PRB-C1-091520 PRB-D1-091520 PRB-B17-091520 and PRB-C17-091520 are laboratory qualified (BJ) to indicate low level blank contamination. **Gasoline results for samples PRB-C1-091520, PRB-D1-091520, PRB-B17-091520, and PRB-C17-091520 are qualified as not detected (U) due to blank contamination.**

Dissolved Gases (Methane, Ethane, and Ethene) by RSK 175:
Laboratory method blanks were included with the analytical batches per method requirement. The target analytes (dissolved gases) are not detected in the method blanks at or above the RDLs.

USEPA Method 6020B and General Chemistry (Alkalinity, Chloride, Sulfate, Nitrate, and TOC):
Laboratory method blanks were included with the analytical batches per method requirement. The target analytes were detected in the method blanks below the RDLs. Per Guidance, no action is taken for blank detections less than the RDL when associated sample detections are greater than the RDL. General chemistry and metal blank detections are shown below:

SDG	Batch	Method	Analyte	Method Blank Result	Qualifier	RDL	Units	Associated Result(s) Qualified
L1261818	WG1544208	9060A	TOC	332	J	1000	μg/L	NO
L1261818	WG1544259	9060A	TOC	447	J	1000	μg/L	NO
L1262257	WG1544259	9060A	TOC	447	J	1000	μg/L	NO
L1262257	WG1545290	9060A	TOC	199	J	1000	μg/L	NO
L1262881	WG1545906	9060A	TOC	356	J	1000	μg/L	NO
L1263397	WG1546593	9060A	TOC	284	J	1000	μg/L	NO
L1263961	WG1547126	9060A	TOC	243	J	1000	μg/L	NO
L1265092	WG1548552	9060A	TOC	359	J	1000	μg/L	NO

Target analytes were detected in method blanks at low levels with no impact to the associated samples.

Trip Blank Results

USEPA Method 8260D and NWTPH-Gx:
Two trip blanks (TB-091420 (SDG L1261818) and TB-091620 (SDG L1262881)) were collected and analyzed for VOCs and gasoline. The target analytes were not detected in the associated samples with the following exceptions:

- SDG L1261818: A low level of gasoline was detected below the RDL in the trip blank (TB-091420) and in the associated method blank. No action is needed since gasoline is either not detected or is detected greater than the action level (RDL) in the associated samples.

- SDG L1262881: A low level of gasoline was detected below the RDL in the trip blank (TB-091620), in the associated method and equipment blanks. Gasoline is detected below the RDL in sample PRB-D11-091620 and PRB-C11-091620. **Gasoline detections in these samples are qualified as not detected (U) due to blank contamination.**

- SDG L1262881: A low level of acetone is above the RDL in the trip blank (TB-091620) and above the RDL in the equipment blank. Per Guidance the highest of the two detections is used to establish an action criterion (2X blank result). **Acetone detections are in samples PRB-D11-091620 and PRB-B11-091620 are qualified as not detected (U) due to blank contamination.**

Field, Rinsate, or Equipment Blank Results

All Analytical Methods:
Two equipment blanks were collected and analyzed. Details are as follows:

- Equipment blank (EQ-091620 with SDG L1262881) is associated with all samples collected via bladder pump on September 16, 2020. Low levels of TOC, iron, manganese, acetone, and toluene are detected in the equipment blank. No action is taken for TOC, iron and manganese detections since these are either not detected in the associated samples or sample detections are far greater than detection in the equipment blank. Associated results are qualified as follows:
    - **Gasoline detections in samples PRB-D11-091620 and PRB-C11-091620 are qualified as not detected (U) due to blank contamination.**
    - **Acetone detections in samples PRB-D11-091620 and PRB-B11-091620 are qualified as not detected (U) due to blank contamination.**
    - **Toluene detections in samples PRB-100-091620, PRB-D11-091620, PRB-A11-091620 are qualified as not detected (U) due to blank contamination.**
- Equipment blank (EQ-091820 with SDG L1263961) is associated with all samples collected via bladder pump on September 16, 2020. Low levels of chloride, sulfate, TOC, iron, gasoline, acetone, and toluene are detected in the equipment blank. No action is needed for chloride, sulfate, TOC, and iron detections since these are either not detected in the associated samples or sample detections are far greater than detection in the equipment blank. Associated results are qualified as follows:
    - **Gasoline detections in samples PRB-101-091820, PRB-D13-091820, PRB-B19-091820, PRB-D23-091820, and PRB-B23-091820 are qualified as not detected (U) due to blank contamination.**
    - **Acetone detections in samples PRB-101-091820, PRB-D20-091820, PRB-D13-091820, PRB-B19-091820, PRB-B23-091820, and PRB-B23-091820 are qualified as not detected (U) due to blank contamination.**
    - **Toluene detections in samples PRB-D20-091820 and PRB-B23-091820 are qualified as not detected (U) due to blank contamination.**

Field Duplicate Analyses

Field duplicate pairs were submitted and analyzed. Field duplicate sample pair is as follows:

- SDG L1262881: PRB-A11-091620 field duplicate is PRB-100-091620
- SDG L1263961: PRB-D23-091820 field duplicate is PRB-101-091820

Target analyte results are comparable and within a relative percent difference (RPD) of 30% (± 1x RDL for groundwater results <5X the RDL) for the field duplicate pairs with the following exception:

- SDG L1262881: Iron, methane, ethane, and ethene RPD exceed acceptance criteria for field duplicate pair PRB-A11-091620 and PRB-100-091620. **Iron, methane, ethane, and ethene results for the field duplicate pair are estimated and qualified (J).**

- SDG L1263961: Iron RPD exceed acceptance criteria for field duplicate pair PRB-D23-091820 field duplicate is PRB-101-091820. **Iron results for the field duplicate pair are estimated and qualified (J).**

Laboratory Duplicate Analyses

USEPA Method 8260D:
Laboratory duplicate samples were not analyzed. Refer to laboratory control sample/sample duplicate (LCS or LCS/LCSD) or field duplicate results for precision data.

NWTPH-Gx Method:
Laboratory duplicate samples were not analyzed. Precision data are not provided for (SDGs L1263397, L1263961, and L1265092). Refer to MS/MSD results associated with SDGs L1261818 and L1262257 for precision data.

Dissolved Gases (Methane, Ethane, and Ethene) by RSK 175:
Laboratory duplicate sample analyses were performed on client and non-client samples within the analytical batches. The primary/duplicate RPDs for dissolved gas analyses are within the laboratory control limit of 20%.

USEPA Method 6020B:
Laboratory duplicate samples were not analyzed. Precision data are not available for Refer to MS/MSD results for precision data.

General Chemistry (Alkalinity, Chloride, Sulfate, Nitrate, and TOC):
Laboratory duplicate sample analyses were performed on client samples and/or on non-client samples. The primary/duplicate RPDs for general chemistry parameters are within the laboratory control RPD limits or ± 1x RDL for groundwater results <5X the RDL.

Surrogate Recoveries

USEPA Method 8260D:
The surrogate recovery results for the samples, laboratory control samples, matrix spike samples, and the method blanks are within the laboratory surrogate control limits for all the analyses.

NWTPH-Gx Method:
The surrogate recovery results for the samples, laboratory control samples, matrix spike samples, and the method blanks are within the laboratory surrogate control limits for all analyses.

Laboratory Control Samples

USEPA Method 8260D:
Laboratory control sample/laboratory control sample duplicate (LCS/LCSD) or laboratory control sample (LCS) were analyzed by USEPA Method 8260D method. The LCS % Rs or LCS/LCSD % Rs and RPDs for all target compounds are within the laboratory control criteria for waters.

NWTPH-Gx Method:
The LCS % Rs for the target compound (gasoline) are within the laboratory control criteria for waters. In many cases, no measure of precision is provided with the analytical batch. No action is taken other than to note this.

Dissolved Gases (Methane, Ethane, and Ethene) by RSK 175:
The LCS/LCSD % Rs and RPDs for the target compound (dissolved gases) are within the laboratory control criteria for waters.

USEPA Method 6020B:
The LCS/LCSD % Rs and RPDs for the target compound (iron and manganese) are within the laboratory control criteria for waters.

General Chemistry (Alkalinity, Chloride, Sulfate, Nitrate, and TOC):
The LCS % Rs for general chemistry parameters are within the laboratory control criteria for waters.

Matrix Spike/Matrix Spike Duplicates

USEPA Method 8260D:
Matrix spike/matrix spike duplicate (MS/MSD) analyses were not performed. Refer to LCS results.

NWTPH-Gx Method:
MS/MSD analyses were performed on sample PRB-C1-091520 (SDG L1262257). The MS/MSD % Rs and RPD are acceptable and within laboratory control limit criteria. For the remaining SDGs refer to LCS results. No measure of precision was provided. No action was taken other than to note this.

Dissolved Gases (Methane, Ethane, and Ethene) by RSK 175:

MS/MSD analyses were not performed. Refer to LCS results, laboratory duplicate, and field duplicate samples for accuracy and precision data.

USEPA Method 6020B:
MS/MSD analyses were performed on client and on non-client samples within the analytical batches. Per guidance, non-client samples are not assessed since these have no impact on client samples. The MS/MSD % Rs and RPD were acceptable and within laboratory control limit criteria for water samples.

General Chemistry (Alkalinity, Chloride, Sulfate, Nitrate, and TOC):
MS or MS/MSD analyses were performed on client and/or non-client samples within the analytical batches. In cases where MS/MSD spike analyses are not performed refer to LCS/LCSD or laboratory duplicate data for accuracy and precision data. Client sample MS/MSD % Rs and RPDs are acceptable and within laboratory control limit criteria for water samples with the following exceptions:

- SDG L1262881: Matrix spike was performed on sample PRB-100-091620 (field duplicate of PRB-A11-091620). Sulfate spike results are below criteria. **Sample PRB-100-091620 and PRB-A11-091620 sulfate results are estimated and qualified (J).**

Other Quality Control Issues

No laboratory quality control issues were identified in the laboratory report with the following discussions:

- Multiple SDGs: Selected sample narratives for alkalinity results indicate that several sample containers had some headspace and exposure to air may have impacted the reported results. No action was taken other than to note this.

- Electronic data deliverables (EDDs) for these SDGs were provided by the laboratory and data validator qualifiers were entered. In some cases, different chemical synonyms are used between the EDD and the hardcopy however associated Chemical Abstracts Service (CAS) numbers are provided in the EDD to confirm chemical identifications.

Compound Identification and Quantitation Limits

Results of the analyses were reported based on laboratory RDLs for all compounds. RDLs for selected compounds are elevated due to method-required dilutions. No action is taken other than to note this.

Gasoline and gasoline range organics are analyzed for via Volatile Organic Compounds (GC) by Washington State Method NWTPHGx (using a gas chromatograph/flame ionization detector (GC/FID)) and Pace reported gasoline range organic-NWTPH results. Several chlorinated VOC compounds (including cis-1,2-dichloroethene, trans-1,2-dichloroethene, trichloroethene, and tetrachloroethene) elute within the gasoline range organics (GRO) retention time range as specified by Washington State (detections falling between the toluene and dodecane range).

Non-petroleum organics (e.g. chlorinated VOC compounds) eluting within the gasoline range contribute to the GRO result and GRO results are likely biased high (J+). PES requested that Pace evaluate chromatograms associated with positive sample detections to confirm the potential presence of gasoline. Per PES's request Pace reviewed selected sample chromatograms against the gasoline standard chromatograms and assigned "no discernible petroleum pattern" to GRO results associated with this Task. PES assigned an additional project level qualifier (Z) to GRO results when the chromatogram for the sample does not match a discernible gasoline standard pattern. Associated chromatograms and qualified samples for this Task are as follows:

Sample ID	**Laboratory Identification**	**Gasoline Range Organic Result (µg/L)**	**DV Qualifier**	**Data Validation Comments**	**Pace Chromatogram Review Notes**
PRB-A19-091420	L1261818-04	897	Z, J+	Elevated chlorinated VOCs detected within the GRO elution range	No discernible petroleum pattern present.
PRB-A1-091520	L1262257-02	499	Z, J+	Elevated chlorinated VOCs detected within the GRO elution range	No discernible petroleum pattern present.
PRB-B1-091520	L1262257-03	1,160	Z, J+	Elevated chlorinated VOCs detected within the GRO elution range	No discernible petroleum pattern present.
PRB-A17-091520	L1262257-05	648	Z, J+	Elevated chlorinated VOCs detected within the GRO elution range	No discernible petroleum pattern present.
PRB-100-091620	L1262881-01	1,130	Z, J+	Elevated chlorinated VOCs detected within the GRO elution range	No discernible petroleum pattern present.
PRB-B11-091620	L1262881-03	274	Z, J+	Elevated chlorinated VOCs detected within the GRO elution range	No discernible petroleum pattern present.
PRB-A11-091620	L1262881-04	1,090	Z, J+	Elevated chlorinated VOCs detected within the GRO elution range	No discernible petroleum pattern present.
PRB-A14-091720	L1263397-02	432	Z, J+	Elevated chlorinated VOCs detected within the GRO elution range	No discernible petroleum pattern present.
PRB-A5-091720	L1263397-03	397	Z, J+	Elevated chlorinated VOCs detected within the GRO elution range	No discernible petroleum pattern present.
PRB-D4-091720	L1263397-04	374	Z, J+	Elevated chlorinated VOCs detected within the GRO elution range	No discernible petroleum pattern present.
PRB-C5-091720	L1263397-05	199	Z, J+	Elevated chlorinated VOCs detected within the GRO elution range	No discernible petroleum pattern present.
PRB-B4-091720	L1263397-06	652	Z, J+	Elevated chlorinated VOCs detected within the GRO elution range	No discernible petroleum pattern present.
PRB-D20-091820	L1263961-02	523	Z, J+	Elevated chlorinated VOCs detected within the GRO elution range	No discernible petroleum pattern present.
PRB-D17-092120	L1265092-01	134	Z, J+	Elevated chlorinated VOCs detected within the GRO elution range	No discernible petroleum pattern present.

Project level qualifiers have been included to the PES's project database (Epiphany) as (ZJ+). Washington State EIM valid values were reviewed. In this case no Washington State EIM valid value descriptor is ideal, and the default estimated value (J) has been selected as the best match to qualify GRO (Z, J+) data.

Data Assessment

The laboratory data reported for this project were reviewed based on the criteria outlined in:

- USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (USEPA, 2017); and
- USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Superfund Methods Data Review (USEPA, 2017).

Data qualifiers are assigned and laboratory report pages with qualifiers are attached. All data, including qualified data, are judged to be acceptable for their intended use.

Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	408000		8450	20000	1	09/16/2020 16:11	WG1543488

Sample Narrative:

L1261818-01 WG1543488: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	67100		379	1000	1	09/15/2020 17:49	WG1543227
Nitrate	U		48.0	100	1	09/15/2020 17:49	WG1543227
Sulfate	61300		594	5000	1	09/15/2020 17:49	WG1543227

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	7360		102	1000	1	09/17/2020 22:03	WG1544208

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	2440		48.9	100	1	09/18/2020 14:24	WG1543663
Manganese	723		1.32	5.00	1	09/18/2020 14:24	WG1543663

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	U		31.6	100	1	09/19/2020 01:33	WG1545313
(S) a,a,a-Trifluorotoluene(FID)	*107*			*78.0-120*		*09/19/2020 01:33*	WG1545313

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	5080		0.287	0.678	1	09/17/2020 14:37	WG1544533
Ethane	65.0		0.296	1.29	1	09/17/2020 14:37	WG1544533
Ethene	650		0.422	1.27	1	09/17/2020 14:37	WG1544533

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U	UJ J0	0.548	1.00	1	09/18/2020 03:22	WG1545111
Acrylonitrile	U	UJ J0	0.0760	0.500	1	09/18/2020 03:22	WG1545111
Benzene	0.0220	J	0.0160	0.0400	1	09/18/2020 03:22	WG1545111
Bromobenzene	U		0.0420	0.500	1	09/18/2020 03:22	WG1545111
Bromodichloromethane	U		0.0315	0.100	1	09/18/2020 03:22	WG1545111
Bromoform	U		0.239	1.00	1	09/18/2020 03:22	WG1545111
Bromomethane	U		0.148	0.500	1	09/18/2020 03:22	WG1545111
n-Butylbenzene	U		0.153	0.500	1	09/18/2020 03:22	WG1545111
sec-Butylbenzene	U		0.101	0.500	1	09/18/2020 03:22	WG1545111
tert-Butylbenzene	U		0.0620	0.200	1	09/18/2020 03:22	WG1545111
Carbon tetrachloride	U		0.0432	0.200	1	09/18/2020 03:22	WG1545111
Chlorobenzene	U		0.0229	0.100	1	09/18/2020 03:22	WG1545111
Chlorodibromomethane	U		0.0180	0.100	1	09/18/2020 03:22	WG1545111

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Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloroethane	U		0.0432	0.200	1	09/18/2020 03:22	WG1545111
Chloroform	U		0.0166	0.100	1	09/18/2020 03:22	WG1545111
Chloromethane	U		0.0556	0.500	1	09/18/2020 03:22	WG1545111
2-Chlorotoluene	U		0.0368	0.100	1	09/18/2020 03:22	WG1545111
4-Chlorotoluene	U		0.0452	0.200	1	09/18/2020 03:22	WG1545111
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	09/18/2020 03:22	WG1545111
1,2-Dibromoethane	U		0.0210	0.100	1	09/18/2020 03:22	WG1545111
Dibromomethane	U	UJ J0	0.0400	0.200	1	09/18/2020 03:22	WG1545111
1,2-Dichlorobenzene	U		0.0580	0.200	1	09/18/2020 03:22	WG1545111
1,3-Dichlorobenzene	U		0.0680	0.200	1	09/18/2020 03:22	WG1545111
1,4-Dichlorobenzene	U		0.0788	0.200	1	09/18/2020 03:22	WG1545111
Dichlorodifluoromethane	U		0.0327	0.100	1	09/18/2020 03:22	WG1545111
1,1-Dichloroethane	U		0.0230	0.100	1	09/18/2020 03:22	WG1545111
1,2-Dichloroethane	U	UJ J0	0.0190	0.100	1	09/18/2020 03:22	WG1545111
1,1-Dichloroethene	0.0920	J	0.0200	0.100	1	09/18/2020 03:22	WG1545111
cis-1,2-Dichloroethene	16.6		0.0276	0.100	1	09/18/2020 03:22	WG1545111
trans-1,2-Dichloroethene	0.0770	J	0.0572	0.200	1	09/18/2020 03:22	WG1545111
1,2-Dichloropropane	U		0.0508	0.200	1	09/18/2020 03:22	WG1545111
1,1-Dichloropropene	U		0.0280	0.100	1	09/18/2020 03:22	WG1545111
1,3-Dichloropropane	U		0.0700	0.200	1	09/18/2020 03:22	WG1545111
cis-1,3-Dichloropropene	U		0.0271	0.100	1	09/18/2020 03:22	WG1545111
trans-1,3-Dichloropropene	U		0.0612	0.200	1	09/18/2020 03:22	WG1545111
2,2-Dichloropropane	U	UJ J0	0.0317	0.100	1	09/18/2020 03:22	WG1545111
Di-isopropyl ether	U		0.0140	0.0400	1	09/18/2020 03:22	WG1545111
Ethylbenzene	U		0.0212	0.100	1	09/18/2020 03:22	WG1545111
Hexachloro-1,3-butadiene	U		0.508	1.00	1	09/18/2020 03:22	WG1545111
Isopropylbenzene	U		0.0345	0.100	1	09/18/2020 03:22	WG1545111
p-Isopropyltoluene	U		0.0932	0.200	1	09/18/2020 03:22	WG1545111
2-Butanone (MEK)	U		0.500	1.00	1	09/18/2020 03:22	WG1545111
Methylene Chloride	U		0.265	1.00	1	09/18/2020 03:22	WG1545111
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	09/18/2020 03:22	WG1545111
Methyl tert-butyl ether	U	UJ J0	0.0118	0.0400	1	09/18/2020 03:22	WG1545111
Naphthalene	U		0.124	0.500	1	09/18/2020 03:22	WG1545111
n-Propylbenzene	U		0.0472	0.200	1	09/18/2020 03:22	WG1545111
Styrene	U		0.109	0.500	1	09/18/2020 03:22	WG1545111
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	09/18/2020 03:22	WG1545111
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	09/18/2020 03:22	WG1545111
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	09/18/2020 03:22	WG1545111
Tetrachloroethene	U		0.0280	0.100	1	09/18/2020 03:22	WG1545111
Toluene	0.0750	J	0.0500	0.200	1	09/18/2020 03:22	WG1545111
1,2,3-Trichlorobenzene	U		0.0250	0.500	1	09/18/2020 03:22	WG1545111
1,2,4-Trichlorobenzene	U		0.193	0.500	1	09/18/2020 03:22	WG1545111
1,1,1-Trichloroethane	U		0.0110	0.100	1	09/18/2020 03:22	WG1545111
1,1,2-Trichloroethane	U		0.0353	0.100	1	09/18/2020 03:22	WG1545111
Trichloroethene	0.116		0.0160	0.0400	1	09/18/2020 03:22	WG1545111
Trichlorofluoromethane	U		0.0200	0.100	1	09/18/2020 03:22	WG1545111
1,2,3-Trichloropropane	U		0.204	0.500	1	09/18/2020 03:22	WG1545111
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	09/18/2020 03:22	WG1545111
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	09/18/2020 03:22	WG1545111
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	09/18/2020 03:22	WG1545111
Vinyl chloride	291		0.273	1.00	10	09/19/2020 03:05	WG1545375
Xylenes, Total	U		0.191	0.260	1	09/18/2020 03:22	WG1545111
Ethyl Ether	U	UJ J0	0.0170	0.100	1	09/18/2020 03:22	WG1545111
Tetrahydrofuran	0.145	J J J0	0.0900	0.500	1	09/18/2020 03:22	WG1545111
Iodomethane	U	UJ J0	0.242	0.500	1	09/18/2020 03:22	WG1545111
Allyl chloride	U		0.580	1.00	1	09/18/2020 03:22	WG1545111

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Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Trans-1,4-Dichloro-2-butene	U		0.0560	0.200	1	09/18/2020 03:22	WG1545111
(S) Toluene-d8	*112*			*75.0-131*		*09/18/2020 03:22*	WG1545111
(S) Toluene-d8	*96.3*			*75.0-131*		*09/19/2020 03:05*	WG1545375
(S) 4-Bromofluorobenzene	*92.0*			*67.0-138*		*09/18/2020 03:22*	WG1545111
(S) 4-Bromofluorobenzene	*92.3*			*67.0-138*		*09/19/2020 03:05*	WG1545375
(S) 1,2-Dichloroethane-d4	*99.3*			*70.0-130*		*09/18/2020 03:22*	WG1545111
(S) 1,2-Dichloroethane-d4	*117*			*70.0-130*		*09/19/2020 03:05*	WG1545375

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Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	184000		8450	20000	1	09/16/2020 16:21	WG1543488

Sample Narrative:

L1261818-02 WG1543488: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	16300		379	1000	1	09/15/2020 18:07	WG1543227
Nitrate	U		48.0	100	1	09/15/2020 18:07	WG1543227
Sulfate	18500		594	5000	1	09/15/2020 18:07	WG1543227

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	1300	~~B~~	102	1000	1	09/17/2020 22:14	WG1544208

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	2370		48.9	100	1	09/18/2020 14:27	WG1543663
Manganese	219		1.32	5.00	1	09/18/2020 14:27	WG1543663

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	U		31.6	100	1	09/19/2020 01:53	WG1545313
(S) a,a,a-Trifluorotoluene(FID)	*109*			*78.0-120*		*09/19/2020 01:53*	WG1545313

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	319		0.287	0.678	1	09/17/2020 14:40	WG1544533
Ethane	U		0.296	1.29	1	09/17/2020 14:40	WG1544533
Ethene	U		0.422	1.27	1	09/17/2020 14:40	WG1544533

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U UJ	J0	0.548	1.00	1	09/18/2020 03:41	WG1545111
Acrylonitrile	U UJ	J0	0.0760	0.500	1	09/18/2020 03:41	WG1545111
Benzene	U		0.0160	0.0400	1	09/18/2020 03:41	WG1545111
Bromobenzene	U		0.0420	0.500	1	09/18/2020 03:41	WG1545111
Bromodichloromethane	U		0.0315	0.100	1	09/18/2020 03:41	WG1545111
Bromoform	U		0.239	1.00	1	09/18/2020 03:41	WG1545111
Bromomethane	U		0.148	0.500	1	09/18/2020 03:41	WG1545111
n-Butylbenzene	U		0.153	0.500	1	09/18/2020 03:41	WG1545111
sec-Butylbenzene	U		0.101	0.500	1	09/18/2020 03:41	WG1545111
tert-Butylbenzene	U		0.0620	0.200	1	09/18/2020 03:41	WG1545111
Carbon tetrachloride	U		0.0432	0.200	1	09/18/2020 03:41	WG1545111
Chlorobenzene	U		0.0229	0.100	1	09/18/2020 03:41	WG1545111
Chlorodibromomethane	U		0.0180	0.100	1	09/18/2020 03:41	WG1545111

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Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloroethane	U		0.0432	0.200	1	09/18/2020 03:41	WG1545111
Chloroform	U		0.0166	0.100	1	09/18/2020 03:41	WG1545111
Chloromethane	U		0.0556	0.500	1	09/18/2020 03:41	WG1545111
2-Chlorotoluene	U		0.0368	0.100	1	09/18/2020 03:41	WG1545111
4-Chlorotoluene	U		0.0452	0.200	1	09/18/2020 03:41	WG1545111
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	09/18/2020 03:41	WG1545111
1,2-Dibromoethane	U		0.0210	0.100	1	09/18/2020 03:41	WG1545111
Dibromomethane	U	UJ J0	0.0400	0.200	1	09/18/2020 03:41	WG1545111
1,2-Dichlorobenzene	U		0.0580	0.200	1	09/18/2020 03:41	WG1545111
1,3-Dichlorobenzene	U		0.0680	0.200	1	09/18/2020 03:41	WG1545111
1,4-Dichlorobenzene	U		0.0788	0.200	1	09/18/2020 03:41	WG1545111
Dichlorodifluoromethane	U		0.0327	0.100	1	09/18/2020 03:41	WG1545111
1,1-Dichloroethane	U		0.0230	0.100	1	09/18/2020 03:41	WG1545111
1,2-Dichloroethane	U	UJ J0	0.0190	0.100	1	09/18/2020 03:41	WG1545111
1,1-Dichloroethene	U		0.0200	0.100	1	09/18/2020 03:41	WG1545111
cis-1,2-Dichloroethene	0.301		0.0276	0.100	1	09/18/2020 03:41	WG1545111
trans-1,2-Dichloroethene	U		0.0572	0.200	1	09/18/2020 03:41	WG1545111
1,2-Dichloropropane	U		0.0508	0.200	1	09/18/2020 03:41	WG1545111
1,1-Dichloropropene	U		0.0280	0.100	1	09/18/2020 03:41	WG1545111
1,3-Dichloropropane	U		0.0700	0.200	1	09/18/2020 03:41	WG1545111
cis-1,3-Dichloropropene	U		0.0271	0.100	1	09/18/2020 03:41	WG1545111
trans-1,3-Dichloropropene	U		0.0612	0.200	1	09/18/2020 03:41	WG1545111
2,2-Dichloropropane	U	UJ J0	0.0317	0.100	1	09/18/2020 03:41	WG1545111
Di-isopropyl ether	U		0.0140	0.0400	1	09/18/2020 03:41	WG1545111
Ethylbenzene	U		0.0212	0.100	1	09/18/2020 03:41	WG1545111
Hexachloro-1,3-butadiene	U		0.508	1.00	1	09/18/2020 03:41	WG1545111
Isopropylbenzene	U		0.0345	0.100	1	09/18/2020 03:41	WG1545111
p-Isopropyltoluene	U		0.0932	0.200	1	09/18/2020 03:41	WG1545111
2-Butanone (MEK)	U		0.500	1.00	1	09/18/2020 03:41	WG1545111
Methylene Chloride	U		0.265	1.00	1	09/18/2020 03:41	WG1545111
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	09/18/2020 03:41	WG1545111
Methyl tert-butyl ether	U	UJ J0	0.0118	0.0400	1	09/18/2020 03:41	WG1545111
Naphthalene	U		0.124	0.500	1	09/18/2020 03:41	WG1545111
n-Propylbenzene	U		0.0472	0.200	1	09/18/2020 03:41	WG1545111
Styrene	U		0.109	0.500	1	09/18/2020 03:41	WG1545111
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	09/18/2020 03:41	WG1545111
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	09/18/2020 03:41	WG1545111
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	09/18/2020 03:41	WG1545111
Tetrachloroethene	U		0.0280	0.100	1	09/18/2020 03:41	WG1545111
Toluene	0.231		0.0500	0.200	1	09/18/2020 03:41	WG1545111
1,2,3-Trichlorobenzene	U		0.0250	0.500	1	09/18/2020 03:41	WG1545111
1,2,4-Trichlorobenzene	U		0.193	0.500	1	09/18/2020 03:41	WG1545111
1,1,1-Trichloroethane	U		0.0110	0.100	1	09/18/2020 03:41	WG1545111
1,1,2-Trichloroethane	U		0.0353	0.100	1	09/18/2020 03:41	WG1545111
Trichloroethene	U		0.0160	0.0400	1	09/18/2020 03:41	WG1545111
Trichlorofluoromethane	U		0.0200	0.100	1	09/18/2020 03:41	WG1545111
1,2,3-Trichloropropane	U		0.204	0.500	1	09/18/2020 03:41	WG1545111
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	09/18/2020 03:41	WG1545111
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	09/18/2020 03:41	WG1545111
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	09/18/2020 03:41	WG1545111
Vinyl chloride	0.610		0.0273	0.100	1	09/19/2020 01:30	WG1545375
Xylenes, Total	U		0.191	0.260	1	09/18/2020 03:41	WG1545111
Ethyl Ether	U	UJ J0	0.0170	0.100	1	09/18/2020 03:41	WG1545111
Tetrahydrofuran	U	UJ J0	0.0900	0.500	1	09/18/2020 03:41	WG1545111
Iodomethane	U	UJ J0	0.242	0.500	1	09/18/2020 03:41	WG1545111
Allyl chloride	U		0.580	1.00	1	09/18/2020 03:41	WG1545111

JC 10/13/2020

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Trans-1,4-Dichloro-2-butene	U		0.0560	0.200	1	09/18/2020 03:41	WG1545111
(S) Toluene-d8	*109*			*75.0-131*		*09/18/2020 03:41*	WG1545111
(S) Toluene-d8	*94.2*			*75.0-131*		*09/19/2020 01:30*	WG1545375
(S) 4-Bromofluorobenzene	*90.9*			*67.0-138*		*09/18/2020 03:41*	WG1545111
(S) 4-Bromofluorobenzene	*93.4*			*67.0-138*		*09/19/2020 01:30*	WG1545375
(S) 1,2-Dichloroethane-d4	*103*			*70.0-130*		*09/18/2020 03:41*	WG1545111
(S) 1,2-Dichloroethane-d4	*122*			*70.0-130*		*09/19/2020 01:30*	WG1545375

JC 10/13/2020

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	266000		8450	20000	1	09/16/2020 16:30	WG1543488

Sample Narrative:

L1261818-03 WG1543488: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	33600		379	1000	1	09/15/2020 18:46	WG1543227
Nitrate	U		48.0	100	1	09/15/2020 18:46	WG1543227
Sulfate	71900		594	5000	1	09/15/2020 18:46	WG1543227

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	5190		102	1000	1	09/17/2020 22:59	WG1544208

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	4140		48.9	100	1	09/18/2020 14:30	WG1543663
Manganese	378		1.32	5.00	1	09/18/2020 14:30	WG1543663

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	U		31.6	100	1	09/19/2020 02:14	WG1545313
(S) a,a,a-Trifluorotoluene(FID)	*108*			*78.0-120*		*09/19/2020 02:14*	WG1545313

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	2980		0.287	0.678	1	09/17/2020 14:43	WG1544533
Ethane	U		0.296	1.29	1	09/17/2020 14:43	WG1544533
Ethene	U		0.422	1.27	1	09/17/2020 14:43	WG1544533

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U UJ	J0	0.548	1.00	1	09/18/2020 04:00	WG1545111
Acrylonitrile	U UJ	J0	0.0760	0.500	1	09/18/2020 04:00	WG1545111
Benzene	U		0.0160	0.0400	1	09/18/2020 04:00	WG1545111
Bromobenzene	U		0.0420	0.500	1	09/18/2020 04:00	WG1545111
Bromodichloromethane	U		0.0315	0.100	1	09/18/2020 04:00	WG1545111
Bromoform	U		0.239	1.00	1	09/18/2020 04:00	WG1545111
Bromomethane	U		0.148	0.500	1	09/18/2020 04:00	WG1545111
n-Butylbenzene	U		0.153	0.500	1	09/18/2020 04:00	WG1545111
sec-Butylbenzene	U		0.101	0.500	1	09/18/2020 04:00	WG1545111
tert-Butylbenzene	U		0.0620	0.200	1	09/18/2020 04:00	WG1545111
Carbon tetrachloride	U		0.0432	0.200	1	09/18/2020 04:00	WG1545111
Chlorobenzene	U		0.0229	0.100	1	09/18/2020 04:00	WG1545111
Chlorodibromomethane	U		0.0180	0.100	1	09/18/2020 04:00	WG1545111

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Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloroethane	U		0.0432	0.200	1	09/18/2020 04:00	WG1545111
Chloroform	U		0.0166	0.100	1	09/18/2020 04:00	WG1545111
Chloromethane	U		0.0556	0.500	1	09/18/2020 04:00	WG1545111
2-Chlorotoluene	U		0.0368	0.100	1	09/18/2020 04:00	WG1545111
4-Chlorotoluene	U		0.0452	0.200	1	09/18/2020 04:00	WG1545111
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	09/18/2020 04:00	WG1545111
1,2-Dibromoethane	U		0.0210	0.100	1	09/18/2020 04:00	WG1545111
Dibromomethane	U	UJ J0	0.0400	0.200	1	09/18/2020 04:00	WG1545111
1,2-Dichlorobenzene	U		0.0580	0.200	1	09/18/2020 04:00	WG1545111
1,3-Dichlorobenzene	U		0.0680	0.200	1	09/18/2020 04:00	WG1545111
1,4-Dichlorobenzene	U		0.0788	0.200	1	09/18/2020 04:00	WG1545111
Dichlorodifluoromethane	U		0.0327	0.100	1	09/18/2020 04:00	WG1545111
1,1-Dichloroethane	U		0.0230	0.100	1	09/18/2020 04:00	WG1545111
1,2-Dichloroethane	U	UJ J0	0.0190	0.100	1	09/18/2020 04:00	WG1545111
1,1-Dichloroethene	U		0.0200	0.100	1	09/18/2020 04:00	WG1545111
cis-1,2-Dichloroethene	U		0.0276	0.100	1	09/18/2020 04:00	WG1545111
trans-1,2-Dichloroethene	U		0.0572	0.200	1	09/18/2020 04:00	WG1545111
1,2-Dichloropropane	U		0.0508	0.200	1	09/18/2020 04:00	WG1545111
1,1-Dichloropropene	U		0.0280	0.100	1	09/18/2020 04:00	WG1545111
1,3-Dichloropropane	U		0.0700	0.200	1	09/18/2020 04:00	WG1545111
cis-1,3-Dichloropropene	U		0.0271	0.100	1	09/18/2020 04:00	WG1545111
trans-1,3-Dichloropropene	U		0.0612	0.200	1	09/18/2020 04:00	WG1545111
2,2-Dichloropropane	U	UJ J0	0.0317	0.100	1	09/18/2020 04:00	WG1545111
Di-isopropyl ether	U		0.0140	0.0400	1	09/18/2020 04:00	WG1545111
Ethylbenzene	U		0.0212	0.100	1	09/18/2020 04:00	WG1545111
Hexachloro-1,3-butadiene	U		0.508	1.00	1	09/18/2020 04:00	WG1545111
Isopropylbenzene	U		0.0345	0.100	1	09/18/2020 04:00	WG1545111
p-Isopropyltoluene	U		0.0932	0.200	1	09/18/2020 04:00	WG1545111
2-Butanone (MEK)	U		0.500	1.00	1	09/18/2020 04:00	WG1545111
Methylene Chloride	U		0.265	1.00	1	09/18/2020 04:00	WG1545111
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	09/18/2020 04:00	WG1545111
Methyl tert-butyl ether	U	UJ J0	0.0118	0.0400	1	09/18/2020 04:00	WG1545111
Naphthalene	U		0.124	0.500	1	09/18/2020 04:00	WG1545111
n-Propylbenzene	U		0.0472	0.200	1	09/18/2020 04:00	WG1545111
Styrene	U		0.109	0.500	1	09/18/2020 04:00	WG1545111
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	09/18/2020 04:00	WG1545111
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	09/18/2020 04:00	WG1545111
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	09/18/2020 04:00	WG1545111
Tetrachloroethene	U		0.0280	0.100	1	09/18/2020 04:00	WG1545111
Toluene	0.208		0.0500	0.200	1	09/18/2020 04:00	WG1545111
1,2,3-Trichlorobenzene	U		0.0250	0.500	1	09/18/2020 04:00	WG1545111
1,2,4-Trichlorobenzene	U		0.193	0.500	1	09/18/2020 04:00	WG1545111
1,1,1-Trichloroethane	U		0.0110	0.100	1	09/18/2020 04:00	WG1545111
1,1,2-Trichloroethane	U		0.0353	0.100	1	09/18/2020 04:00	WG1545111
Trichloroethene	U		0.0160	0.0400	1	09/18/2020 04:00	WG1545111
Trichlorofluoromethane	U		0.0200	0.100	1	09/18/2020 04:00	WG1545111
1,2,3-Trichloropropane	U		0.204	0.500	1	09/18/2020 04:00	WG1545111
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	09/18/2020 04:00	WG1545111
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	09/18/2020 04:00	WG1545111
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	09/18/2020 04:00	WG1545111
Vinyl chloride	U		0.0273	0.100	1	09/19/2020 01:49	WG1545375
Xylenes, Total	U		0.191	0.260	1	09/18/2020 04:00	WG1545111
Ethyl Ether	U	UJUJJ0	0.0170	0.100	1	09/18/2020 04:00	WG1545111
Tetrahydrofuran	U	UJ J0	0.0900	0.500	1	09/18/2020 04:00	WG1545111
Iodomethane	U	UJ J0	0.242	0.500	1	09/18/2020 04:00	WG1545111
Allyl chloride	U		0.580	1.00	1	09/18/2020 04:00	WG1545111

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Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Trans-1,4-Dichloro-2-butene	U		0.0560	0.200	1	09/18/2020 04:00	WG1545111
(S) Toluene-d8	*113*			*75.0-131*		*09/18/2020 04:00*	WG1545111
(S) Toluene-d8	*96.4*			*75.0-131*		*09/19/2020 01:49*	WG1545375
(S) 4-Bromofluorobenzene	*87.2*			*67.0-138*		*09/18/2020 04:00*	WG1545111
(S) 4-Bromofluorobenzene	*96.6*			*67.0-138*		*09/19/2020 01:49*	WG1545375
(S) 1,2-Dichloroethane-d4	*103*			*70.0-130*		*09/18/2020 04:00*	WG1545111
(S) 1,2-Dichloroethane-d4	*121*			*70.0-130*		*09/19/2020 01:49*	WG1545375

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Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	236000		8450	20000	1	09/16/2020 16:41	WG1543488

Sample Narrative:

L1261818-04 WG1543488: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	26400		379	1000	1	09/15/2020 19:22	WG1543227
Nitrate	U		48.0	100	1	09/15/2020 19:22	WG1543227
Sulfate	34200		594	5000	1	09/15/2020 19:22	WG1543227

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	2060	~~B~~	102	1000	1	09/17/2020 19:48	WG1544259

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	5210		48.9	100	1	09/18/2020 14:33	WG1543663
Manganese	735		1.32	5.00	1	09/18/2020 14:33	WG1543663

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	897	Z, J+	31.6	100	1	09/19/2020 02:35	WG1545313
(S) a,a,a-Trifluorotoluene(FID)	*108*			*78.0-120*		*09/19/2020 02:35*	WG1545313

Sample Narrative:

L1261818-04 WG1545313: No discernible petroleum pattern present

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	6380		0.287	0.678	1	09/17/2020 14:46	WG1544533
Ethane	U		0.296	1.29	1	09/17/2020 14:46	WG1544533
Ethene	U		0.422	1.27	1	09/17/2020 14:46	WG1544533

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U	UJ J0	0.548	1.00	1	09/18/2020 04:19	WG1545111
Acrylonitrile	U	UJ J0	0.0760	0.500	1	09/18/2020 04:19	WG1545111
Benzene	0.103		0.0160	0.0400	1	09/18/2020 04:19	WG1545111
Bromobenzene	U		0.0420	0.500	1	09/18/2020 04:19	WG1545111
Bromodichloromethane	U		0.0315	0.100	1	09/18/2020 04:19	WG1545111
Bromoform	U		0.239	1.00	1	09/18/2020 04:19	WG1545111
Bromomethane	U		0.148	0.500	1	09/18/2020 04:19	WG1545111
n-Butylbenzene	U		0.153	0.500	1	09/18/2020 04:19	WG1545111
sec-Butylbenzene	U		0.101	0.500	1	09/18/2020 04:19	WG1545111
tert-Butylbenzene	U		0.0620	0.200	1	09/18/2020 04:19	WG1545111

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Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloroethane	U		0.0432	0.200	1	09/18/2020 04:19	WG1545111
Chloroform	U		0.0166	0.100	1	09/18/2020 04:19	WG1545111
Chloromethane	U		0.0556	0.500	1	09/18/2020 04:19	WG1545111
2-Chlorotoluene	U		0.0368	0.100	1	09/18/2020 04:19	WG1545111
4-Chlorotoluene	U		0.0452	0.200	1	09/18/2020 04:19	WG1545111
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	09/18/2020 04:19	WG1545111
1,2-Dibromoethane	U		0.0210	0.100	1	09/18/2020 04:19	WG1545111
Dibromomethane	U	UJ J0	0.0400	0.200	1	09/18/2020 04:19	WG1545111
1,2-Dichlorobenzene	U		0.0580	0.200	1	09/18/2020 04:19	WG1545111
1,3-Dichlorobenzene	U		0.0680	0.200	1	09/18/2020 04:19	WG1545111
1,4-Dichlorobenzene	U		0.0788	0.200	1	09/18/2020 04:19	WG1545111
Dichlorodifluoromethane	U		0.0327	0.100	1	09/18/2020 04:19	WG1545111
1,1-Dichloroethane	U		0.0230	0.100	1	09/18/2020 04:19	WG1545111
1,2-Dichloroethane	U	UJ J0	0.0190	0.100	1	09/18/2020 04:19	WG1545111
1,1-Dichloroethene	3.11		0.0200	0.100	1	09/18/2020 04:19	WG1545111
cis-1,2-Dichloroethene	1100		5.52	20.0	200	09/19/2020 04:21	WG1545375
trans-1,2-Dichloroethene	4.46		0.0572	0.200	1	09/18/2020 04:19	WG1545111
1,2-Dichloropropane	U		0.0508	0.200	1	09/18/2020 04:19	WG1545111
1,1-Dichloropropene	U		0.0280	0.100	1	09/18/2020 04:19	WG1545111
1,3-Dichloropropane	U		0.0700	0.200	1	09/18/2020 04:19	WG1545111
cis-1,3-Dichloropropene	U		0.0271	0.100	1	09/18/2020 04:19	WG1545111
trans-1,3-Dichloropropene	U		0.0612	0.200	1	09/18/2020 04:19	WG1545111
2,2-Dichloropropane	U	UJ J0	0.0317	0.100	1	09/18/2020 04:19	WG1545111
Di-isopropyl ether	U		0.0140	0.0400	1	09/18/2020 04:19	WG1545111
Ethylbenzene	U		0.0212	0.100	1	09/18/2020 04:19	WG1545111
Hexachloro-1,3-butadiene	U		0.508	1.00	1	09/18/2020 04:19	WG1545111
Isopropylbenzene	U		0.0345	0.100	1	09/18/2020 04:19	WG1545111
p-Isopropyltoluene	U		0.0932	0.200	1	09/18/2020 04:19	WG1545111
2-Butanone (MEK)	U		0.500	1.00	1	09/18/2020 04:19	WG1545111
Methylene Chloride	U		0.265	1.00	1	09/18/2020 04:19	WG1545111
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	09/18/2020 04:19	WG1545111
Methyl tert-butyl ether	U	UJ J0	0.0118	0.0400	1	09/18/2020 04:19	WG1545111
Naphthalene	U		0.124	0.500	1	09/18/2020 04:19	WG1545111
n-Propylbenzene	U		0.0472	0.200	1	09/18/2020 04:19	WG1545111
Styrene	U		0.109	0.500	1	09/18/2020 04:19	WG1545111
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	09/18/2020 04:19	WG1545111
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	09/18/2020 04:19	WG1545111
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	09/18/2020 04:19	WG1545111
Tetrachloroethene	59.2		0.0280	0.100	1	09/18/2020 04:19	WG1545111
Toluene	0.251		0.0500	0.200	1	09/18/2020 04:19	WG1545111
1,2,3-Trichlorobenzene	U		0.0250	0.500	1	09/18/2020 04:19	WG1545111
1,2,4-Trichlorobenzene	U		0.193	0.500	1	09/18/2020 04:19	WG1545111
1,1,1-Trichloroethane	U		0.0110	0.100	1	09/18/2020 04:19	WG1545111
1,1,2-Trichloroethane	U		0.0353	0.100	1	09/18/2020 04:19	WG1545111
Trichloroethene	24.2		0.0160	0.0400	1	09/18/2020 04:19	WG1545111
Trichlorofluoromethane	U		0.0200	0.100	1	09/18/2020 04:19	WG1545111
1,2,3-Trichloropropane	U		0.204	0.500	1	09/18/2020 04:19	WG1545111
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	09/18/2020 04:19	WG1545111
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	09/18/2020 04:19	WG1545111
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	09/18/2020 04:19	WG1545111
Vinyl chloride	3360		5.46	20.0	200	09/19/2020 04:21	WG1545375
Xylenes, Total	U		0.191	0.260	1	09/18/2020 04:19	WG1545111
Ethyl Ether	U	UJ J0	0.0170	0.100	1	09/18/2020 04:19	WG1545111
Tetrahydrofuran	0.265	J J J0	0.0900	0.500	1	09/18/2020 04:19	WG1545111
Iodomethane	U	UJ J0	0.242	0.500	1	09/18/2020 04:19	WG1545111
Allyl chloride	U		0.580	1.00	1	09/18/2020 04:19	WG1545111

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Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Trans-1,4-Dichloro-2-butene	U		0.0560	0.200	1	09/18/2020 04:19	WG1545111
(S) Toluene-d8	*112*			*75.0-131*		*09/18/2020 04:19*	WG1545111
(S) Toluene-d8	*95.4*			*75.0-131*		*09/19/2020 04:21*	WG1545375
(S) 4-Bromofluorobenzene	*90.5*			*67.0-138*		*09/18/2020 04:19*	WG1545111
(S) 4-Bromofluorobenzene	*93.5*			*67.0-138*		*09/19/2020 04:21*	WG1545375
(S) 1,2-Dichloroethane-d4	*97.3*			*70.0-130*		*09/18/2020 04:19*	WG1545111
(S) 1,2-Dichloroethane-d4	*117*			*70.0-130*		*09/19/2020 04:21*	WG1545375

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1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Wet Chemistry by Method 2320 B-2011

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Alkalinity	382000		8450	20000	1	09/16/2020 16:50	WG1543488

Sample Narrative:

L1261818-05 WG1543488: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 9056A

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Chloride	28900		379	1000	1	09/15/2020 20:18	WG1543227
Nitrate	U		48.0	100	1	09/15/2020 20:18	WG1543227
Sulfate	4310	J	594	5000	1	09/15/2020 20:18	WG1543227

Wet Chemistry by Method 9060A

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
TOC (Total Organic Carbon)	29700		102	1000	1	09/17/2020 20:22	WG1544259

Metals (ICPMS) by Method 6020B

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Iron	13300		48.9	100	1	09/18/2020 14:37	WG1543663
Manganese	2330		1.32	5.00	1	09/18/2020 14:37	WG1543663

Volatile Organic Compounds (GC) by Method NWTPHGX

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Gasoline Range Organics-NWTPH	U		31.6	100	1	09/19/2020 02:56	WG1545313
(S) a,a,a-Trifluorotoluene(FID)	*110*			*78.0-120*		*09/19/2020 02:56*	WG1545313

Volatile Organic Compounds (GC) by Method RSK175

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Methane	25400		2.87	6.78	10	09/18/2020 16:19	WG1545228
Ethane	589		0.296	1.29	1	09/17/2020 15:17	WG1544533
Ethene	259		0.422	1.27	1	09/17/2020 15:17	WG1544533

Volatile Organic Compounds (GC/MS) by Method 8260D

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Acetone	3.20 J	J0	0.548	1.00	1	09/18/2020 04:38	WG1545111
Acrylonitrile	U UJ	J0	0.0760	0.500	1	09/18/2020 04:38	WG1545111
Benzene	0.0610		0.0160	0.0400	1	09/18/2020 04:38	WG1545111
Bromobenzene	U		0.0420	0.500	1	09/18/2020 04:38	WG1545111
Bromodichloromethane	U		0.0315	0.100	1	09/18/2020 04:38	WG1545111
Bromoform	U		0.239	1.00	1	09/18/2020 04:38	WG1545111
Bromomethane	U		0.148	0.500	1	09/18/2020 04:38	WG1545111
n-Butylbenzene	U		0.153	0.500	1	09/18/2020 04:38	WG1545111
sec-Butylbenzene	U		0.101	0.500	1	09/18/2020 04:38	WG1545111
tert-Butylbenzene	U		0.0620	0.200	1	09/18/2020 04:38	WG1545111
Carbon tetrachloride	U		0.0432	0.200	1	09/18/2020 04:38	WG1545111
Chlorobenzene	U		0.0229	0.100	1	09/18/2020 04:38	WG1545111
Chlorodibromomethane	U		0.0180	0.100	1	09/18/2020 04:38	WG1545111

JC 10/13/2020

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloroethane	0.827		0.0432	0.200	1	09/18/2020 04:38	WG1545111
Chloroform	U		0.0166	0.100	1	09/18/2020 04:38	WG1545111
Chloromethane	U		0.0556	0.500	1	09/18/2020 04:38	WG1545111
2-Chlorotoluene	U		0.0368	0.100	1	09/18/2020 04:38	WG1545111
4-Chlorotoluene	U		0.0452	0.200	1	09/18/2020 04:38	WG1545111
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	09/18/2020 04:38	WG1545111
1,2-Dibromoethane	U		0.0210	0.100	1	09/18/2020 04:38	WG1545111
Dibromomethane	U	UJ J0	0.0400	0.200	1	09/18/2020 04:38	WG1545111
1,2-Dichlorobenzene	U		0.0580	0.200	1	09/18/2020 04:38	WG1545111
1,3-Dichlorobenzene	U		0.0680	0.200	1	09/18/2020 04:38	WG1545111
1,4-Dichlorobenzene	U		0.0788	0.200	1	09/18/2020 04:38	WG1545111
Dichlorodifluoromethane	U		0.0327	0.100	1	09/18/2020 04:38	WG1545111
1,1-Dichloroethane	U		0.0230	0.100	1	09/18/2020 04:38	WG1545111
1,2-Dichloroethane	U	UJ J0	0.0190	0.100	1	09/18/2020 04:38	WG1545111
1,1-Dichloroethene	U		0.0200	0.100	1	09/18/2020 04:38	WG1545111
cis-1,2-Dichloroethene	1.04		0.0276	0.100	1	09/19/2020 02:08	WG1545375
trans-1,2-Dichloroethene	0.413		0.0572	0.200	1	09/18/2020 04:38	WG1545111
1,2-Dichloropropane	U		0.0508	0.200	1	09/18/2020 04:38	WG1545111
1,1-Dichloropropene	U		0.0280	0.100	1	09/18/2020 04:38	WG1545111
1,3-Dichloropropane	U		0.0700	0.200	1	09/18/2020 04:38	WG1545111
cis-1,3-Dichloropropene	U		0.0271	0.100	1	09/18/2020 04:38	WG1545111
trans-1,3-Dichloropropene	U		0.0612	0.200	1	09/18/2020 04:38	WG1545111
2,2-Dichloropropane	U	UJ J0	0.0317	0.100	1	09/18/2020 04:38	WG1545111
Di-isopropyl ether	U		0.0140	0.0400	1	09/18/2020 04:38	WG1545111
Ethylbenzene	U		0.0212	0.100	1	09/18/2020 04:38	WG1545111
Hexachloro-1,3-butadiene	U		0.508	1.00	1	09/18/2020 04:38	WG1545111
Isopropylbenzene	U		0.0345	0.100	1	09/18/2020 04:38	WG1545111
p-Isopropyltoluene	U		0.0932	0.200	1	09/18/2020 04:38	WG1545111
2-Butanone (MEK)	2.55		0.500	1.00	1	09/18/2020 04:38	WG1545111
Methylene Chloride	U		0.265	1.00	1	09/18/2020 04:38	WG1545111
4-Methyl-2-pentanone (MIBK)	1.31		0.400	1.00	1	09/18/2020 04:38	WG1545111
Methyl tert-butyl ether	U	UJ J0	0.0118	0.0400	1	09/18/2020 04:38	WG1545111
Naphthalene	U		0.124	0.500	1	09/18/2020 04:38	WG1545111
n-Propylbenzene	U		0.0472	0.200	1	09/18/2020 04:38	WG1545111
Styrene	U		0.109	0.500	1	09/18/2020 04:38	WG1545111
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	09/18/2020 04:38	WG1545111
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	09/18/2020 04:38	WG1545111
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	09/18/2020 04:38	WG1545111
Tetrachloroethene	0.225		0.0280	0.100	1	09/18/2020 04:38	WG1545111
Toluene	0.220		0.0500	0.200	1	09/18/2020 04:38	WG1545111
1,2,3-Trichlorobenzene	U		0.0250	0.500	1	09/18/2020 04:38	WG1545111
1,2,4-Trichlorobenzene	U		0.193	0.500	1	09/18/2020 04:38	WG1545111
1,1,1-Trichloroethane	U		0.0110	0.100	1	09/18/2020 04:38	WG1545111
1,1,2-Trichloroethane	U		0.0353	0.100	1	09/18/2020 04:38	WG1545111
Trichloroethene	0.110		0.0160	0.0400	1	09/18/2020 04:38	WG1545111
Trichlorofluoromethane	U		0.0200	0.100	1	09/18/2020 04:38	WG1545111
1,2,3-Trichloropropane	U		0.204	0.500	1	09/18/2020 04:38	WG1545111
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	09/18/2020 04:38	WG1545111
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	09/18/2020 04:38	WG1545111
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	09/18/2020 04:38	WG1545111
Vinyl chloride	2.48		0.0273	0.100	1	09/19/2020 02:08	WG1545375
Xylenes, Total	U		0.191	0.260	1	09/18/2020 04:38	WG1545111
Ethyl Ether	U	UJ J0	0.0170	0.100	1	09/18/2020 04:38	WG1545111
Tetrahydrofuran	3.85	J J0	0.0900	0.500	1	09/18/2020 04:38	WG1545111
Iodomethane	U	UJ J0	0.242	0.500	1	09/18/2020 04:38	WG1545111
Allyl chloride	U		0.580	1.00	1	09/18/2020 04:38	WG1545111

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Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Trans-1,4-Dichloro-2-butene	U		0.0560	0.200	1	09/18/2020 04:38	WG1545111
(S) Toluene-d8	*112*			*75.0-131*		*09/18/2020 04:38*	WG1545111
(S) Toluene-d8	*95.3*			*75.0-131*		*09/19/2020 02:08*	WG1545375
(S) 4-Bromofluorobenzene	*93.1*			*67.0-138*		*09/18/2020 04:38*	WG1545111
(S) 4-Bromofluorobenzene	*94.8*			*67.0-138*		*09/19/2020 02:08*	WG1545375
(S) 1,2-Dichloroethane-d4	*97.2*			*70.0-130*		*09/18/2020 04:38*	WG1545111
(S) 1,2-Dichloroethane-d4	*118*			*70.0-130*		*09/19/2020 02:08*	WG1545375

JC 10/13/2020

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	271000		8450	20000	1	09/17/2020 14:46	WG1544185

Sample Narrative:

L1262257-01 WG1544185: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	31900		379	1000	1	09/16/2020 21:56	WG1543962
Nitrate	U		48.0	100	1	09/16/2020 21:56	WG1543962
Sulfate	6280		594	5000	1	09/16/2020 21:56	WG1543962

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	3100	~~B~~	102	1000	1	09/18/2020 04:26	WG1544259

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	2840		48.9	100	1	09/20/2020 22:50	WG1544670
Manganese	299		1.32	5.00	1	09/20/2020 22:50	WG1544670

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	40.4	U ~~BJ~~	31.6	100	1	09/20/2020 14:06	WG1546048
(S) a,a,a-Trifluorotoluene(FID)	*91.0*			*78.0-120*		*09/20/2020 14:06*	WG1546048

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	855		0.287	0.678	1	09/20/2020 15:02	WG1545826
Ethane	U		0.296	1.29	1	09/20/2020 15:02	WG1545826
Ethene	8.18		0.422	1.27	1	09/20/2020 15:02	WG1545826

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U	UJ J0	0.548	1.00	1	09/18/2020 04:57	WG1545111
Acrylonitrile	U	UJ J0	0.0760	0.500	1	09/18/2020 04:57	WG1545111
Benzene	0.0420		0.0160	0.0400	1	09/18/2020 04:57	WG1545111
Bromobenzene	U		0.0420	0.500	1	09/18/2020 04:57	WG1545111
Bromodichloromethane	U		0.0315	0.100	1	09/18/2020 04:57	WG1545111
Bromoform	U		0.239	1.00	1	09/18/2020 04:57	WG1545111
Bromomethane	U		0.148	0.500	1	09/18/2020 04:57	WG1545111
n-Butylbenzene	U		0.153	0.500	1	09/18/2020 04:57	WG1545111
sec-Butylbenzene	U		0.101	0.500	1	09/18/2020 04:57	WG1545111
tert-Butylbenzene	U		0.0620	0.200	1	09/18/2020 04:57	WG1545111
Carbon tetrachloride	U		0.0432	0.200	1	09/18/2020 04:57	WG1545111
Chlorobenzene	U		0.0229	0.100	1	09/18/2020 04:57	WG1545111
Chlorodibromomethane	U		0.0180	0.100	1	09/18/2020 04:57	WG1545111

JC 10/13/2020

PRB-C1-091520

Collected date/time: 09/15/20 09:00

SAMPLE RESULTS - 01

L1262257

Volatile Organic Compounds (GC/MS) by Method 8260D

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloroethane	U		0.0432	0.200	1	09/18/2020 04:57	WG1545111
Chloroform	U		0.0166	0.100	1	09/18/2020 04:57	WG1545111
Chloromethane	U		0.0556	0.500	1	09/18/2020 04:57	WG1545111
2-Chlorotoluene	U		0.0368	0.100	1	09/18/2020 04:57	WG1545111
4-Chlorotoluene	U		0.0452	0.200	1	09/18/2020 04:57	WG1545111
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	09/18/2020 04:57	WG1545111
1,2-Dibromoethane	U		0.0210	0.100	1	09/18/2020 04:57	WG1545111
Dibromomethane	U	UJ J0	0.0400	0.200	1	09/18/2020 04:57	WG1545111
1,2-Dichlorobenzene	U		0.0580	0.200	1	09/18/2020 04:57	WG1545111
1,3-Dichlorobenzene	U		0.0680	0.200	1	09/18/2020 04:57	WG1545111
1,4-Dichlorobenzene	U		0.0788	0.200	1	09/18/2020 04:57	WG1545111
Dichlorodifluoromethane	U		0.0327	0.100	1	09/18/2020 04:57	WG1545111
1,1-Dichloroethane	U		0.0230	0.100	1	09/18/2020 04:57	WG1545111
1,2-Dichloroethane	U	UJ J0	0.0190	0.100	1	09/18/2020 04:57	WG1545111
1,1-Dichloroethene	0.0530	J	0.0200	0.100	1	09/18/2020 04:57	WG1545111
cis-1,2-Dichloroethene	0.381		0.0276	0.100	1	09/19/2020 02:27	WG1545375
trans-1,2-Dichloroethene	U		0.0572	0.200	1	09/18/2020 04:57	WG1545111
1,2-Dichloropropane	U		0.0508	0.200	1	09/18/2020 04:57	WG1545111
1,1-Dichloropropene	U		0.0280	0.100	1	09/18/2020 04:57	WG1545111
1,3-Dichloropropane	U		0.0700	0.200	1	09/18/2020 04:57	WG1545111
cis-1,3-Dichloropropene	U		0.0271	0.100	1	09/18/2020 04:57	WG1545111
trans-1,3-Dichloropropene	U		0.0612	0.200	1	09/18/2020 04:57	WG1545111
2,2-Dichloropropane	U	UJ J0	0.0317	0.100	1	09/18/2020 04:57	WG1545111
Di-isopropyl ether	U		0.0140	0.0400	1	09/18/2020 04:57	WG1545111
Ethylbenzene	0.0510	J	0.0212	0.100	1	09/18/2020 04:57	WG1545111
Hexachloro-1,3-butadiene	U		0.508	1.00	1	09/18/2020 04:57	WG1545111
Isopropylbenzene	U		0.0345	0.100	1	09/18/2020 04:57	WG1545111
p-Isopropyltoluene	U		0.0932	0.200	1	09/18/2020 04:57	WG1545111
2-Butanone (MEK)	U		0.500	1.00	1	09/18/2020 04:57	WG1545111
Methylene Chloride	U		0.265	1.00	1	09/18/2020 04:57	WG1545111
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	09/18/2020 04:57	WG1545111
Methyl tert-butyl ether	U	UJ J0	0.0118	0.0400	1	09/18/2020 04:57	WG1545111
Naphthalene	U		0.124	0.500	1	09/18/2020 04:57	WG1545111
n-Propylbenzene	U		0.0472	0.200	1	09/18/2020 04:57	WG1545111
Styrene	U		0.109	0.500	1	09/18/2020 04:57	WG1545111
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	09/18/2020 04:57	WG1545111
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	09/18/2020 04:57	WG1545111
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	09/18/2020 04:57	WG1545111
Tetrachloroethene	0.0900	J	0.0280	0.100	1	09/18/2020 04:57	WG1545111
Toluene	0.893		0.0500	0.200	1	09/18/2020 04:57	WG1545111
1,2,3-Trichlorobenzene	U		0.0250	0.500	1	09/18/2020 04:57	WG1545111
1,2,4-Trichlorobenzene	U		0.193	0.500	1	09/18/2020 04:57	WG1545111
1,1,1-Trichloroethane	U		0.0110	0.100	1	09/18/2020 04:57	WG1545111
1,1,2-Trichloroethane	U		0.0353	0.100	1	09/18/2020 04:57	WG1545111
Trichloroethene	0.191		0.0160	0.0400	1	09/18/2020 04:57	WG1545111
Trichlorofluoromethane	U		0.0200	0.100	1	09/18/2020 04:57	WG1545111
1,2,3-Trichloropropane	U		0.204	0.500	1	09/18/2020 04:57	WG1545111
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	09/18/2020 04:57	WG1545111
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	09/18/2020 04:57	WG1545111
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	09/18/2020 04:57	WG1545111
Vinyl chloride	5.77		0.0273	0.100	1	09/18/2020 04:57	WG1545111
Xylenes, Total	0.201	J	0.191	0.260	1	09/18/2020 04:57	WG1545111
Ethyl Ether	U	UJ J0	0.0170	0.100	1	09/18/2020 04:57	WG1545111
Tetrahydrofuran	U	UJ J0	0.0900	0.500	1	09/18/2020 04:57	WG1545111
Iodomethane	U	UJ J0	0.242	0.500	1	09/18/2020 04:57	WG1545111
Allyl chloride	U		0.580	1.00	1	09/18/2020 04:57	WG1545111

JC 10/13/2020

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Trans-1,4-Dichloro-2-butene	U		0.0560	0.200	1	09/18/2020 04:57	WG1545111
(S) Toluene-d8	*111*			*75.0-131*		*09/18/2020 04:57*	WG1545111
(S) Toluene-d8	*93.2*			*75.0-131*		*09/19/2020 02:27*	WG1545375
(S) 4-Bromofluorobenzene	*88.1*			*67.0-138*		*09/18/2020 04:57*	WG1545111
(S) 4-Bromofluorobenzene	*99.1*			*67.0-138*		*09/19/2020 02:27*	WG1545375
(S) 1,2-Dichloroethane-d4	*97.0*			*70.0-130*		*09/18/2020 04:57*	WG1545111
(S) 1,2-Dichloroethane-d4	*120*			*70.0-130*		*09/19/2020 02:27*	WG1545375

JC 10/13/2020

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	373000		8450	20000	1	09/17/2020 14:56	WG1544185

Sample Narrative:

L1262257-02 WG1544185: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	27600		379	1000	1	09/16/2020 22:21	WG1543962
Nitrate	U		48.0	100	1	09/16/2020 22:21	WG1543962
Sulfate	63400		594	5000	1	09/16/2020 22:21	WG1543962

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	8920		102	1000	1	09/18/2020 04:50	WG1544259

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	12700		48.9	100	1	09/20/2020 22:54	WG1544670
Manganese	1650		1.32	5.00	1	09/20/2020 22:54	WG1544670

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	499	Z, J+	31.6	100	1	09/20/2020 14:26	WG1546048
(S) a,a,a-Trifluorotoluene(FID)	*92.8*			*78.0-120*		*09/20/2020 14:26*	WG1546048

Sample Narrative:

L1262257-02 WG1546048: No discernible petroleum pattern present

JC 10/27/2020

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	2350		0.287	0.678	1	09/20/2020 15:06	WG1545826
Ethane	26.4		0.296	1.29	1	09/20/2020 15:06	WG1545826
Ethene	17.1		0.422	1.27	1	09/20/2020 15:06	WG1545826

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	1.49	J J0	0.548	1.00	1	09/18/2020 05:16	WG1545111
Acrylonitrile	U	UJ J0	0.0760	0.500	1	09/18/2020 05:16	WG1545111
Benzene	0.486		0.0160	0.0400	1	09/18/2020 05:16	WG1545111
Bromobenzene	U		0.0420	0.500	1	09/18/2020 05:16	WG1545111
Bromodichloromethane	U		0.0315	0.100	1	09/18/2020 05:16	WG1545111
Bromoform	U		0.239	1.00	1	09/18/2020 05:16	WG1545111
Bromomethane	U		0.148	0.500	1	09/18/2020 05:16	WG1545111
n-Butylbenzene	U		0.153	0.500	1	09/18/2020 05:16	WG1545111
sec-Butylbenzene	U		0.101	0.500	1	09/18/2020 05:16	WG1545111
tert-Butylbenzene	U		0.0620	0.200	1	09/18/2020 05:16	WG1545111

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloroethane	U		0.0432	0.200	1	09/18/2020 05:16	WG1545111
Chloroform	U		0.0166	0.100	1	09/18/2020 05:16	WG1545111
Chloromethane	U		0.0556	0.500	1	09/18/2020 05:16	WG1545111
2-Chlorotoluene	U		0.0368	0.100	1	09/18/2020 05:16	WG1545111
4-Chlorotoluene	U		0.0452	0.200	1	09/18/2020 05:16	WG1545111
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	09/18/2020 05:16	WG1545111
1,2-Dibromoethane	U		0.0210	0.100	1	09/18/2020 05:16	WG1545111
Dibromomethane	U	UJ J0	0.0400	0.200	1	09/18/2020 05:16	WG1545111
1,2-Dichlorobenzene	U		0.0580	0.200	1	09/18/2020 05:16	WG1545111
1,3-Dichlorobenzene	U		0.0680	0.200	1	09/18/2020 05:16	WG1545111
1,4-Dichlorobenzene	U		0.0788	0.200	1	09/18/2020 05:16	WG1545111
Dichlorodifluoromethane	U		0.0327	0.100	1	09/18/2020 05:16	WG1545111
1,1-Dichloroethane	U		0.0230	0.100	1	09/18/2020 05:16	WG1545111
1,2-Dichloroethane	0.144	J J0	0.0190	0.100	1	09/18/2020 05:16	WG1545111
1,1-Dichloroethene	1.74		0.0200	0.100	1	09/18/2020 05:16	WG1545111
cis-1,2-Dichloroethene	649		0.276	1.00	10	09/19/2020 03:24	WG1545375
trans-1,2-Dichloroethene	1.72		0.0572	0.200	1	09/18/2020 05:16	WG1545111
1,2-Dichloropropane	U		0.0508	0.200	1	09/18/2020 05:16	WG1545111
1,1-Dichloropropene	U		0.0280	0.100	1	09/18/2020 05:16	WG1545111
1,3-Dichloropropane	U		0.0700	0.200	1	09/18/2020 05:16	WG1545111
cis-1,3-Dichloropropene	U		0.0271	0.100	1	09/18/2020 05:16	WG1545111
trans-1,3-Dichloropropene	U		0.0612	0.200	1	09/18/2020 05:16	WG1545111
2,2-Dichloropropane	U	UJ J0	0.0317	0.100	1	09/18/2020 05:16	WG1545111
Di-isopropyl ether	0.0420		0.0140	0.0400	1	09/18/2020 05:16	WG1545111
Ethylbenzene	0.104		0.0212	0.100	1	09/18/2020 05:16	WG1545111
Hexachloro-1,3-butadiene	U		0.508	1.00	1	09/18/2020 05:16	WG1545111
Isopropylbenzene	U		0.0345	0.100	1	09/18/2020 05:16	WG1545111
p-Isopropyltoluene	0.131	J	0.0932	0.200	1	09/18/2020 05:16	WG1545111
2-Butanone (MEK)	U		0.500	1.00	1	09/18/2020 05:16	WG1545111
Methylene Chloride	U		0.265	1.00	1	09/18/2020 05:16	WG1545111
4-Methyl-2-pentanone (MIBK)	2.08		0.400	1.00	1	09/18/2020 05:16	WG1545111
Methyl tert-butyl ether	U	UJ J0	0.0118	0.0400	1	09/18/2020 05:16	WG1545111
Naphthalene	U		0.124	0.500	1	09/18/2020 05:16	WG1545111
n-Propylbenzene	U		0.0472	0.200	1	09/18/2020 05:16	WG1545111
Styrene	U		0.109	0.500	1	09/18/2020 05:16	WG1545111
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	09/18/2020 05:16	WG1545111
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	09/18/2020 05:16	WG1545111
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	09/18/2020 05:16	WG1545111
Tetrachloroethene	24.6		0.0280	0.100	1	09/18/2020 05:16	WG1545111
Toluene	0.654		0.0500	0.200	1	09/18/2020 05:16	WG1545111
1,2,3-Trichlorobenzene	U		0.0250	0.500	1	09/18/2020 05:16	WG1545111
1,2,4-Trichlorobenzene	U		0.193	0.500	1	09/18/2020 05:16	WG1545111
1,1,1-Trichloroethane	U		0.0110	0.100	1	09/18/2020 05:16	WG1545111
1,1,2-Trichloroethane	U		0.0353	0.100	1	09/18/2020 05:16	WG1545111
Trichloroethene	25.6		0.0160	0.0400	1	09/18/2020 05:16	WG1545111
Trichlorofluoromethane	U		0.0200	0.100	1	09/18/2020 05:16	WG1545111
1,2,3-Trichloropropane	U		0.204	0.500	1	09/18/2020 05:16	WG1545111
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	09/18/2020 05:16	WG1545111
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	09/18/2020 05:16	WG1545111
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	09/18/2020 05:16	WG1545111
Vinyl chloride	45.2		0.0273	0.100	1	09/18/2020 05:16	WG1545111
Xylenes, Total	0.632		0.191	0.260	1	09/18/2020 05:16	WG1545111
Ethyl Ether	U	UJ J0	0.0170	0.100	1	09/18/2020 05:16	WG1545111
Tetrahydrofuran	13.7	J J0	0.0900	0.500	1	09/18/2020 05:16	WG1545111
Iodomethane	U	UJ J0	0.242	0.500	1	09/18/2020 05:16	WG1545111
Allyl chloride	U		0.580	1.00	1	09/18/2020 05:16	WG1545111

JC 10/13/2020

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Trans-1,4-Dichloro-2-butene	U		0.0560	0.200	1	09/18/2020 05:16	WG1545111
(S) Toluene-d8	*110*			*75.0-131*		*09/18/2020 05:16*	WG1545111
(S) Toluene-d8	*97.8*			*75.0-131*		*09/19/2020 03:24*	WG1545375
(S) 4-Bromofluorobenzene	*94.1*			*67.0-138*		*09/18/2020 05:16*	WG1545111
(S) 4-Bromofluorobenzene	*93.3*			*67.0-138*		*09/19/2020 03:24*	WG1545375
(S) 1,2-Dichloroethane-d4	*103*			*70.0-130*		*09/18/2020 05:16*	WG1545111
(S) 1,2-Dichloroethane-d4	*119*			*70.0-130*		*09/19/2020 03:24*	WG1545375

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Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	245000		8450	20000	1	09/17/2020 15:03	WG1544185

Sample Narrative:

L1262257-03 WG1544185: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	21000		379	1000	1	09/16/2020 22:59	WG1543962
Nitrate	U		48.0	100	1	09/16/2020 22:59	WG1543962
Sulfate	90700		594	5000	1	09/16/2020 22:59	WG1543962

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	8300		102	1000	1	09/18/2020 05:12	WG1544259

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	5140		48.9	100	1	09/20/2020 22:57	WG1544670
Manganese	1740		1.32	5.00	1	09/20/2020 22:57	WG1544670

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	1160	Z, J+	31.6	100	1	09/20/2020 14:47	WG1546048
(S) a,a,a-Trifluorotoluene(FID)	*96.1*			*78.0-120*		*09/20/2020 14:47*	WG1546048

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Sample Narrative:

L1262257-03 WG1546048: No discernible petroleum pattern present

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	558		0.287	0.678	1	09/20/2020 15:10	WG1545826
Ethane	7.50		0.296	1.29	1	09/20/2020 15:10	WG1545826
Ethene	U		0.422	1.27	1	09/20/2020 15:10	WG1545826

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U UJ	J0	0.548	1.00	1	09/18/2020 05:35	WG1545111
Acrylonitrile	U UJ	J0	0.0760	0.500	1	09/18/2020 05:35	WG1545111
Benzene	0.129		0.0160	0.0400	1	09/18/2020 05:35	WG1545111
Bromobenzene	U		0.0420	0.500	1	09/18/2020 05:35	WG1545111
Bromodichloromethane	U		0.0315	0.100	1	09/18/2020 05:35	WG1545111
Bromoform	U		0.239	1.00	1	09/18/2020 05:35	WG1545111
Bromomethane	U		0.148	0.500	1	09/18/2020 05:35	WG1545111
n-Butylbenzene	U		0.153	0.500	1	09/18/2020 05:35	WG1545111
sec-Butylbenzene	U		0.101	0.500	1	09/18/2020 05:35	WG1545111
tert-Butylbenzene	U		0.0620	0.200	1	09/18/2020 05:35	WG1545111

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloroethane	U		0.0432	0.200	1	09/18/2020 05:35	WG1545111
Chloroform	U		0.0166	0.100	1	09/18/2020 05:35	WG1545111
Chloromethane	U		0.0556	0.500	1	09/18/2020 05:35	WG1545111
2-Chlorotoluene	U		0.0368	0.100	1	09/18/2020 05:35	WG1545111
4-Chlorotoluene	U		0.0452	0.200	1	09/18/2020 05:35	WG1545111
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	09/18/2020 05:35	WG1545111
1,2-Dibromoethane	U		0.0210	0.100	1	09/18/2020 05:35	WG1545111
Dibromomethane	U	UJ J0	0.0400	0.200	1	09/18/2020 05:35	WG1545111
1,2-Dichlorobenzene	U		0.0580	0.200	1	09/18/2020 05:35	WG1545111
1,3-Dichlorobenzene	U		0.0680	0.200	1	09/18/2020 05:35	WG1545111
1,4-Dichlorobenzene	U		0.0788	0.200	1	09/18/2020 05:35	WG1545111
Dichlorodifluoromethane	U		0.0327	0.100	1	09/18/2020 05:35	WG1545111
1,1-Dichloroethane	0.562		0.0230	0.100	1	09/18/2020 05:35	WG1545111
1,2-Dichloroethane	U	UJ J0	0.0190	0.100	1	09/18/2020 05:35	WG1545111
1,1-Dichloroethene	6.08		0.0200	0.100	1	09/18/2020 05:35	WG1545111
cis-1,2-Dichloroethene	1440		0.552	2.00	20	09/19/2020 03:43	WG1545375
trans-1,2-Dichloroethene	5.40		0.0572	0.200	1	09/18/2020 05:35	WG1545111
1,2-Dichloropropane	U		0.0508	0.200	1	09/18/2020 05:35	WG1545111
1,1-Dichloropropene	U		0.0280	0.100	1	09/18/2020 05:35	WG1545111
1,3-Dichloropropane	U		0.0700	0.200	1	09/18/2020 05:35	WG1545111
cis-1,3-Dichloropropene	U		0.0271	0.100	1	09/18/2020 05:35	WG1545111
trans-1,3-Dichloropropene	U		0.0612	0.200	1	09/18/2020 05:35	WG1545111
2,2-Dichloropropane	U	UJ J0	0.0317	0.100	1	09/18/2020 05:35	WG1545111
Di-isopropyl ether	U		0.0140	0.0400	1	09/18/2020 05:35	WG1545111
Ethylbenzene	U		0.0212	0.100	1	09/18/2020 05:35	WG1545111
Hexachloro-1,3-butadiene	U		0.508	1.00	1	09/18/2020 05:35	WG1545111
Isopropylbenzene	U		0.0345	0.100	1	09/18/2020 05:35	WG1545111
p-Isopropyltoluene	U		0.0932	0.200	1	09/18/2020 05:35	WG1545111
2-Butanone (MEK)	U		0.500	1.00	1	09/18/2020 05:35	WG1545111
Methylene Chloride	U		0.265	1.00	1	09/18/2020 05:35	WG1545111
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	09/18/2020 05:35	WG1545111
Methyl tert-butyl ether	U	UJ J0	0.0118	0.0400	1	09/18/2020 05:35	WG1545111
Naphthalene	U		0.124	0.500	1	09/18/2020 05:35	WG1545111
n-Propylbenzene	U		0.0472	0.200	1	09/18/2020 05:35	WG1545111
Styrene	U		0.109	0.500	1	09/18/2020 05:35	WG1545111
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	09/18/2020 05:35	WG1545111
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	09/18/2020 05:35	WG1545111
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	09/18/2020 05:35	WG1545111
Tetrachloroethene	1070		0.560	2.00	20	09/19/2020 03:43	WG1545375
Toluene	0.270		0.0500	0.200	1	09/18/2020 05:35	WG1545111
1,2,3-Trichlorobenzene	U		0.0250	0.500	1	09/18/2020 05:35	WG1545111
1,2,4-Trichlorobenzene	U		0.193	0.500	1	09/18/2020 05:35	WG1545111
1,1,1-Trichloroethane	U		0.0110	0.100	1	09/18/2020 05:35	WG1545111
1,1,2-Trichloroethane	U		0.0353	0.100	1	09/18/2020 05:35	WG1545111
Trichloroethene	827		0.320	0.800	20	09/19/2020 03:43	WG1545375
Trichlorofluoromethane	U		0.0200	0.100	1	09/18/2020 05:35	WG1545111
1,2,3-Trichloropropane	U		0.204	0.500	1	09/18/2020 05:35	WG1545111
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	09/18/2020 05:35	WG1545111
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	09/18/2020 05:35	WG1545111
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	09/18/2020 05:35	WG1545111
Vinyl chloride	7.17		0.0273	0.100	1	09/18/2020 05:35	WG1545111
Xylenes, Total	U		0.191	0.260	1	09/18/2020 05:35	WG1545111
Ethyl Ether	U	UJ J0	0.0170	0.100	1	09/18/2020 05:35	WG1545111
Tetrahydrofuran	0.566	J J0	0.0900	0.500	1	09/18/2020 05:35	WG1545111
Iodomethane	U	UJ J0	0.242	0.500	1	09/18/2020 05:35	WG1545111
Allyl chloride	U		0.580	1.00	1	09/18/2020 05:35	WG1545111

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Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Trans-1,4-Dichloro-2-butene	U		0.0560	0.200	1	09/18/2020 05:35	WG1545111
(S) Toluene-d8	*114*			*75.0-131*		*09/18/2020 05:35*	WG1545111
(S) Toluene-d8	*95.3*			*75.0-131*		*09/19/2020 03:43*	WG1545375
(S) 4-Bromofluorobenzene	*92.4*			*67.0-138*		*09/18/2020 05:35*	WG1545111
(S) 4-Bromofluorobenzene	*95.8*			*67.0-138*		*09/19/2020 03:43*	WG1545375
(S) 1,2-Dichloroethane-d4	*96.4*			*70.0-130*		*09/18/2020 05:35*	WG1545111
(S) 1,2-Dichloroethane-d4	*115*			*70.0-130*		*09/19/2020 03:43*	WG1545375

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PRB-D1-091520
Collected date/time: 09/15/20 12:45

SAMPLE RESULTS - 04

L1262257

Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	277000		8450	20000	1	09/17/2020 15:10	WG1544185

Sample Narrative:

L1262257-04 WG1544185: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	22500		379	1000	1	09/16/2020 23:12	WG1543962
Nitrate	U		48.0	100	1	09/16/2020 23:12	WG1543962
Sulfate	26000		594	5000	1	09/16/2020 23:12	WG1543962

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	2490	~~B~~	102	1000	1	09/18/2020 05:29	WG1544259

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	5260		48.9	100	1	09/20/2020 23:01	WG1544670
Manganese	493		1.32	5.00	1	09/20/2020 23:01	WG1544670

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	54.3 U	~~B J~~	31.6	100	1	09/20/2020 15:08	WG1546048
(S) a,a,a-Trifluorotoluene(FID)	*92.0*			*78.0-120*		*09/20/2020 15:08*	WG1546048

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	835		0.287	0.678	1	09/20/2020 15:15	WG1545826
Ethane	U		0.296	1.29	1	09/20/2020 15:15	WG1545826
Ethene	U		0.422	1.27	1	09/20/2020 15:15	WG1545826

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U UJ	J0	0.548	1.00	1	09/18/2020 05:54	WG1545111
Acrylonitrile	U UJ	J0	0.0760	0.500	1	09/18/2020 05:54	WG1545111
Benzene	U		0.0160	0.0400	1	09/18/2020 05:54	WG1545111
Bromobenzene	U		0.0420	0.500	1	09/18/2020 05:54	WG1545111
Bromodichloromethane	U		0.0315	0.100	1	09/18/2020 05:54	WG1545111
Bromoform	U		0.239	1.00	1	09/18/2020 05:54	WG1545111
Bromomethane	U		0.148	0.500	1	09/18/2020 05:54	WG1545111
n-Butylbenzene	U		0.153	0.500	1	09/18/2020 05:54	WG1545111
sec-Butylbenzene	U		0.101	0.500	1	09/18/2020 05:54	WG1545111
tert-Butylbenzene	U		0.0620	0.200	1	09/18/2020 05:54	WG1545111
Carbon tetrachloride	U		0.0432	0.200	1	09/18/2020 05:54	WG1545111
Chlorobenzene	U		0.0229	0.100	1	09/18/2020 05:54	WG1545111
Chlorodibromomethane	U		0.0180	0.100	1	09/18/2020 05:54	WG1545111

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Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloroethane	2.79		0.0432	0.200	1	09/18/2020 05:54	WG1545111
Chloroform	U		0.0166	0.100	1	09/18/2020 05:54	WG1545111
Chloromethane	U		0.0556	0.500	1	09/18/2020 05:54	WG1545111
2-Chlorotoluene	U		0.0368	0.100	1	09/18/2020 05:54	WG1545111
4-Chlorotoluene	U		0.0452	0.200	1	09/18/2020 05:54	WG1545111
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	09/18/2020 05:54	WG1545111
1,2-Dibromoethane	U		0.0210	0.100	1	09/18/2020 05:54	WG1545111
Dibromomethane	U	UJ J0	0.0400	0.200	1	09/18/2020 05:54	WG1545111
1,2-Dichlorobenzene	U		0.0580	0.200	1	09/18/2020 05:54	WG1545111
1,3-Dichlorobenzene	U		0.0680	0.200	1	09/18/2020 05:54	WG1545111
1,4-Dichlorobenzene	U		0.0788	0.200	1	09/18/2020 05:54	WG1545111
Dichlorodifluoromethane	U		0.0327	0.100	1	09/18/2020 05:54	WG1545111
1,1-Dichloroethane	U		0.0230	0.100	1	09/18/2020 05:54	WG1545111
1,2-Dichloroethane	U	UJ J0	0.0190	0.100	1	09/18/2020 05:54	WG1545111
1,1-Dichloroethene	0.0790	J	0.0200	0.100	1	09/18/2020 05:54	WG1545111
cis-1,2-Dichloroethene	7.96		0.0276	0.100	1	09/19/2020 02:46	WG1545375
trans-1,2-Dichloroethene	U		0.0572	0.200	1	09/18/2020 05:54	WG1545111
1,2-Dichloropropane	U		0.0508	0.200	1	09/18/2020 05:54	WG1545111
1,1-Dichloropropene	U		0.0280	0.100	1	09/18/2020 05:54	WG1545111
1,3-Dichloropropane	U		0.0700	0.200	1	09/18/2020 05:54	WG1545111
cis-1,3-Dichloropropene	U		0.0271	0.100	1	09/18/2020 05:54	WG1545111
trans-1,3-Dichloropropene	U		0.0612	0.200	1	09/18/2020 05:54	WG1545111
2,2-Dichloropropane	U	UJ J0	0.0317	0.100	1	09/18/2020 05:54	WG1545111
Di-isopropyl ether	U		0.0140	0.0400	1	09/18/2020 05:54	WG1545111
Ethylbenzene	U		0.0212	0.100	1	09/18/2020 05:54	WG1545111
Hexachloro-1,3-butadiene	U		0.508	1.00	1	09/18/2020 05:54	WG1545111
Isopropylbenzene	U		0.0345	0.100	1	09/18/2020 05:54	WG1545111
p-Isopropyltoluene	U		0.0932	0.200	1	09/18/2020 05:54	WG1545111
2-Butanone (MEK)	U		0.500	1.00	1	09/18/2020 05:54	WG1545111
Methylene Chloride	U		0.265	1.00	1	09/18/2020 05:54	WG1545111
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	09/18/2020 05:54	WG1545111
Methyl tert-butyl ether	U	UJ J0	0.0118	0.0400	1	09/18/2020 05:54	WG1545111
Naphthalene	U		0.124	0.500	1	09/18/2020 05:54	WG1545111
n-Propylbenzene	U		0.0472	0.200	1	09/18/2020 05:54	WG1545111
Styrene	U		0.109	0.500	1	09/18/2020 05:54	WG1545111
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	09/18/2020 05:54	WG1545111
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	09/18/2020 05:54	WG1545111
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	09/18/2020 05:54	WG1545111
Tetrachloroethene	0.0450	J	0.0280	0.100	1	09/19/2020 02:46	WG1545375
Toluene	1.19		0.0500	0.200	1	09/18/2020 05:54	WG1545111
1,2,3-Trichlorobenzene	U		0.0250	0.500	1	09/18/2020 05:54	WG1545111
1,2,4-Trichlorobenzene	U		0.193	0.500	1	09/18/2020 05:54	WG1545111
1,1,1-Trichloroethane	U		0.0110	0.100	1	09/18/2020 05:54	WG1545111
1,1,2-Trichloroethane	U		0.0353	0.100	1	09/18/2020 05:54	WG1545111
Trichloroethene	0.141		0.0160	0.0400	1	09/19/2020 02:46	WG1545375
Trichlorofluoromethane	U		0.0200	0.100	1	09/18/2020 05:54	WG1545111
1,2,3-Trichloropropane	U		0.204	0.500	1	09/18/2020 05:54	WG1545111
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	09/18/2020 05:54	WG1545111
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	09/18/2020 05:54	WG1545111
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	09/18/2020 05:54	WG1545111
Vinyl chloride	22.6		0.0273	0.100	1	09/18/2020 05:54	WG1545111
Xylenes, Total	U		0.191	0.260	1	09/18/2020 05:54	WG1545111
Ethyl Ether	U	UJ J0	0.0170	0.100	1	09/18/2020 05:54	WG1545111
Tetrahydrofuran	U	UJ J0	0.0900	0.500	1	09/18/2020 05:54	WG1545111
Iodomethane	U	J0	0.242	0.500	1	09/18/2020 05:54	WG1545111
Allyl chloride	U	UJ	0.580	1.00	1	09/18/2020 05:54	WG1545111

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Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Trans-1,4-Dichloro-2-butene	U		0.0560	0.200	1	09/18/2020 05:54	WG1545111
(S) Toluene-d8	*110*			*75.0-131*		*09/18/2020 05:54*	WG1545111
(S) Toluene-d8	*95.6*			*75.0-131*		*09/19/2020 02:46*	WG1545375
(S) 4-Bromofluorobenzene	*91.5*			*67.0-138*		*09/18/2020 05:54*	WG1545111
(S) 4-Bromofluorobenzene	*93.7*			*67.0-138*		*09/19/2020 02:46*	WG1545375
(S) 1,2-Dichloroethane-d4	*100*			*70.0-130*		*09/18/2020 05:54*	WG1545111
(S) 1,2-Dichloroethane-d4	*116*			*70.0-130*		*09/19/2020 02:46*	WG1545375

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Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	284000		8450	20000	1	09/17/2020 15:18	WG1544185

Sample Narrative:

L1262257-05 WG1544185: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	26500		379	1000	1	09/16/2020 23:25	WG1543962
Nitrate	U		48.0	100	1	09/16/2020 23:25	WG1543962
Sulfate	57600		594	5000	1	09/16/2020 23:25	WG1543962

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	2370		102	1000	1	09/18/2020 13:54	WG1545290

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	5320		48.9	100	1	09/20/2020 23:23	WG1544670
Manganese	2120		1.32	5.00	1	09/20/2020 23:23	WG1544670

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch	
Gasoline Range Organics-NWTPH	648 Z, J+		31.6	100	1	09/20/2020 15:29	WG1546048	JC 10/27/2020
(S) a,a,a-Trifluorotoluene(FID)	*91.7*			*78.0-120*		*09/20/2020 15:29*	WG1546048	

Sample Narrative:

L1262257-05 WG1546048: No discernible petroleum pattern present

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	3010		0.287	0.678	1	09/20/2020 15:18	WG1545826
Ethane	U		0.296	1.29	1	09/20/2020 15:18	WG1545826
Ethene	69.9		0.422	1.27	1	09/20/2020 15:18	WG1545826

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U UJ	J0	0.548	1.00	1	09/18/2020 06:12	WG1545111
Acrylonitrile	U UJ	J0	0.0760	0.500	1	09/18/2020 06:12	WG1545111
Benzene	0.0900		0.0160	0.0400	1	09/18/2020 06:12	WG1545111
Bromobenzene	U		0.0420	0.500	1	09/18/2020 06:12	WG1545111
Bromodichloromethane	U		0.0315	0.100	1	09/18/2020 06:12	WG1545111
Bromoform	U		0.239	1.00	1	09/18/2020 06:12	WG1545111
Bromomethane	U		0.148	0.500	1	09/18/2020 06:12	WG1545111
n-Butylbenzene	U		0.153	0.500	1	09/18/2020 06:12	WG1545111
sec-Butylbenzene	U		0.101	0.500	1	09/18/2020 06:12	WG1545111
tert-Butylbenzene	U		0.0620	0.200	1	09/18/2020 06:12	WG1545111

PRB-A17-091520
Collected date/time: 09/15/20 13:30

SAMPLE RESULTS - 05

L1262257

ONE LAB. NATIONWIDE.

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloroethane	U		0.0432	0.200	1	09/18/2020 06:12	WG1545111
Chloroform	U		0.0166	0.100	1	09/18/2020 06:12	WG1545111
Chloromethane	U		0.0556	0.500	1	09/18/2020 06:12	WG1545111
2-Chlorotoluene	U		0.0368	0.100	1	09/18/2020 06:12	WG1545111
4-Chlorotoluene	U		0.0452	0.200	1	09/18/2020 06:12	WG1545111
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	09/18/2020 06:12	WG1545111
1,2-Dibromoethane	U		0.0210	0.100	1	09/18/2020 06:12	WG1545111
Dibromomethane	U UJ	J0	0.0400	0.200	1	09/18/2020 06:12	WG1545111
1,2-Dichlorobenzene	U		0.0580	0.200	1	09/18/2020 06:12	WG1545111
1,3-Dichlorobenzene	U		0.0680	0.200	1	09/18/2020 06:12	WG1545111
1,4-Dichlorobenzene	U		0.0788	0.200	1	09/18/2020 06:12	WG1545111
Dichlorodifluoromethane	U		0.0327	0.100	1	09/18/2020 06:12	WG1545111
1,1-Dichloroethane	U		0.0230	0.100	1	09/18/2020 06:12	WG1545111
1,2-Dichloroethane	U UJ	J0	0.0190	0.100	1	09/18/2020 06:12	WG1545111
1,1-Dichloroethene	4.68		0.0200	0.100	1	09/18/2020 06:12	WG1545111
cis-1,2-Dichloroethene	1400		0.690	2.50	25	09/19/2020 04:02	WG1545375
trans-1,2-Dichloroethene	2.49		0.0572	0.200	1	09/18/2020 06:12	WG1545111
1,2-Dichloropropane	U		0.0508	0.200	1	09/18/2020 06:12	WG1545111
1,1-Dichloropropene	U		0.0280	0.100	1	09/18/2020 06:12	WG1545111
1,3-Dichloropropane	U		0.0700	0.200	1	09/18/2020 06:12	WG1545111
cis-1,3-Dichloropropene	U		0.0271	0.100	1	09/18/2020 06:12	WG1545111
trans-1,3-Dichloropropene	U		0.0612	0.200	1	09/18/2020 06:12	WG1545111
2,2-Dichloropropane	U UJ	J0	0.0317	0.100	1	09/18/2020 06:12	WG1545111
Di-isopropyl ether	U		0.0140	0.0400	1	09/18/2020 06:12	WG1545111
Ethylbenzene	U		0.0212	0.100	1	09/18/2020 06:12	WG1545111
Hexachloro-1,3-butadiene	U		0.508	1.00	1	09/18/2020 06:12	WG1545111
Isopropylbenzene	U		0.0345	0.100	1	09/18/2020 06:12	WG1545111
p-Isopropyltoluene	U		0.0932	0.200	1	09/18/2020 06:12	WG1545111
2-Butanone (MEK)	U		0.500	1.00	1	09/18/2020 06:12	WG1545111
Methylene Chloride	U		0.265	1.00	1	09/18/2020 06:12	WG1545111
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	09/18/2020 06:12	WG1545111
Methyl tert-butyl ether	U UJ	J0	0.0118	0.0400	1	09/18/2020 06:12	WG1545111
Naphthalene	U		0.124	0.500	1	09/18/2020 06:12	WG1545111
n-Propylbenzene	U		0.0472	0.200	1	09/18/2020 06:12	WG1545111
Styrene	U		0.109	0.500	1	09/18/2020 06:12	WG1545111
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	09/18/2020 06:12	WG1545111
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	09/18/2020 06:12	WG1545111
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	09/18/2020 06:12	WG1545111
Tetrachloroethene	U		0.700	2.50	25	09/19/2020 04:02	WG1545375
Toluene	0.403		0.0500	0.200	1	09/18/2020 06:12	WG1545111
1,2,3-Trichlorobenzene	U		0.0250	0.500	1	09/18/2020 06:12	WG1545111
1,2,4-Trichlorobenzene	U		0.193	0.500	1	09/18/2020 06:12	WG1545111
1,1,1-Trichloroethane	U		0.0110	0.100	1	09/18/2020 06:12	WG1545111
1,1,2-Trichloroethane	U		0.0353	0.100	1	09/18/2020 06:12	WG1545111
Trichloroethene	2.46		0.0160	0.0400	1	09/18/2020 06:12	WG1545111
Trichlorofluoromethane	U		0.0200	0.100	1	09/18/2020 06:12	WG1545111
1,2,3-Trichloropropane	U		0.204	0.500	1	09/18/2020 06:12	WG1545111
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	09/18/2020 06:12	WG1545111
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	09/18/2020 06:12	WG1545111
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	09/18/2020 06:12	WG1545111
Vinyl chloride	1270		0.682	2.50	25	09/19/2020 04:02	WG1545375
Xylenes, Total	U		0.191	0.260	1	09/18/2020 06:12	WG1545111
Ethyl Ether	U UJ	J0	0.0170	0.100	1	09/18/2020 06:12	WG1545111
Tetrahydrofuran	0.319 J	J J0	0.0900	0.500	1	09/18/2020 06:12	WG1545111
Iodomethane	U UJ	J0	0.242	0.500	1	09/18/2020 06:12	WG1545111
Allyl chloride	U		0.580	1.00	1	09/18/2020 06:12	WG1545111

JC 10/13/2020

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Trans-1,4-Dichloro-2-butene	U		0.0560	0.200	1	09/18/2020 06:12	WG1545111
(S) Toluene-d8	*114*			*75.0-131*		*09/18/2020 06:12*	WG1545111
(S) Toluene-d8	*94.4*			*75.0-131*		*09/19/2020 04:02*	WG1545375
(S) 4-Bromofluorobenzene	*91.5*			*67.0-138*		*09/18/2020 06:12*	WG1545111
(S) 4-Bromofluorobenzene	*92.3*			*67.0-138*		*09/19/2020 04:02*	WG1545375
(S) 1,2-Dichloroethane-d4	*101*			*70.0-130*		*09/18/2020 06:12*	WG1545111
(S) 1,2-Dichloroethane-d4	*119*			*70.0-130*		*09/19/2020 04:02*	WG1545375

JC 10/13/2020

Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	144000		8450	20000	1	09/17/2020 15:36	WG1544185

Sample Narrative:

L1262257-06 WG1544185: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	99500		379	1000	1	09/17/2020 00:16	WG1543962
Nitrate	U		48.0	100	1	09/17/2020 00:16	WG1543962
Sulfate	79400		594	5000	1	09/17/2020 00:16	WG1543962

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	6390		102	1000	1	09/18/2020 14:23	WG1545290

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	2110		48.9	100	1	09/20/2020 23:27	WG1544670
Manganese	462		1.32	5.00	1	09/20/2020 23:27	WG1544670

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	50.1	~~B J~~	31.6	100	1	09/20/2020 15:50	WG1546048
(S) a,a,a-Trifluorotoluene(FID)	*91.5*			*78.0-120*		*09/20/2020 15:50*	WG1546048

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	906		0.287	0.678	1	09/20/2020 15:20	WG1545826
Ethane	U		0.296	1.29	1	09/20/2020 15:20	WG1545826
Ethene	U		0.422	1.27	1	09/20/2020 15:20	WG1545826

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	0.704	J	0.548	1.00	1	09/24/2020 15:43	WG1547998
Acrylonitrile	U		0.0760	0.500	1	09/24/2020 15:43	WG1547998
Benzene	0.0250	J	0.0160	0.0400	1	09/24/2020 15:43	WG1547998
Bromobenzene	U		0.0420	0.500	1	09/24/2020 15:43	WG1547998
Bromodichloromethane	U		0.0315	0.100	1	09/24/2020 15:43	WG1547998
Bromoform	U		0.239	1.00	1	09/24/2020 15:43	WG1547998
Bromomethane	U	UJ J0	0.148	0.500	1	09/24/2020 15:43	WG1547998
n-Butylbenzene	U		0.153	0.500	1	09/24/2020 15:43	WG1547998
sec-Butylbenzene	U		0.101	0.500	1	09/24/2020 15:43	WG1547998
tert-Butylbenzene	U		0.0620	0.200	1	09/24/2020 15:43	WG1547998
Carbon tetrachloride	U		0.0432	0.200	1	09/24/2020 15:43	WG1547998
Chlorobenzene	U		0.0229	0.100	1	09/24/2020 15:43	WG1547998
Chlorodibromomethane	U		0.0180	0.100	1	09/24/2020 15:43	WG1547998

JC 10/13/2020

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chloroethane	U UJ	J0	0.0432	0.200	1	09/24/2020 15:43	WG1547998
Chloroform	U		0.0166	0.100	1	09/24/2020 15:43	WG1547998
Chloromethane	U UJ	J0	0.0556	0.500	1	09/24/2020 15:43	WG1547998
2-Chlorotoluene	U		0.0368	0.100	1	09/24/2020 15:43	WG1547998
4-Chlorotoluene	U		0.0452	0.200	1	09/24/2020 15:43	WG1547998
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	09/24/2020 15:43	WG1547998
1,2-Dibromoethane	U		0.0210	0.100	1	09/24/2020 15:43	WG1547998
Dibromomethane	U		0.0400	0.200	1	09/24/2020 15:43	WG1547998
1,2-Dichlorobenzene	U		0.0580	0.200	1	09/24/2020 15:43	WG1547998
1,3-Dichlorobenzene	U		0.0680	0.200	1	09/24/2020 15:43	WG1547998
1,4-Dichlorobenzene	U		0.0788	0.200	1	09/24/2020 15:43	WG1547998
Dichlorodifluoromethane	U		0.0327	0.100	1	09/24/2020 15:43	WG1547998
1,1-Dichloroethane	U		0.0230	0.100	1	09/24/2020 15:43	WG1547998
1,2-Dichloroethane	U		0.0190	0.100	1	09/24/2020 15:43	WG1547998
1,1-Dichloroethene	0.0420	J	0.0200	0.100	1	09/24/2020 15:43	WG1547998
cis-1,2-Dichloroethene	5.03		0.0276	0.100	1	09/24/2020 15:43	WG1547998
trans-1,2-Dichloroethene	U		0.0572	0.200	1	09/24/2020 15:43	WG1547998
1,2-Dichloropropane	U		0.0508	0.200	1	09/24/2020 15:43	WG1547998
1,1-Dichloropropene	U		0.0280	0.100	1	09/24/2020 15:43	WG1547998
1,3-Dichloropropane	U		0.0700	0.200	1	09/24/2020 15:43	WG1547998
cis-1,3-Dichloropropene	U		0.0271	0.100	1	09/24/2020 15:43	WG1547998
trans-1,3-Dichloropropene	U		0.0612	0.200	1	09/24/2020 15:43	WG1547998
2,2-Dichloropropane	U		0.0317	0.100	1	09/24/2020 15:43	WG1547998
Di-isopropyl ether	U		0.0140	0.0400	1	09/24/2020 15:43	WG1547998
Ethylbenzene	0.0230	J	0.0212	0.100	1	09/24/2020 15:43	WG1547998
Hexachloro-1,3-butadiene	U		0.508	1.00	1	09/24/2020 15:43	WG1547998
Isopropylbenzene	U		0.0345	0.100	1	09/24/2020 15:43	WG1547998
p-Isopropyltoluene	U		0.0932	0.200	1	09/24/2020 15:43	WG1547998
2-Butanone (MEK)	U		0.500	1.00	1	09/24/2020 15:43	WG1547998
Methylene Chloride	U		0.265	1.00	1	09/24/2020 15:43	WG1547998
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	09/24/2020 15:43	WG1547998
Methyl tert-butyl ether	U		0.0118	0.0400	1	09/24/2020 15:43	WG1547998
Naphthalene	U		0.124	0.500	1	09/24/2020 15:43	WG1547998
n-Propylbenzene	U		0.0472	0.200	1	09/24/2020 15:43	WG1547998
Styrene	U		0.109	0.500	1	09/24/2020 15:43	WG1547998
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	09/24/2020 15:43	WG1547998
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	09/24/2020 15:43	WG1547998
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	09/24/2020 15:43	WG1547998
Tetrachloroethene	0.158		0.0280	0.100	1	09/24/2020 15:43	WG1547998
Toluene	1.57		0.0500	0.200	1	09/24/2020 15:43	WG1547998
1,2,3-Trichlorobenzene	U		0.0250	0.500	1	09/24/2020 15:43	WG1547998
1,2,4-Trichlorobenzene	U		0.193	0.500	1	09/24/2020 15:43	WG1547998
1,1,1-Trichloroethane	U		0.0110	0.100	1	09/24/2020 15:43	WG1547998
1,1,2-Trichloroethane	U		0.0353	0.100	1	09/24/2020 15:43	WG1547998
Trichloroethene	0.312		0.0160	0.0400	1	09/24/2020 15:43	WG1547998
Trichlorofluoromethane	U UJ	J0	0.0200	0.100	1	09/24/2020 15:43	WG1547998
1,2,3-Trichloropropane	U		0.204	0.500	1	09/24/2020 15:43	WG1547998
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	09/24/2020 15:43	WG1547998
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	09/24/2020 15:43	WG1547998
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	09/24/2020 15:43	WG1547998
Vinyl chloride	30.6 J	J0	0.0273	0.100	1	09/24/2020 15:43	WG1547998
Xylenes, Total	U		0.191	0.260	1	09/24/2020 15:43	WG1547998
Ethyl Ether	U		0.0170	0.100	1	09/24/2020 15:43	WG1547998
Tetrahydrofuran	U		0.0900	0.500	1	09/24/2020 15:43	WG1547998
Iodomethane	U		0.242	0.500	1	09/24/2020 15:43	WG1547998
Allyl chloride	U		0.580	1.00	1	09/24/2020 15:43	WG1547998

JC
10/13/2020

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l		Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Trans-1,4-Dichloro-2-butene	0.0570	J	J J0	0.0560	0.200	1	09/24/2020 15:43	WG1547998
(S) Toluene-d8	*112*				*75.0-131*		*09/24/2020 15:43*	WG1547998
(S) 4-Bromofluorobenzene	*90.5*				*67.0-138*		*09/24/2020 15:43*	WG1547998
(S) 1,2-Dichloroethane-d4	*109*				*70.0-130*		*09/24/2020 15:43*	WG1547998

JC
10/13/2020

SAMPLE RESULTS - 07

L1262257

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Wet Chemistry by Method 2320 B-2011

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Alkalinity	95700		8450	20000	1	09/17/2020 15:45	WG1544185

Sample Narrative:

L1262257-07 WG1544185: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 9056A

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Chloride	92400		379	1000	1	09/17/2020 00:42	WG1543962
Nitrate	U		48.0	100	1	09/17/2020 00:42	WG1543962
Sulfate	85800		594	5000	1	09/17/2020 00:42	WG1543962

Wet Chemistry by Method 9060A

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
TOC (Total Organic Carbon)	18100		102	1000	1	09/18/2020 14:37	WG1545290

Metals (ICPMS) by Method 6020B

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Iron	15400		48.9	100	1	09/20/2020 23:31	WG1544670
Manganese	1070		1.32	5.00	1	09/20/2020 23:31	WG1544670

Volatile Organic Compounds (GC) by Method NWTPHGX

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Gasoline Range Organics-NWTPH	52.5	~~B J~~	31.6	100	1	09/20/2020 16:10	WG1546048
(S) a,a,a-Trifluorotoluene(FID)	*92.5*			*78.0-120*		*09/20/2020 16:10*	WG1546048

Volatile Organic Compounds (GC) by Method RSK175

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Methane	1260		0.287	0.678	1	09/20/2020 15:24	WG1545826
Ethane	U		0.296	1.29	1	09/20/2020 15:24	WG1545826
Ethene	8.21		0.422	1.27	1	09/20/2020 15:24	WG1545826

Volatile Organic Compounds (GC/MS) by Method 8260D

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Acetone	0.701	J	0.548	1.00	1	09/24/2020 16:02	WG1547998
Acrylonitrile	U		0.0760	0.500	1	09/24/2020 16:02	WG1547998
Benzene	0.0310	J	0.0160	0.0400	1	09/24/2020 16:02	WG1547998
Bromobenzene	U		0.0420	0.500	1	09/24/2020 16:02	WG1547998
Bromodichloromethane	U		0.0315	0.100	1	09/24/2020 16:02	WG1547998
Bromoform	U		0.239	1.00	1	09/24/2020 16:02	WG1547998
Bromomethane	U	UJ J0	0.148	0.500	1	09/24/2020 16:02	WG1547998
n-Butylbenzene	U		0.153	0.500	1	09/24/2020 16:02	WG1547998
sec-Butylbenzene	U		0.101	0.500	1	09/24/2020 16:02	WG1547998
tert-Butylbenzene	U		0.0620	0.200	1	09/24/2020 16:02	WG1547998
Carbon tetrachloride	U		0.0432	0.200	1	09/24/2020 16:02	WG1547998
Chlorobenzene	U		0.0229	0.100	1	09/24/2020 16:02	WG1547998
Chlorodibromomethane	U		0.0180	0.100	1	09/24/2020 16:02	WG1547998

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Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloroethane	1.24 J	J0	0.0432	0.200	1	09/24/2020 16:02	WG1547998
Chloroform	0.0170 J	J	0.0166	0.100	1	09/24/2020 16:02	WG1547998
Chloromethane	U UJ	J0	0.0556	0.500	1	09/24/2020 16:02	WG1547998
2-Chlorotoluene	U		0.0368	0.100	1	09/24/2020 16:02	WG1547998
4-Chlorotoluene	U		0.0452	0.200	1	09/24/2020 16:02	WG1547998
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	09/24/2020 16:02	WG1547998
1,2-Dibromoethane	U		0.0210	0.100	1	09/24/2020 16:02	WG1547998
Dibromomethane	U		0.0400	0.200	1	09/24/2020 16:02	WG1547998
1,2-Dichlorobenzene	U		0.0580	0.200	1	09/24/2020 16:02	WG1547998
1,3-Dichlorobenzene	U		0.0680	0.200	1	09/24/2020 16:02	WG1547998
1,4-Dichlorobenzene	U		0.0788	0.200	1	09/24/2020 16:02	WG1547998
Dichlorodifluoromethane	U		0.0327	0.100	1	09/24/2020 16:02	WG1547998
1,1-Dichloroethane	U		0.0230	0.100	1	09/24/2020 16:02	WG1547998
1,2-Dichloroethane	U		0.0190	0.100	1	09/24/2020 16:02	WG1547998
1,1-Dichloroethene	0.0500	J	0.0200	0.100	1	09/24/2020 16:02	WG1547998
cis-1,2-Dichloroethene	9.92		0.0276	0.100	1	09/24/2020 16:02	WG1547998
trans-1,2-Dichloroethene	U		0.0572	0.200	1	09/24/2020 16:02	WG1547998
1,2-Dichloropropane	U		0.0508	0.200	1	09/24/2020 16:02	WG1547998
1,1-Dichloropropene	U		0.0280	0.100	1	09/24/2020 16:02	WG1547998
1,3-Dichloropropane	U		0.0700	0.200	1	09/24/2020 16:02	WG1547998
cis-1,3-Dichloropropene	U		0.0271	0.100	1	09/24/2020 16:02	WG1547998
trans-1,3-Dichloropropene	U		0.0612	0.200	1	09/24/2020 16:02	WG1547998
2,2-Dichloropropane	U		0.0317	0.100	1	09/24/2020 16:02	WG1547998
Di-isopropyl ether	U		0.0140	0.0400	1	09/24/2020 16:02	WG1547998
Ethylbenzene	0.0230	J	0.0212	0.100	1	09/24/2020 16:02	WG1547998
Hexachloro-1,3-butadiene	U		0.508	1.00	1	09/24/2020 16:02	WG1547998
Isopropylbenzene	U		0.0345	0.100	1	09/24/2020 16:02	WG1547998
p-Isopropyltoluene	U		0.0932	0.200	1	09/24/2020 16:02	WG1547998
2-Butanone (MEK)	U		0.500	1.00	1	09/24/2020 16:02	WG1547998
Methylene Chloride	U		0.265	1.00	1	09/24/2020 16:02	WG1547998
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	09/24/2020 16:02	WG1547998
Methyl tert-butyl ether	U		0.0118	0.0400	1	09/24/2020 16:02	WG1547998
Naphthalene	U		0.124	0.500	1	09/24/2020 16:02	WG1547998
n-Propylbenzene	U		0.0472	0.200	1	09/24/2020 16:02	WG1547998
Styrene	U		0.109	0.500	1	09/24/2020 16:02	WG1547998
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	09/24/2020 16:02	WG1547998
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	09/24/2020 16:02	WG1547998
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	09/24/2020 16:02	WG1547998
Tetrachloroethene	0.187		0.0280	0.100	1	09/24/2020 16:02	WG1547998
Toluene	1.64		0.0500	0.200	1	09/24/2020 16:02	WG1547998
1,2,3-Trichlorobenzene	U		0.0250	0.500	1	09/24/2020 16:02	WG1547998
1,2,4-Trichlorobenzene	U		0.193	0.500	1	09/24/2020 16:02	WG1547998
1,1,1-Trichloroethane	U		0.0110	0.100	1	09/24/2020 16:02	WG1547998
1,1,2-Trichloroethane	U		0.0353	0.100	1	09/24/2020 16:02	WG1547998
Trichloroethene	0.252		0.0160	0.0400	1	09/24/2020 16:02	WG1547998
Trichlorofluoromethane	U UJ	J0	0.0200	0.100	1	09/24/2020 16:02	WG1547998
1,2,3-Trichloropropane	U		0.204	0.500	1	09/24/2020 16:02	WG1547998
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	09/24/2020 16:02	WG1547998
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	09/24/2020 16:02	WG1547998
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	09/24/2020 16:02	WG1547998
Vinyl chloride	7.99 J	J0	0.0273	0.100	1	09/24/2020 16:02	WG1547998
Xylenes, Total	U		0.191	0.260	1	09/24/2020 16:02	WG1547998
Ethyl Ether	U		0.0170	0.100	1	09/24/2020 16:02	WG1547998
Tetrahydrofuran	U		0.0900	0.500	1	09/24/2020 16:02	WG1547998
Iodomethane	U		0.242	0.500	1	09/24/2020 16:02	WG1547998
Allyl chloride	U		0.580	1.00	1	09/24/2020 16:02	WG1547998

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Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Trans-1,4-Dichloro-2-butene	U		0.0560	0.200	1	09/24/2020 16:02	WG1547998
(S) Toluene-d8	*110*			*75.0-131*		*09/24/2020 16:02*	WG1547998
(S) 4-Bromofluorobenzene	*87.6*			*67.0-138*		*09/24/2020 16:02*	WG1547998
(S) 1,2-Dichloroethane-d4	*108*			*70.0-130*		*09/24/2020 16:02*	WG1547998

JC 10/13/2020

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	252000		8450	20000	1	09/18/2020 16:54	WG1544723

Sample Narrative:

L1262881-01 WG1544723: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	31100		379	1000	1	09/17/2020 13:14	WG1544722
Nitrate	U		48.0	100	1	09/17/2020 13:14	WG1544722
Sulfate	34200		594	5000	1	09/17/2020 13:14	WG1544722

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	5670		102	1000	1	09/19/2020 19:03	WG1545906

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	4790		48.9	100	1	09/22/2020 20:43	WG1544684
Manganese	823		1.32	5.00	1	09/22/2020 20:43	WG1544684

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	1130	Z, J+	31.6	100	1	09/20/2020 17:13	WG1546048
(S) a,a,a-Trifluorotoluene(FID)	*94.0*			*78.0-120*		*09/20/2020 17:13*	WG1546048

Sample Narrative:

L1262881-01 WG1546048: No discernible petroleum pattern present

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	1710		0.287	0.678	1	09/24/2020 13:45	WG1548395
Ethane	69.7		0.296	1.29	1	09/23/2020 11:13	WG1546968
Ethene	37.1		0.422	1.27	1	09/23/2020 11:13	WG1546968

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	9.03		0.548	1.00	1	09/24/2020 16:21	WG1547998
Acrylonitrile	U		0.0760	0.500	1	09/24/2020 16:21	WG1547998
Benzene	0.161		0.0160	0.0400	1	09/24/2020 16:21	WG1547998
Bromobenzene	U		0.0420	0.500	1	09/24/2020 16:21	WG1547998
Bromodichloromethane	U		0.0315	0.100	1	09/24/2020 16:21	WG1547998
Bromoform	U		0.239	1.00	1	09/24/2020 16:21	WG1547998
Bromomethane	U	UJ J0	0.148	0.500	1	09/24/2020 16:21	WG1547998
n-Butylbenzene	U		0.153	0.500	1	09/24/2020 16:21	WG1547998
sec-Butylbenzene	U		0.101	0.500	1	09/24/2020 16:21	WG1547998
tert-Butylbenzene	U		0.0620	0.200	1	09/24/2020 16:21	WG1547998

JC 10/27/2020

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l		Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloroethane	U	UJ	J0	0.0432	0.200	1	09/24/2020 16:21	WG1547998
Chloroform	U			0.0166	0.100	1	09/24/2020 16:21	WG1547998
Chloromethane	U	UJ	J0	0.0556	0.500	1	09/24/2020 16:21	WG1547998
2-Chlorotoluene	U			0.0368	0.100	1	09/24/2020 16:21	WG1547998
4-Chlorotoluene	U			0.0452	0.200	1	09/24/2020 16:21	WG1547998
1,2-Dibromo-3-Chloropropane	U			0.204	1.00	1	09/24/2020 16:21	WG1547998
1,2-Dibromoethane	U			0.0210	0.100	1	09/24/2020 16:21	WG1547998
Dibromomethane	U			0.0400	0.200	1	09/24/2020 16:21	WG1547998
1,2-Dichlorobenzene	U			0.0580	0.200	1	09/24/2020 16:21	WG1547998
1,3-Dichlorobenzene	U			0.0680	0.200	1	09/24/2020 16:21	WG1547998
1,4-Dichlorobenzene	U			0.0788	0.200	1	09/24/2020 16:21	WG1547998
Dichlorodifluoromethane	U			0.0327	0.100	1	09/24/2020 16:21	WG1547998
1,1-Dichloroethane	U			0.0230	0.100	1	09/24/2020 16:21	WG1547998
1,2-Dichloroethane	U			0.0190	0.100	1	09/24/2020 16:21	WG1547998
1,1-Dichloroethene	4.61			0.0200	0.100	1	09/24/2020 16:21	WG1547998
cis-1,2-Dichloroethene	2000			1.38	5.00	50	09/26/2020 00:31	WG1548950
trans-1,2-Dichloroethene	7.43			0.0572	0.200	1	09/24/2020 16:21	WG1547998
1,2-Dichloropropane	U			0.0508	0.200	1	09/24/2020 16:21	WG1547998
1,1-Dichloropropene	U			0.0280	0.100	1	09/24/2020 16:21	WG1547998
1,3-Dichloropropane	U			0.0700	0.200	1	09/24/2020 16:21	WG1547998
cis-1,3-Dichloropropene	U			0.0271	0.100	1	09/24/2020 16:21	WG1547998
trans-1,3-Dichloropropene	U			0.0612	0.200	1	09/24/2020 16:21	WG1547998
2,2-Dichloropropane	U			0.0317	0.100	1	09/24/2020 16:21	WG1547998
Di-isopropyl ether	U			0.0140	0.0400	1	09/24/2020 16:21	WG1547998
Ethylbenzene	U			0.0212	0.100	1	09/24/2020 16:21	WG1547998
Hexachloro-1,3-butadiene	U			0.508	1.00	1	09/24/2020 16:21	WG1547998
Isopropylbenzene	U			0.0345	0.100	1	09/24/2020 16:21	WG1547998
p-Isopropyltoluene	U			0.0932	0.200	1	09/24/2020 16:21	WG1547998
2-Butanone (MEK)	4.34	J	J0	0.500	1.00	1	09/24/2020 16:21	WG1547998
Methylene Chloride	U			0.265	1.00	1	09/24/2020 16:21	WG1547998
4-Methyl-2-pentanone (MIBK)	3.43	J	J0	0.400	1.00	1	09/24/2020 16:21	WG1547998
Methyl tert-butyl ether	U			0.0118	0.0400	1	09/24/2020 16:21	WG1547998
Naphthalene	U			0.124	0.500	1	09/24/2020 16:21	WG1547998
n-Propylbenzene	U			0.0472	0.200	1	09/24/2020 16:21	WG1547998
Styrene	U			0.109	0.500	1	09/24/2020 16:21	WG1547998
1,1,1,2-Tetrachloroethane	U			0.0200	0.100	1	09/24/2020 16:21	WG1547998
1,1,2,2-Tetrachloroethane	U			0.0156	0.100	1	09/24/2020 16:21	WG1547998
1,1,2-Trichlorotrifluoroethane	U			0.0270	0.100	1	09/24/2020 16:21	WG1547998
Tetrachloroethene	454			1.40	5.00	50	09/26/2020 00:31	WG1548950
Toluene	0.148	U	~~J~~	0.0500	0.200	1	09/24/2020 16:21	WG1547998
1,2,3-Trichlorobenzene	U			0.0250	0.500	1	09/24/2020 16:21	WG1547998
1,2,4-Trichlorobenzene	U			0.193	0.500	1	09/24/2020 16:21	WG1547998
1,1,1-Trichloroethane	U			0.0110	0.100	1	09/24/2020 16:21	WG1547998
1,1,2-Trichloroethane	U			0.0353	0.100	1	09/24/2020 16:21	WG1547998
Trichloroethene	320			0.800	2.00	50	09/27/2020 19:11	WG1550166
Trichlorofluoromethane	0.0200	J	J J0	0.0200	0.100	1	09/24/2020 16:21	WG1547998
1,2,3-Trichloropropane	U			0.204	0.500	1	09/24/2020 16:21	WG1547998
1,2,4-Trimethylbenzene	U			0.0464	0.200	1	09/24/2020 16:21	WG1547998
1,2,3-Trimethylbenzene	U			0.0460	0.200	1	09/24/2020 16:21	WG1547998
1,3,5-Trimethylbenzene	U			0.0432	0.200	1	09/24/2020 16:21	WG1547998
Vinyl chloride	234			1.36	5.00	50	09/26/2020 00:31	WG1548950
Xylenes, Total	U			0.191	0.260	1	09/24/2020 16:21	WG1547998
Ethyl Ether	U			0.0170	0.100	1	09/24/2020 16:21	WG1547998
Tetrahydrofuran	38.3			0.0900	0.500	1	09/24/2020 16:21	WG1547998
Iodomethane	U			0.242	0.500	1	09/24/2020 16:21	WG1547998
Allyl chloride	U			0.580	1.00	1	09/24/2020 16:21	WG1547998

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Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Trans-1,4-Dichloro-2-butene	U		0.0560	0.200	1	09/24/2020 16:21	WG1547998
(S) Toluene-d8	*112*			*75.0-131*		*09/24/2020 16:21*	WG1547998
(S) Toluene-d8	*105*			*75.0-131*		*09/26/2020 00:31*	WG1548950
(S) Toluene-d8	*102*			*75.0-131*		*09/27/2020 19:11*	WG1550166
(S) 4-Bromofluorobenzene	*87.9*			*67.0-138*		*09/24/2020 16:21*	WG1547998
(S) 4-Bromofluorobenzene	*103*			*67.0-138*		*09/26/2020 00:31*	WG1548950
(S) 4-Bromofluorobenzene	*97.6*			*67.0-138*		*09/27/2020 19:11*	WG1550166
(S) 1,2-Dichloroethane-d4	*108*			*70.0-130*		*09/24/2020 16:21*	WG1547998
(S) 1,2-Dichloroethane-d4	*99.1*			*70.0-130*		*09/26/2020 00:31*	WG1548950
(S) 1,2-Dichloroethane-d4	*101*			*70.0-130*		*09/27/2020 19:11*	WG1550166

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Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	238000		8450	20000	1	09/18/2020 17:02	WG1544723

Sample Narrative:

L1262881-02 WG1544723: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	24700		379	1000	1	09/17/2020 13:27	WG1544722
Nitrate	U		48.0	100	1	09/17/2020 13:27	WG1544722
Sulfate	112000		2970	25000	5	09/17/2020 15:35	WG1544722

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	3970		102	1000	1	09/19/2020 19:23	WG1545906

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	2800		48.9	100	1	09/22/2020 20:47	WG1544684
Manganese	749		1.32	5.00	1	09/22/2020 20:47	WG1544684

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	69.2 U	~~B J~~	31.6	100	1	09/20/2020 17:34	WG1546048
(S) a,a,a-Trifluorotoluene(FID)	*92.0*			*78.0-120*		*09/20/2020 17:34*	WG1546048

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	2350		0.287	0.678	1	09/23/2020 11:16	WG1546968
Ethane	U		0.296	1.29	1	09/23/2020 11:16	WG1546968
Ethene	15.2		0.422	1.27	1	09/23/2020 11:16	WG1546968

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	0.795	J	0.548	1.00	1	09/24/2020 16:41	WG1547998
Acrylonitrile	U		0.0760	0.500	1	09/24/2020 16:41	WG1547998
Benzene	0.0180	J	0.0160	0.0400	1	09/24/2020 16:41	WG1547998
Bromobenzene	U		0.0420	0.500	1	09/24/2020 16:41	WG1547998
Bromodichloromethane	U		0.0315	0.100	1	09/24/2020 16:41	WG1547998
Bromoform	U		0.239	1.00	1	09/24/2020 16:41	WG1547998
Bromomethane	U UJ	J0	0.148	0.500	1	09/24/2020 16:41	WG1547998
n-Butylbenzene	U		0.153	0.500	1	09/24/2020 16:41	WG1547998
sec-Butylbenzene	U		0.101	0.500	1	09/24/2020 16:41	WG1547998
tert-Butylbenzene	U		0.0620	0.200	1	09/24/2020 16:41	WG1547998
Carbon tetrachloride	U		0.0432	0.200	1	09/24/2020 16:41	WG1547998
Chlorobenzene	U		0.0229	0.100	1	09/24/2020 16:41	WG1547998
Chlorodibromomethane	U		0.0180	0.100	1	09/24/2020 16:41	WG1547998

JC 10/13/2020

PRB-D11-091620
Collected date/time: 09/16/20 09:20

SAMPLE RESULTS - 02

L1262881

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l		Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloroethane	0.273	J	J0	0.0432	0.200	1	09/24/2020 16:41	WG1547998
Chloroform	0.0710	J	J	0.0166	0.100	1	09/24/2020 16:41	WG1547998
Chloromethane	U	UJ	J0	0.0556	0.500	1	09/24/2020 16:41	WG1547998
2-Chlorotoluene	U			0.0368	0.100	1	09/24/2020 16:41	WG1547998
4-Chlorotoluene	U			0.0452	0.200	1	09/24/2020 16:41	WG1547998
1,2-Dibromo-3-Chloropropane	U			0.204	1.00	1	09/24/2020 16:41	WG1547998
1,2-Dibromoethane	U			0.0210	0.100	1	09/24/2020 16:41	WG1547998
Dibromomethane	U			0.0400	0.200	1	09/24/2020 16:41	WG1547998
1,2-Dichlorobenzene	U			0.0580	0.200	1	09/24/2020 16:41	WG1547998
1,3-Dichlorobenzene	U			0.0680	0.200	1	09/24/2020 16:41	WG1547998
1,4-Dichlorobenzene	U			0.0788	0.200	1	09/24/2020 16:41	WG1547998
Dichlorodifluoromethane	U			0.0327	0.100	1	09/24/2020 16:41	WG1547998
1,1-Dichloroethane	U			0.0230	0.100	1	09/24/2020 16:41	WG1547998
1,2-Dichloroethane	U			0.0190	0.100	1	09/24/2020 16:41	WG1547998
1,1-Dichloroethene	0.0230		J	0.0200	0.100	1	09/24/2020 16:41	WG1547998
cis-1,2-Dichloroethene	6.63			0.0276	0.100	1	09/25/2020 23:30	WG1548950
trans-1,2-Dichloroethene	U			0.0572	0.200	1	09/24/2020 16:41	WG1547998
1,2-Dichloropropane	U			0.0508	0.200	1	09/24/2020 16:41	WG1547998
1,1-Dichloropropene	U			0.0280	0.100	1	09/24/2020 16:41	WG1547998
1,3-Dichloropropane	U			0.0700	0.200	1	09/24/2020 16:41	WG1547998
cis-1,3-Dichloropropene	U			0.0271	0.100	1	09/24/2020 16:41	WG1547998
trans-1,3-Dichloropropene	U			0.0612	0.200	1	09/24/2020 16:41	WG1547998
2,2-Dichloropropane	U			0.0317	0.100	1	09/24/2020 16:41	WG1547998
Di-isopropyl ether	U			0.0140	0.0400	1	09/24/2020 16:41	WG1547998
Ethylbenzene	U			0.0212	0.100	1	09/24/2020 16:41	WG1547998
Hexachloro-1,3-butadiene	U			0.508	1.00	1	09/24/2020 16:41	WG1547998
Isopropylbenzene	U			0.0345	0.100	1	09/24/2020 16:41	WG1547998
p-Isopropyltoluene	U			0.0932	0.200	1	09/24/2020 16:41	WG1547998
2-Butanone (MEK)	U			0.500	1.00	1	09/24/2020 16:41	WG1547998
Methylene Chloride	U			0.265	1.00	1	09/24/2020 16:41	WG1547998
4-Methyl-2-pentanone (MIBK)	U			0.400	1.00	1	09/24/2020 16:41	WG1547998
Methyl tert-butyl ether	U			0.0118	0.0400	1	09/24/2020 16:41	WG1547998
Naphthalene	U			0.124	0.500	1	09/24/2020 16:41	WG1547998
n-Propylbenzene	U			0.0472	0.200	1	09/24/2020 16:41	WG1547998
Styrene	U			0.109	0.500	1	09/24/2020 16:41	WG1547998
1,1,1,2-Tetrachloroethane	U			0.0200	0.100	1	09/24/2020 16:41	WG1547998
1,1,2,2-Tetrachloroethane	U			0.0156	0.100	1	09/24/2020 16:41	WG1547998
1,1,2-Trichlorotrifluoroethane	U			0.0270	0.100	1	09/24/2020 16:41	WG1547998
Tetrachloroethene	U			0.0280	0.100	1	09/25/2020 23:30	WG1548950
Toluene	0.0930	U	~~J~~	0.0500	0.200	1	09/24/2020 16:41	WG1547998
1,2,3-Trichlorobenzene	U			0.0250	0.500	1	09/24/2020 16:41	WG1547998
1,2,4-Trichlorobenzene	U			0.193	0.500	1	09/24/2020 16:41	WG1547998
1,1,1-Trichloroethane	U			0.0110	0.100	1	09/24/2020 16:41	WG1547998
1,1,2-Trichloroethane	U			0.0353	0.100	1	09/24/2020 16:41	WG1547998
Trichloroethene	U			0.0160	0.0400	1	09/27/2020 18:10	WG1550166
Trichlorofluoromethane	U	UJ	J0	0.0200	0.100	1	09/24/2020 16:41	WG1547998
1,2,3-Trichloropropane	U			0.204	0.500	1	09/24/2020 16:41	WG1547998
1,2,4-Trimethylbenzene	U			0.0464	0.200	1	09/24/2020 16:41	WG1547998
1,2,3-Trimethylbenzene	U			0.0460	0.200	1	09/24/2020 16:41	WG1547998
1,3,5-Trimethylbenzene	U			0.0432	0.200	1	09/24/2020 16:41	WG1547998
Vinyl chloride	6.73			0.0273	0.100	1	09/25/2020 23:30	WG1548950
Xylenes, Total	U			0.191	0.260	1	09/24/2020 16:41	WG1547998
Ethyl Ether	U			0.0170	0.100	1	09/24/2020 16:41	WG1547998
Tetrahydrofuran	U			0.0900	0.500	1	09/24/2020 16:41	WG1547998
Iodomethane	U			0.242	0.500	1	09/24/2020 16:41	WG1547998
Allyl chloride	U			0.580	1.00	1	09/24/2020 16:41	WG1547998

JC 10/13/2020

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Trans-1,4-Dichloro-2-butene	U		0.0560	0.200	1	09/24/2020 16:41	WG1547998
(S) Toluene-d8	*113*			*75.0-131*		*09/24/2020 16:41*	WG1547998
(S) Toluene-d8	*103*			*75.0-131*		*09/25/2020 23:30*	WG1548950
(S) Toluene-d8	*102*			*75.0-131*		*09/27/2020 18:10*	WG1550166
(S) 4-Bromofluorobenzene	*87.8*			*67.0-138*		*09/24/2020 16:41*	WG1547998
(S) 4-Bromofluorobenzene	*102*			*67.0-138*		*09/25/2020 23:30*	WG1548950
(S) 4-Bromofluorobenzene	*100*			*67.0-138*		*09/27/2020 18:10*	WG1550166
(S) 1,2-Dichloroethane-d4	*113*			*70.0-130*		*09/24/2020 16:41*	WG1547998
(S) 1,2-Dichloroethane-d4	*99.8*			*70.0-130*		*09/25/2020 23:30*	WG1548950
(S) 1,2-Dichloroethane-d4	*103*			*70.0-130*		*09/27/2020 18:10*	WG1550166

JC 10/13/2020

PRB-B11-091620
Collected date/time: 09/16/20 10:25

SAMPLE RESULTS - 03

L1262881

Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	450000		8450	20000	1	09/18/2020 17:20	WG1544723

Sample Narrative:

L1262881-03 WG1544723: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	53800		379	1000	1	09/17/2020 14:06	WG1544722
Nitrate	U		48.0	100	1	09/17/2020 14:06	WG1544722
Sulfate	189000		2970	25000	5	09/17/2020 15:48	WG1544722

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	4770		102	1000	1	09/19/2020 19:43	WG1545906

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	5400		48.9	100	1	09/22/2020 20:51	WG1544684
Manganese	812		1.32	5.00	1	09/22/2020 20:51	WG1544684

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	274	Z, J+ ~~B~~	31.6	100	1	09/20/2020 17:55	WG1546048
(S) a,a,a-Trifluorotoluene(FID)	*92.8*			*78.0-120*		*09/20/2020 17:55*	WG1546048

Sample Narrative:

L1262881-03 WG1546048: No discernible petroleum pattern present

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	1480		0.287	0.678	1	09/24/2020 13:49	WG1548395
Ethane	277		0.296	1.29	1	09/23/2020 11:18	WG1546968
Ethene	211		0.422	1.27	1	09/23/2020 11:18	WG1546968

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	1.24		0.548	1.00	1	09/24/2020 17:00	WG1547998
Acrylonitrile	U		0.0760	0.500	1	09/24/2020 17:00	WG1547998
Benzene	0.118		0.0160	0.0400	1	09/24/2020 17:00	WG1547998
Bromobenzene	U		0.0420	0.500	1	09/24/2020 17:00	WG1547998
Bromodichloromethane	U		0.0315	0.100	1	09/24/2020 17:00	WG1547998
Bromoform	U		0.239	1.00	1	09/24/2020 17:00	WG1547998
Bromomethane	U	UJ J0	0.148	0.500	1	09/24/2020 17:00	WG1547998
n-Butylbenzene	U		0.153	0.500	1	09/24/2020 17:00	WG1547998
sec-Butylbenzene	U		0.101	0.500	1	09/24/2020 17:00	WG1547998
tert-Butylbenzene	U		0.0620	0.200	1	09/24/2020 17:00	WG1547998

JC 10/27/2020

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l		Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloroethane	U	UJ	J0	0.0432	0.200	1	09/24/2020 17:00	WG1547998
Chloroform	U			0.0166	0.100	1	09/24/2020 17:00	WG1547998
Chloromethane	U	UJ	J0	0.0556	0.500	1	09/24/2020 17:00	WG1547998
2-Chlorotoluene	U			0.0368	0.100	1	09/24/2020 17:00	WG1547998
4-Chlorotoluene	U			0.0452	0.200	1	09/24/2020 17:00	WG1547998
1,2-Dibromo-3-Chloropropane	U			0.204	1.00	1	09/24/2020 17:00	WG1547998
1,2-Dibromoethane	U			0.0210	0.100	1	09/24/2020 17:00	WG1547998
Dibromomethane	U			0.0400	0.200	1	09/24/2020 17:00	WG1547998
1,2-Dichlorobenzene	U			0.0580	0.200	1	09/24/2020 17:00	WG1547998
1,3-Dichlorobenzene	U			0.0680	0.200	1	09/24/2020 17:00	WG1547998
1,4-Dichlorobenzene	U			0.0788	0.200	1	09/24/2020 17:00	WG1547998
Dichlorodifluoromethane	U			0.0327	0.100	1	09/24/2020 17:00	WG1547998
1,1-Dichloroethane	U			0.0230	0.100	1	09/24/2020 17:00	WG1547998
1,2-Dichloroethane	0.0480	J	J	0.0190	0.100	1	09/24/2020 17:00	WG1547998
1,1-Dichloroethene	13.1			0.0200	0.100	1	09/24/2020 17:00	WG1547998
cis-1,2-Dichloroethene	465			0.276	1.00	10	09/26/2020 00:51	WG1548950
trans-1,2-Dichloroethene	3.01			0.0572	0.200	1	09/24/2020 17:00	WG1547998
1,2-Dichloropropane	U			0.0508	0.200	1	09/24/2020 17:00	WG1547998
1,1-Dichloropropene	U			0.0280	0.100	1	09/24/2020 17:00	WG1547998
1,3-Dichloropropane	U			0.0700	0.200	1	09/24/2020 17:00	WG1547998
cis-1,3-Dichloropropene	U			0.0271	0.100	1	09/24/2020 17:00	WG1547998
trans-1,3-Dichloropropene	U			0.0612	0.200	1	09/24/2020 17:00	WG1547998
2,2-Dichloropropane	U			0.0317	0.100	1	09/24/2020 17:00	WG1547998
Di-isopropyl ether	U			0.0140	0.0400	1	09/24/2020 17:00	WG1547998
Ethylbenzene	U			0.0212	0.100	1	09/24/2020 17:00	WG1547998
Hexachloro-1,3-butadiene	U			0.508	1.00	1	09/24/2020 17:00	WG1547998
Isopropylbenzene	U			0.0345	0.100	1	09/24/2020 17:00	WG1547998
p-Isopropyltoluene	U			0.0932	0.200	1	09/24/2020 17:00	WG1547998
2-Butanone (MEK)	0.690	J	J J0	0.500	1.00	1	09/24/2020 17:00	WG1547998
Methylene Chloride	U			0.265	1.00	1	09/24/2020 17:00	WG1547998
4-Methyl-2-pentanone (MIBK)	U			0.400	1.00	1	09/24/2020 17:00	WG1547998
Methyl tert-butyl ether	U			0.0118	0.0400	1	09/24/2020 17:00	WG1547998
Naphthalene	U			0.124	0.500	1	09/24/2020 17:00	WG1547998
n-Propylbenzene	U			0.0472	0.200	1	09/24/2020 17:00	WG1547998
Styrene	U			0.109	0.500	1	09/24/2020 17:00	WG1547998
1,1,1,2-Tetrachloroethane	U			0.0200	0.100	1	09/24/2020 17:00	WG1547998
1,1,2,2-Tetrachloroethane	U			0.0156	0.100	1	09/24/2020 17:00	WG1547998
1,1,2-Trichlorotrifluoroethane	U			0.0270	0.100	1	09/24/2020 17:00	WG1547998
Tetrachloroethene	0.818			0.0280	0.100	1	09/24/2020 17:00	WG1547998
Toluene	0.204			0.0500	0.200	1	09/24/2020 17:00	WG1547998
1,2,3-Trichlorobenzene	U			0.0250	0.500	1	09/24/2020 17:00	WG1547998
1,2,4-Trichlorobenzene	U			0.193	0.500	1	09/24/2020 17:00	WG1547998
1,1,1-Trichloroethane	U			0.0110	0.100	1	09/24/2020 17:00	WG1547998
1,1,2-Trichloroethane	U			0.0353	0.100	1	09/24/2020 17:00	WG1547998
Trichloroethene	35.9			0.0160	0.0400	1	09/24/2020 17:00	WG1547998
Trichlorofluoromethane	U	UJ	J0	0.0200	0.100	1	09/24/2020 17:00	WG1547998
1,2,3-Trichloropropane	U			0.204	0.500	1	09/24/2020 17:00	WG1547998
1,2,4-Trimethylbenzene	U			0.0464	0.200	1	09/24/2020 17:00	WG1547998
1,2,3-Trimethylbenzene	U			0.0460	0.200	1	09/24/2020 17:00	WG1547998
1,3,5-Trimethylbenzene	U			0.0432	0.200	1	09/24/2020 17:00	WG1547998
Vinyl chloride	344			0.273	1.00	10	09/26/2020 00:51	WG1548950
Xylenes, Total	U			0.191	0.260	1	09/24/2020 17:00	WG1547998
Ethyl Ether	U			0.0170	0.100	1	09/24/2020 17:00	WG1547998
Tetrahydrofuran	15.5			0.0900	0.500	1	09/24/2020 17:00	WG1547998
Iodomethane	U			0.242	0.500	1	09/24/2020 17:00	WG1547998
Allyl chloride	U			0.580	1.00	1	09/24/2020 17:00	WG1547998

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Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Trans-1,4-Dichloro-2-butene	U		0.0560	0.200	1	09/24/2020 17:00	WG1547998
(S) Toluene-d8	*113*			*75.0-131*		*09/24/2020 17:00*	WG1547998
(S) Toluene-d8	*102*			*75.0-131*		*09/26/2020 00:51*	WG1548950
(S) 4-Bromofluorobenzene	*87.5*			*67.0-138*		*09/24/2020 17:00*	WG1547998
(S) 4-Bromofluorobenzene	*103*			*67.0-138*		*09/26/2020 00:51*	WG1548950
(S) 1,2-Dichloroethane-d4	*113*			*70.0-130*		*09/24/2020 17:00*	WG1547998
(S) 1,2-Dichloroethane-d4	*99.5*			*70.0-130*		*09/26/2020 00:51*	WG1548950

JC 10/13/2020

Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	271000		8450	20000	1	09/18/2020 17:29	WG1544723

Sample Narrative:

L1262881-04 WG1544723: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	30500		379	1000	1	09/17/2020 14:18	WG1544722
Nitrate	U		48.0	100	1	09/17/2020 14:18	WG1544722
Sulfate	37400		594	5000	1	09/17/2020 14:18	WG1544722

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	5620		102	1000	1	09/19/2020 20:04	WG1545906

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	7350		48.9	100	1	09/22/2020 20:54	WG1544684
Manganese	905		1.32	5.00	1	09/22/2020 20:54	WG1544684

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	1090	Z, J+	31.6	100	1	09/20/2020 18:15	WG1546048
(S) a,a,a-Trifluorotoluene(FID)	*93.0*			*78.0-120*		*09/20/2020 18:15*	WG1546048

Sample Narrative:

L1262881-04 WG1546048: No discernible petroleum pattern present

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	1170		0.287	0.678	1	09/24/2020 13:52	WG1548395
Ethane	56.2		0.296	1.29	1	09/23/2020 11:21	WG1546968
Ethene	27.6		0.422	1.27	1	09/23/2020 11:21	WG1546968

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	11.0		0.548	1.00	1	09/24/2020 17:18	WG1547998
Acrylonitrile	U		0.0760	0.500	1	09/24/2020 17:18	WG1547998
Benzene	0.143		0.0160	0.0400	1	09/24/2020 17:18	WG1547998
Bromobenzene	U		0.0420	0.500	1	09/24/2020 17:18	WG1547998
Bromodichloromethane	U		0.0315	0.100	1	09/24/2020 17:18	WG1547998
Bromoform	U		0.239	1.00	1	09/24/2020 17:18	WG1547998
Bromomethane	U	UJ J0	0.148	0.500	1	09/24/2020 17:18	WG1547998
n-Butylbenzene	U		0.153	0.500	1	09/24/2020 17:18	WG1547998
sec-Butylbenzene	U		0.101	0.500	1	09/24/2020 17:18	WG1547998
tert-Butylbenzene	U		0.0620	0.200	1	09/24/2020 17:18	WG1547998

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Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloroethane	U UJ	J0	0.0432	0.200	1	09/24/2020 17:18	WG1547998
Chloroform	U		0.0166	0.100	1	09/24/2020 17:18	WG1547998
Chloromethane	U UJ	J0	0.0556	0.500	1	09/24/2020 17:18	WG1547998
2-Chlorotoluene	U		0.0368	0.100	1	09/24/2020 17:18	WG1547998
4-Chlorotoluene	U		0.0452	0.200	1	09/24/2020 17:18	WG1547998
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	09/24/2020 17:18	WG1547998
1,2-Dibromoethane	U		0.0210	0.100	1	09/24/2020 17:18	WG1547998
Dibromomethane	U		0.0400	0.200	1	09/24/2020 17:18	WG1547998
1,2-Dichlorobenzene	U		0.0580	0.200	1	09/24/2020 17:18	WG1547998
1,3-Dichlorobenzene	U		0.0680	0.200	1	09/24/2020 17:18	WG1547998
1,4-Dichlorobenzene	U		0.0788	0.200	1	09/24/2020 17:18	WG1547998
Dichlorodifluoromethane	U		0.0327	0.100	1	09/24/2020 17:18	WG1547998
1,1-Dichloroethane	U		0.0230	0.100	1	09/24/2020 17:18	WG1547998
1,2-Dichloroethane	0.0770	J	0.0190	0.100	1	09/24/2020 17:18	WG1547998
1,1-Dichloroethene	3.81		0.0200	0.100	1	09/24/2020 17:18	WG1547998
cis-1,2-Dichloroethene	2030		1.38	5.00	50	09/26/2020 01:12	WG1548950
trans-1,2-Dichloroethene	7.25		0.0572	0.200	1	09/24/2020 17:18	WG1547998
1,2-Dichloropropane	U		0.0508	0.200	1	09/24/2020 17:18	WG1547998
1,1-Dichloropropene	U		0.0280	0.100	1	09/24/2020 17:18	WG1547998
1,3-Dichloropropane	U		0.0700	0.200	1	09/24/2020 17:18	WG1547998
cis-1,3-Dichloropropene	U		0.0271	0.100	1	09/24/2020 17:18	WG1547998
trans-1,3-Dichloropropene	U		0.0612	0.200	1	09/24/2020 17:18	WG1547998
2,2-Dichloropropane	U		0.0317	0.100	1	09/24/2020 17:18	WG1547998
Di-isopropyl ether	U		0.0140	0.0400	1	09/24/2020 17:18	WG1547998
Ethylbenzene	U		0.0212	0.100	1	09/24/2020 17:18	WG1547998
Hexachloro-1,3-butadiene	U		0.508	1.00	1	09/24/2020 17:18	WG1547998
Isopropylbenzene	U		0.0345	0.100	1	09/24/2020 17:18	WG1547998
p-Isopropyltoluene	U		0.0932	0.200	1	09/24/2020 17:18	WG1547998
2-Butanone (MEK)	4.01 J	J0	0.500	1.00	1	09/24/2020 17:18	WG1547998
Methylene Chloride	U		0.265	1.00	1	09/24/2020 17:18	WG1547998
4-Methyl-2-pentanone (MIBK)	3.18 J	J0	0.400	1.00	1	09/24/2020 17:18	WG1547998
Methyl tert-butyl ether	U		0.0118	0.0400	1	09/24/2020 17:18	WG1547998
Naphthalene	U		0.124	0.500	1	09/24/2020 17:18	WG1547998
n-Propylbenzene	U		0.0472	0.200	1	09/24/2020 17:18	WG1547998
Styrene	U		0.109	0.500	1	09/24/2020 17:18	WG1547998
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	09/24/2020 17:18	WG1547998
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	09/24/2020 17:18	WG1547998
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	09/24/2020 17:18	WG1547998
Tetrachloroethene	446		1.40	5.00	50	09/26/2020 01:12	WG1548950
Toluene	0.169	J	0.0500	0.200	1	09/24/2020 17:18	WG1547998
1,2,3-Trichlorobenzene	U		0.0250	0.500	1	09/24/2020 17:18	WG1547998
1,2,4-Trichlorobenzene	U		0.193	0.500	1	09/24/2020 17:18	WG1547998
1,1,1-Trichloroethane	U		0.0110	0.100	1	09/24/2020 17:18	WG1547998
1,1,2-Trichloroethane	U		0.0353	0.100	1	09/24/2020 17:18	WG1547998
Trichloroethene	336		0.800	2.00	50	09/27/2020 19:32	WG1550166
Trichlorofluoromethane	0.0210 J	J J0	0.0200	0.100	1	09/24/2020 17:18	WG1547998
1,2,3-Trichloropropane	U		0.204	0.500	1	09/24/2020 17:18	WG1547998
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	09/24/2020 17:18	WG1547998
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	09/24/2020 17:18	WG1547998
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	09/24/2020 17:18	WG1547998
Vinyl chloride	237		1.36	5.00	50	09/26/2020 01:12	WG1548950
Xylenes, Total	U		0.191	0.260	1	09/24/2020 17:18	WG1547998
Ethyl Ether	U		0.0170	0.100	1	09/24/2020 17:18	WG1547998
Tetrahydrofuran	39.2		0.0900	0.500	1	09/24/2020 17:18	WG1547998
Iodomethane	U		0.242	0.500	1	09/24/2020 17:18	WG1547998
Allyl chloride	U		0.580	1.00	1	09/24/2020 17:18	WG1547998

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Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Trans-1,4-Dichloro-2-butene	U		0.0560	0.200	1	09/24/2020 17:18	WG1547998
(S) Toluene-d8	*112*			*75.0-131*		*09/24/2020 17:18*	WG1547998
(S) Toluene-d8	*103*			*75.0-131*		*09/26/2020 01:12*	WG1548950
(S) Toluene-d8	*102*			*75.0-131*		*09/27/2020 19:32*	WG1550166
(S) 4-Bromofluorobenzene	*92.3*			*67.0-138*		*09/24/2020 17:18*	WG1547998
(S) 4-Bromofluorobenzene	*102*			*67.0-138*		*09/26/2020 01:12*	WG1548950
(S) 4-Bromofluorobenzene	*100*			*67.0-138*		*09/27/2020 19:32*	WG1550166
(S) 1,2-Dichloroethane-d4	*109*			*70.0-130*		*09/24/2020 17:18*	WG1547998
(S) 1,2-Dichloroethane-d4	*100*			*70.0-130*		*09/26/2020 01:12*	WG1548950
(S) 1,2-Dichloroethane-d4	*98.0*			*70.0-130*		*09/27/2020 19:32*	WG1550166

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1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	235000		8450	20000	1	09/18/2020 17:38	WG1544723

Sample Narrative:

L1262881-05 WG1544723: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	23000		379	1000	1	09/17/2020 15:22	WG1544722
Nitrate	U		48.0	100	1	09/17/2020 15:22	WG1544722
Sulfate	45200		594	5000	1	09/17/2020 15:22	WG1544722

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	1990	~~B~~	102	1000	1	09/19/2020 22:15	WG1545906

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	13600		48.9	100	1	09/22/2020 20:58	WG1544684
Manganese	545		1.32	5.00	1	09/22/2020 20:58	WG1544684

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	50.3 U	~~B J~~	31.6	100	1	09/20/2020 18:36	WG1546048
(S) a,a,a-Trifluorotoluene(FID)	*91.9*			*78.0-120*		*09/20/2020 18:36*	WG1546048

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	763		0.287	0.678	1	09/23/2020 11:38	WG1546968
Ethane	3.36		0.296	1.29	1	09/23/2020 11:38	WG1546968
Ethene	7.63		0.422	1.27	1	09/23/2020 11:38	WG1546968

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U		0.548	1.00	1	09/24/2020 17:37	WG1547998
Acrylonitrile	U		0.0760	0.500	1	09/24/2020 17:37	WG1547998
Benzene	U		0.0160	0.0400	1	09/24/2020 17:37	WG1547998
Bromobenzene	U		0.0420	0.500	1	09/24/2020 17:37	WG1547998
Bromodichloromethane	U		0.0315	0.100	1	09/24/2020 17:37	WG1547998
Bromoform	U		0.239	1.00	1	09/24/2020 17:37	WG1547998
Bromomethane	U UJ	J0	0.148	0.500	1	09/24/2020 17:37	WG1547998
n-Butylbenzene	U		0.153	0.500	1	09/24/2020 17:37	WG1547998
sec-Butylbenzene	U		0.101	0.500	1	09/24/2020 17:37	WG1547998
tert-Butylbenzene	U		0.0620	0.200	1	09/24/2020 17:37	WG1547998
Carbon tetrachloride	U		0.0432	0.200	1	09/24/2020 17:37	WG1547998
Chlorobenzene	U		0.0229	0.100	1	09/24/2020 17:37	WG1547998
Chlorodibromomethane	U		0.0180	0.100	1	09/24/2020 17:37	WG1547998

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Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloroethane	U UJ	J0	0.0432	0.200	1	09/24/2020 17:37	WG1547998
Chloroform	U		0.0166	0.100	1	09/24/2020 17:37	WG1547998
Chloromethane	U UJ	J0	0.0556	0.500	1	09/24/2020 17:37	WG1547998
2-Chlorotoluene	U		0.0368	0.100	1	09/24/2020 17:37	WG1547998
4-Chlorotoluene	U		0.0452	0.200	1	09/24/2020 17:37	WG1547998
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	09/24/2020 17:37	WG1547998
1,2-Dibromoethane	U		0.0210	0.100	1	09/24/2020 17:37	WG1547998
Dibromomethane	U		0.0400	0.200	1	09/24/2020 17:37	WG1547998
1,2-Dichlorobenzene	U		0.0580	0.200	1	09/24/2020 17:37	WG1547998
1,3-Dichlorobenzene	U		0.0680	0.200	1	09/24/2020 17:37	WG1547998
1,4-Dichlorobenzene	U		0.0788	0.200	1	09/24/2020 17:37	WG1547998
Dichlorodifluoromethane	U		0.0327	0.100	1	09/24/2020 17:37	WG1547998
1,1-Dichloroethane	U		0.0230	0.100	1	09/24/2020 17:37	WG1547998
1,2-Dichloroethane	U		0.0190	0.100	1	09/24/2020 17:37	WG1547998
1,1-Dichloroethene	0.0250	J	0.0200	0.100	1	09/24/2020 17:37	WG1547998
cis-1,2-Dichloroethene	5.97		0.0276	0.100	1	09/25/2020 23:50	WG1548950
trans-1,2-Dichloroethene	U		0.0572	0.200	1	09/24/2020 17:37	WG1547998
1,2-Dichloropropane	U		0.0508	0.200	1	09/24/2020 17:37	WG1547998
1,1-Dichloropropene	U		0.0280	0.100	1	09/24/2020 17:37	WG1547998
1,3-Dichloropropane	U		0.0700	0.200	1	09/24/2020 17:37	WG1547998
cis-1,3-Dichloropropene	U		0.0271	0.100	1	09/24/2020 17:37	WG1547998
trans-1,3-Dichloropropene	U		0.0612	0.200	1	09/24/2020 17:37	WG1547998
2,2-Dichloropropane	U		0.0317	0.100	1	09/24/2020 17:37	WG1547998
Di-isopropyl ether	U		0.0140	0.0400	1	09/24/2020 17:37	WG1547998
Ethylbenzene	U		0.0212	0.100	1	09/24/2020 17:37	WG1547998
Hexachloro-1,3-butadiene	U		0.508	1.00	1	09/24/2020 17:37	WG1547998
Isopropylbenzene	U		0.0345	0.100	1	09/24/2020 17:37	WG1547998
p-Isopropyltoluene	U		0.0932	0.200	1	09/24/2020 17:37	WG1547998
2-Butanone (MEK)	U		0.500	1.00	1	09/24/2020 17:37	WG1547998
Methylene Chloride	U		0.265	1.00	1	09/24/2020 17:37	WG1547998
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	09/24/2020 17:37	WG1547998
Methyl tert-butyl ether	U		0.0118	0.0400	1	09/24/2020 17:37	WG1547998
Naphthalene	U		0.124	0.500	1	09/24/2020 17:37	WG1547998
n-Propylbenzene	U		0.0472	0.200	1	09/24/2020 17:37	WG1547998
Styrene	U		0.109	0.500	1	09/24/2020 17:37	WG1547998
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	09/24/2020 17:37	WG1547998
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	09/24/2020 17:37	WG1547998
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	09/24/2020 17:37	WG1547998
Tetrachloroethene	0.477		0.0280	0.100	1	09/25/2020 23:50	WG1548950
Toluene	0.477		0.0500	0.200	1	09/24/2020 17:37	WG1547998
1,2,3-Trichlorobenzene	U		0.0250	0.500	1	09/24/2020 17:37	WG1547998
1,2,4-Trichlorobenzene	U		0.193	0.500	1	09/24/2020 17:37	WG1547998
1,1,1-Trichloroethane	U		0.0110	0.100	1	09/24/2020 17:37	WG1547998
1,1,2-Trichloroethane	U		0.0353	0.100	1	09/24/2020 17:37	WG1547998
Trichloroethene	0.268		0.0160	0.0400	1	09/27/2020 18:31	WG1550166
Trichlorofluoromethane	U UJ	J0	0.0200	0.100	1	09/24/2020 17:37	WG1547998
1,2,3-Trichloropropane	U		0.204	0.500	1	09/24/2020 17:37	WG1547998
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	09/24/2020 17:37	WG1547998
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	09/24/2020 17:37	WG1547998
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	09/24/2020 17:37	WG1547998
Vinyl chloride	24.7		0.0273	0.100	1	09/25/2020 23:50	WG1548950
Xylenes, Total	U		0.191	0.260	1	09/24/2020 17:37	WG1547998
Ethyl Ether	U		0.0170	0.100	1	09/24/2020 17:37	WG1547998
Tetrahydrofuran	U		0.0900	0.500	1	09/24/2020 17:37	WG1547998
Iodomethane	U		0.242	0.500	1	09/24/2020 17:37	WG1547998
Allyl chloride	U		0.580	1.00	1	09/24/2020 17:37	WG1547998

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Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Trans-1,4-Dichloro-2-butene	U		0.0560	0.200	1	09/24/2020 17:37	WG1547998
(S) Toluene-d8	*117*			*75.0-131*		*09/24/2020 17:37*	WG1547998
(S) Toluene-d8	*103*			*75.0-131*		*09/25/2020 23:50*	WG1548950
(S) Toluene-d8	*102*			*75.0-131*		*09/27/2020 18:31*	WG1550166
(S) 4-Bromofluorobenzene	*88.7*			*67.0-138*		*09/24/2020 17:37*	WG1547998
(S) 4-Bromofluorobenzene	*99.7*			*67.0-138*		*09/25/2020 23:50*	WG1548950
(S) 4-Bromofluorobenzene	*99.4*			*67.0-138*		*09/27/2020 18:31*	WG1550166
(S) 1,2-Dichloroethane-d4	*113*			*70.0-130*		*09/24/2020 17:37*	WG1547998
(S) 1,2-Dichloroethane-d4	*100*			*70.0-130*		*09/25/2020 23:50*	WG1548950
(S) 1,2-Dichloroethane-d4	*100*			*70.0-130*		*09/27/2020 18:31*	WG1550166

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Wet Chemistry by Method 2320 B-2011

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Alkalinity	227000		8450	20000	1	09/21/2020 12:06	WG1546227

Sample Narrative:
L1263397-01 WG1546227: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 9056A

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Chloride	47200		379	1000	1	09/18/2020 13:47	WG1545298
Nitrate	U		48.0	100	1	09/18/2020 13:47	WG1545298
Sulfate	88300		594	5000	1	09/18/2020 13:47	WG1545298

Wet Chemistry by Method 9060A

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
TOC (Total Organic Carbon)	3060		102	1000	1	09/21/2020 16:10	WG1546593

Metals (ICPMS) by Method 6020B

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Iron	6240		48.9	100	1	09/23/2020 19:28	WG1546505
Manganese	240		1.32	5.00	1	09/23/2020 19:28	WG1546505

Volatile Organic Compounds (GC) by Method NWTPHGX

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Gasoline Range Organics-NWTPH	37.5 U	~~B J~~	31.6	100	1	09/22/2020 19:34	WG1547280
(S) a,a,a-Trifluorotoluene(FID)	*111*			*78.0-120*		*09/22/2020 19:34*	WG1547280

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Volatile Organic Compounds (GC) by Method RSK175

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Methane	266		0.287	0.678	1	09/24/2020 12:02	WG1548397
Ethane	U		0.296	1.29	1	09/24/2020 12:02	WG1548397
Ethene	8.29		0.422	1.27	1	09/24/2020 12:02	WG1548397

Volatile Organic Compounds (GC/MS) by Method 8260D

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Acetone	1.80		0.548	1.00	1	09/24/2020 17:56	WG1547998
Acrylonitrile	U		0.0760	0.500	1	09/24/2020 17:56	WG1547998
Benzene	U		0.0160	0.0400	1	09/24/2020 17:56	WG1547998
Bromobenzene	U		0.0420	0.500	1	09/24/2020 17:56	WG1547998
Bromodichloromethane	U		0.0315	0.100	1	09/24/2020 17:56	WG1547998
Bromoform	U		0.239	1.00	1	09/24/2020 17:56	WG1547998
Bromomethane	U UJ	J0	0.148	0.500	1	09/24/2020 17:56	WG1547998
n-Butylbenzene	U		0.153	0.500	1	09/24/2020 17:56	WG1547998
sec-Butylbenzene	U		0.101	0.500	1	09/24/2020 17:56	WG1547998
tert-Butylbenzene	U		0.0620	0.200	1	09/24/2020 17:56	WG1547998
Carbon tetrachloride	U		0.0432	0.200	1	09/24/2020 17:56	WG1547998
Chlorobenzene	U		0.0229	0.100	1	09/24/2020 17:56	WG1547998
Chlorodibromomethane	U		0.0180	0.100	1	09/24/2020 17:56	WG1547998

JC 10/13/2020

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloroethane	U	UJ J0	0.0432	0.200	1	09/24/2020 17:56	WG1547998
Chloroform	U		0.0166	0.100	1	09/24/2020 17:56	WG1547998
Chloromethane	U	UJ J0	0.0556	0.500	1	09/24/2020 17:56	WG1547998
2-Chlorotoluene	U		0.0368	0.100	1	09/24/2020 17:56	WG1547998
4-Chlorotoluene	U		0.0452	0.200	1	09/24/2020 17:56	WG1547998
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	09/24/2020 17:56	WG1547998
1,2-Dibromoethane	U		0.0210	0.100	1	09/24/2020 17:56	WG1547998
Dibromomethane	U		0.0400	0.200	1	09/24/2020 17:56	WG1547998
1,2-Dichlorobenzene	U		0.0580	0.200	1	09/24/2020 17:56	WG1547998
1,3-Dichlorobenzene	U		0.0680	0.200	1	09/24/2020 17:56	WG1547998
1,4-Dichlorobenzene	U		0.0788	0.200	1	09/24/2020 17:56	WG1547998
Dichlorodifluoromethane	U		0.0327	0.100	1	09/24/2020 17:56	WG1547998
1,1-Dichloroethane	U		0.0230	0.100	1	09/24/2020 17:56	WG1547998
1,2-Dichloroethane	U		0.0190	0.100	1	09/24/2020 17:56	WG1547998
1,1-Dichloroethene	U		0.0200	0.100	1	09/24/2020 17:56	WG1547998
cis-1,2-Dichloroethene	0.127		0.0276	0.100	1	09/26/2020 00:11	WG1548950
trans-1,2-Dichloroethene	U		0.0572	0.200	1	09/24/2020 17:56	WG1547998
1,2-Dichloropropane	U		0.0508	0.200	1	09/24/2020 17:56	WG1547998
1,1-Dichloropropene	U		0.0280	0.100	1	09/24/2020 17:56	WG1547998
1,3-Dichloropropane	U		0.0700	0.200	1	09/24/2020 17:56	WG1547998
cis-1,3-Dichloropropene	U		0.0271	0.100	1	09/24/2020 17:56	WG1547998
trans-1,3-Dichloropropene	U		0.0612	0.200	1	09/24/2020 17:56	WG1547998
2,2-Dichloropropane	U		0.0317	0.100	1	09/24/2020 17:56	WG1547998
Di-isopropyl ether	U		0.0140	0.0400	1	09/24/2020 17:56	WG1547998
Ethylbenzene	U		0.0212	0.100	1	09/24/2020 17:56	WG1547998
Hexachloro-1,3-butadiene	U		0.508	1.00	1	09/24/2020 17:56	WG1547998
Isopropylbenzene	U		0.0345	0.100	1	09/24/2020 17:56	WG1547998
p-Isopropyltoluene	U		0.0932	0.200	1	09/24/2020 17:56	WG1547998
2-Butanone (MEK)	U		0.500	1.00	1	09/24/2020 17:56	WG1547998
Methylene Chloride	U		0.265	1.00	1	09/24/2020 17:56	WG1547998
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	09/24/2020 17:56	WG1547998
Methyl tert-butyl ether	U		0.0118	0.0400	1	09/24/2020 17:56	WG1547998
Naphthalene	U		0.124	0.500	1	09/24/2020 17:56	WG1547998
n-Propylbenzene	U		0.0472	0.200	1	09/24/2020 17:56	WG1547998
Styrene	U		0.109	0.500	1	09/24/2020 17:56	WG1547998
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	09/24/2020 17:56	WG1547998
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	09/24/2020 17:56	WG1547998
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	09/24/2020 17:56	WG1547998
Tetrachloroethene	U		0.0280	0.100	1	09/26/2020 00:11	WG1548950
Toluene	0.773		0.0500	0.200	1	09/24/2020 17:56	WG1547998
1,2,3-Trichlorobenzene	U		0.0250	0.500	1	09/24/2020 17:56	WG1547998
1,2,4-Trichlorobenzene	U		0.193	0.500	1	09/24/2020 17:56	WG1547998
1,1,1-Trichloroethane	U		0.0110	0.100	1	09/24/2020 17:56	WG1547998
1,1,2-Trichloroethane	U		0.0353	0.100	1	09/24/2020 17:56	WG1547998
Trichloroethene	0.0814		0.0160	0.0400	1	09/27/2020 18:51	WG1550166
Trichlorofluoromethane	U	UJ J0	0.0200	0.100	1	09/24/2020 17:56	WG1547998
1,2,3-Trichloropropane	U		0.204	0.500	1	09/24/2020 17:56	WG1547998
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	09/24/2020 17:56	WG1547998
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	09/24/2020 17:56	WG1547998
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	09/24/2020 17:56	WG1547998
Vinyl chloride	0.575		0.0273	0.100	1	09/26/2020 00:11	WG1548950
Xylenes, Total	U		0.191	0.260	1	09/24/2020 17:56	WG1547998
Ethyl Ether	U		0.0170	0.100	1	09/24/2020 17:56	WG1547998
Tetrahydrofuran	0.0980	J	0.0900	0.500	1	09/24/2020 17:56	WG1547998
Iodomethane	U		0.242	0.500	1	09/24/2020 17:56	WG1547998
Allyl chloride	U		0.580	1.00	1	09/24/2020 17:56	WG1547998

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Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Trans-1,4-Dichloro-2-butene	U		0.0560	0.200	1	09/24/2020 17:56	WG1547998
(S) Toluene-d8	*111*			*75.0-131*		*09/24/2020 17:56*	WG1547998
(S) Toluene-d8	*104*			*75.0-131*		*09/26/2020 00:11*	WG1548950
(S) Toluene-d8	*104*			*75.0-131*		*09/27/2020 18:51*	WG1550166
(S) 4-Bromofluorobenzene	*91.8*			*67.0-138*		*09/24/2020 17:56*	WG1547998
(S) 4-Bromofluorobenzene	*104*			*67.0-138*		*09/26/2020 00:11*	WG1548950
(S) 4-Bromofluorobenzene	*99.9*			*67.0-138*		*09/27/2020 18:51*	WG1550166
(S) 1,2-Dichloroethane-d4	*115*			*70.0-130*		*09/24/2020 17:56*	WG1547998
(S) 1,2-Dichloroethane-d4	*99.5*			*70.0-130*		*09/26/2020 00:11*	WG1548950
(S) 1,2-Dichloroethane-d4	*101*			*70.0-130*		*09/27/2020 18:51*	WG1550166

JC 10/13/2020

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	234000		8450	20000	1	09/21/2020 12:14	WG1546227

Sample Narrative:

L1263397-02 WG1546227: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	26200		379	1000	1	09/18/2020 14:56	WG1545298
Nitrate	U		48.0	100	1	09/18/2020 14:56	WG1545298
Sulfate	201000		2970	25000	5	09/21/2020 03:35	WG1546224

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	2480	~~B~~	102	1000	1	09/21/2020 16:37	WG1546593

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	2630		48.9	100	1	09/23/2020 19:31	WG1546505
Manganese	565		1.32	5.00	1	09/23/2020 19:31	WG1546505

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	432	Z, J+ ~~B~~	31.6	100	1	09/22/2020 19:59	WG1547280
(S) a,a,a-Trifluorotoluene(FID)	*110*			*78.0-120*		*09/22/2020 19:59*	WG1547280

Sample Narrative:

L1263397-02 WG1547280: No discernible petroleum pattern present

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	419		0.287	0.678	1	09/24/2020 12:05	WG1548397
Ethane	U		0.296	1.29	1	09/24/2020 12:05	WG1548397
Ethene	27.6		0.422	1.27	1	09/24/2020 12:05	WG1548397

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	1.38		0.548	1.00	1	09/24/2020 18:15	WG1547998
Acrylonitrile	U		0.0760	0.500	1	09/24/2020 18:15	WG1547998
Benzene	0.110		0.0160	0.0400	1	09/24/2020 18:15	WG1547998
Bromobenzene	U		0.0420	0.500	1	09/24/2020 18:15	WG1547998
Bromodichloromethane	U		0.0315	0.100	1	09/24/2020 18:15	WG1547998
Bromoform	U		0.239	1.00	1	09/24/2020 18:15	WG1547998
Bromomethane	U	UJ J0	0.148	0.500	1	09/24/2020 18:15	WG1547998
n-Butylbenzene	U		0.153	0.500	1	09/24/2020 18:15	WG1547998
sec-Butylbenzene	U		0.101	0.500	1	09/24/2020 18:15	WG1547998
tert-Butylbenzene	U		0.0620	0.200	1	09/24/2020 18:15	WG1547998

JC 10/27/2020

PRB-A14-091720
Collected date/time: 09/17/20 09:40

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L1263397

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chloroethane	U UJ	J0	0.0432	0.200	1	09/24/2020 18:15	WG1547998
Chloroform	U		0.0166	0.100	1	09/24/2020 18:15	WG1547998
Chloromethane	U UJ	J0	0.0556	0.500	1	09/24/2020 18:15	WG1547998
2-Chlorotoluene	U		0.0368	0.100	1	09/24/2020 18:15	WG1547998
4-Chlorotoluene	U		0.0452	0.200	1	09/24/2020 18:15	WG1547998
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	09/24/2020 18:15	WG1547998
1,2-Dibromoethane	U		0.0210	0.100	1	09/24/2020 18:15	WG1547998
Dibromomethane	U		0.0400	0.200	1	09/24/2020 18:15	WG1547998
1,2-Dichlorobenzene	U		0.0580	0.200	1	09/24/2020 18:15	WG1547998
1,3-Dichlorobenzene	U		0.0680	0.200	1	09/24/2020 18:15	WG1547998
1,4-Dichlorobenzene	U		0.0788	0.200	1	09/24/2020 18:15	WG1547998
Dichlorodifluoromethane	U		0.0327	0.100	1	09/24/2020 18:15	WG1547998
1,1-Dichloroethane	U		0.0230	0.100	1	09/24/2020 18:15	WG1547998
1,2-Dichloroethane	U		0.0190	0.100	1	09/24/2020 18:15	WG1547998
1,1-Dichloroethene	5.70		0.0200	0.100	1	09/24/2020 18:15	WG1547998
cis-1,2-Dichloroethene	577		0.276	1.00	10	09/26/2020 01:32	WG1548950
trans-1,2-Dichloroethene	1.84		0.0572	0.200	1	09/24/2020 18:15	WG1547998
1,2-Dichloropropane	U		0.0508	0.200	1	09/24/2020 18:15	WG1547998
1,1-Dichloropropene	U		0.0280	0.100	1	09/24/2020 18:15	WG1547998
1,3-Dichloropropane	U		0.0700	0.200	1	09/24/2020 18:15	WG1547998
cis-1,3-Dichloropropene	U		0.0271	0.100	1	09/24/2020 18:15	WG1547998
trans-1,3-Dichloropropene	U		0.0612	0.200	1	09/24/2020 18:15	WG1547998
2,2-Dichloropropane	U		0.0317	0.100	1	09/24/2020 18:15	WG1547998
Di-isopropyl ether	U		0.0140	0.0400	1	09/24/2020 18:15	WG1547998
Ethylbenzene	0.149		0.0212	0.100	1	09/24/2020 18:15	WG1547998
Hexachloro-1,3-butadiene	U		0.508	1.00	1	09/24/2020 18:15	WG1547998
Isopropylbenzene	U		0.0345	0.100	1	09/24/2020 18:15	WG1547998
p-Isopropyltoluene	U		0.0932	0.200	1	09/24/2020 18:15	WG1547998
2-Butanone (MEK)	U		0.500	1.00	1	09/24/2020 18:15	WG1547998
Methylene Chloride	U		0.265	1.00	1	09/24/2020 18:15	WG1547998
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	09/24/2020 18:15	WG1547998
Methyl tert-butyl ether	U		0.0118	0.0400	1	09/24/2020 18:15	WG1547998
Naphthalene	U		0.124	0.500	1	09/24/2020 18:15	WG1547998
n-Propylbenzene	U		0.0472	0.200	1	09/24/2020 18:15	WG1547998
Styrene	U		0.109	0.500	1	09/24/2020 18:15	WG1547998
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	09/24/2020 18:15	WG1547998
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	09/24/2020 18:15	WG1547998
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	09/24/2020 18:15	WG1547998
Tetrachloroethene	0.522		0.0280	0.100	1	09/24/2020 18:15	WG1547998
Toluene	1.46		0.0500	0.200	1	09/24/2020 18:15	WG1547998
1,2,3-Trichlorobenzene	U		0.0250	0.500	1	09/24/2020 18:15	WG1547998
1,2,4-Trichlorobenzene	U		0.193	0.500	1	09/24/2020 18:15	WG1547998
1,1,1-Trichloroethane	U		0.0110	0.100	1	09/24/2020 18:15	WG1547998
1,1,2-Trichloroethane	U		0.0353	0.100	1	09/24/2020 18:15	WG1547998
Trichloroethene	2.51		0.0160	0.0400	1	09/24/2020 18:15	WG1547998
Trichlorofluoromethane	U UJ	J0	0.0200	0.100	1	09/24/2020 18:15	WG1547998
1,2,3-Trichloropropane	U		0.204	0.500	1	09/24/2020 18:15	WG1547998
1,2,4-Trimethylbenzene	0.0980	J	0.0464	0.200	1	09/24/2020 18:15	WG1547998
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	09/24/2020 18:15	WG1547998
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	09/24/2020 18:15	WG1547998
Vinyl chloride	262		0.273	1.00	10	09/26/2020 01:32	WG1548950
Xylenes, Total	0.943		0.191	0.260	1	09/24/2020 18:15	WG1547998
Ethyl Ether	U		0.0170	0.100	1	09/24/2020 18:15	WG1547998
Tetrahydrofuran	0.305	J	0.0900	0.500	1	09/24/2020 18:15	WG1547998
Iodomethane	U		0.242	0.500	1	09/24/2020 18:15	WG1547998
Allyl chloride	U		0.580	1.00	1	09/24/2020 18:15	WG1547998

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Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Trans-1,4-Dichloro-2-butene	U		0.0560	0.200	1	09/24/2020 18:15	WG1547998
(S) Toluene-d8	*111*			*75.0-131*		*09/24/2020 18:15*	WG1547998
(S) Toluene-d8	*104*			*75.0-131*		*09/26/2020 01:32*	WG1548950
(S) 4-Bromofluorobenzene	*93.1*			*67.0-138*		*09/24/2020 18:15*	WG1547998
(S) 4-Bromofluorobenzene	*103*			*67.0-138*		*09/26/2020 01:32*	WG1548950
(S) 1,2-Dichloroethane-d4	*114*			*70.0-130*		*09/24/2020 18:15*	WG1547998
(S) 1,2-Dichloroethane-d4	*101*			*70.0-130*		*09/26/2020 01:32*	WG1548950

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

JC 10/13/2020

Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	543000		8450	20000	1	09/21/2020 12:35	WG1546227

Sample Narrative:

L1263397-03 WG1546227: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	20000		379	1000	1	09/18/2020 15:41	WG1545298
Nitrate	U		48.0	100	1	09/18/2020 15:41	WG1545298
Sulfate	75400		594	5000	1	09/18/2020 15:41	WG1545298

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	14200		102	1000	1	09/21/2020 16:52	WG1546593

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	9040		48.9	100	1	09/23/2020 19:34	WG1546505
Manganese	2090		1.32	5.00	1	09/23/2020 19:34	WG1546505

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result ug/l		Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	397	Z, J+	~~B~~	31.6	100	1	09/22/2020 20:24	WG1547280
(S) a,a,a-Trifluorotoluene(FID)	*109*				*78.0-120*		*09/22/2020 20:24*	WG1547280

Sample Narrative:

L1263397-03 WG1547280: No discernible petroleum pattern present

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch	
Methane	12900		2.87	6.78	10	09/24/2020 17:42	WG1548880	JC 10/27/2020
Ethane	65.6		0.296	1.29	1	09/24/2020 12:07	WG1548397	
Ethene	70.3		0.422	1.27	1	09/24/2020 12:07	WG1548397	

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l		Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	1.44			0.548	1.00	1	09/24/2020 18:34	WG1547998
Acrylonitrile	U			0.0760	0.500	1	09/24/2020 18:34	WG1547998
Benzene	0.210			0.0160	0.0400	1	09/24/2020 18:34	WG1547998
Bromobenzene	U			0.0420	0.500	1	09/24/2020 18:34	WG1547998
Bromodichloromethane	U			0.0315	0.100	1	09/24/2020 18:34	WG1547998
Bromoform	U			0.239	1.00	1	09/24/2020 18:34	WG1547998
Bromomethane	U	UJ	J0	0.148	0.500	1	09/24/2020 18:34	WG1547998
n-Butylbenzene	U			0.153	0.500	1	09/24/2020 18:34	WG1547998
sec-Butylbenzene	U			0.101	0.500	1	09/24/2020 18:34	WG1547998
tert-Butylbenzene	U			0.0620	0.200	1	09/24/2020 18:34	WG1547998

PRB-A5-091720
Collected date/time: 09/17/20 12:30

SAMPLE RESULTS - 03

L1263397

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Volatile Organic Compounds (GC/MS) by Method 8260D

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Chloroethane	2.27 J	J0	0.0432	0.200	1	09/24/2020 18:34	WG1547998
Chloroform	U		0.0166	0.100	1	09/24/2020 18:34	WG1547998
Chloromethane	U UJ	J0	0.0556	0.500	1	09/24/2020 18:34	WG1547998
2-Chlorotoluene	U		0.0368	0.100	1	09/24/2020 18:34	WG1547998
4-Chlorotoluene	U		0.0452	0.200	1	09/24/2020 18:34	WG1547998
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	09/24/2020 18:34	WG1547998
1,2-Dibromoethane	U		0.0210	0.100	1	09/24/2020 18:34	WG1547998
Dibromomethane	U		0.0400	0.200	1	09/24/2020 18:34	WG1547998
1,2-Dichlorobenzene	U		0.0580	0.200	1	09/24/2020 18:34	WG1547998
1,3-Dichlorobenzene	U		0.0680	0.200	1	09/24/2020 18:34	WG1547998
1,4-Dichlorobenzene	U		0.0788	0.200	1	09/24/2020 18:34	WG1547998
Dichlorodifluoromethane	U		0.0327	0.100	1	09/24/2020 18:34	WG1547998
1,1-Dichloroethane	U		0.0230	0.100	1	09/24/2020 18:34	WG1547998
1,2-Dichloroethane	U		0.0190	0.100	1	09/24/2020 18:34	WG1547998
1,1-Dichloroethene	1.66		0.0200	0.100	1	09/24/2020 18:34	WG1547998
cis-1,2-Dichloroethene	523		0.276	1.00	10	09/26/2020 01:53	WG1548950
trans-1,2-Dichloroethene	4.52		0.0572	0.200	1	09/24/2020 18:34	WG1547998
1,2-Dichloropropane	U		0.0508	0.200	1	09/24/2020 18:34	WG1547998
1,1-Dichloropropene	U		0.0280	0.100	1	09/24/2020 18:34	WG1547998
1,3-Dichloropropane	U		0.0700	0.200	1	09/24/2020 18:34	WG1547998
cis-1,3-Dichloropropene	U		0.0271	0.100	1	09/24/2020 18:34	WG1547998
trans-1,3-Dichloropropene	U		0.0612	0.200	1	09/24/2020 18:34	WG1547998
2,2-Dichloropropane	U		0.0317	0.100	1	09/24/2020 18:34	WG1547998
Di-isopropyl ether	U		0.0140	0.0400	1	09/24/2020 18:34	WG1547998
Ethylbenzene	0.0490	J	0.0212	0.100	1	09/24/2020 18:34	WG1547998
Hexachloro-1,3-butadiene	U		0.508	1.00	1	09/24/2020 18:34	WG1547998
Isopropylbenzene	U		0.0345	0.100	1	09/24/2020 18:34	WG1547998
p-Isopropyltoluene	U		0.0932	0.200	1	09/24/2020 18:34	WG1547998
2-Butanone (MEK)	U		0.500	1.00	1	09/24/2020 18:34	WG1547998
Methylene Chloride	U		0.265	1.00	1	09/24/2020 18:34	WG1547998
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	09/24/2020 18:34	WG1547998
Methyl tert-butyl ether	U		0.0118	0.0400	1	09/24/2020 18:34	WG1547998
Naphthalene	U		0.124	0.500	1	09/24/2020 18:34	WG1547998
n-Propylbenzene	U		0.0472	0.200	1	09/24/2020 18:34	WG1547998
Styrene	U		0.109	0.500	1	09/24/2020 18:34	WG1547998
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	09/24/2020 18:34	WG1547998
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	09/24/2020 18:34	WG1547998
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	09/24/2020 18:34	WG1547998
Tetrachloroethene	0.0560	J	0.0280	0.100	1	09/24/2020 18:34	WG1547998
Toluene	0.623		0.0500	0.200	1	09/24/2020 18:34	WG1547998
1,2,3-Trichlorobenzene	U		0.0250	0.500	1	09/24/2020 18:34	WG1547998
1,2,4-Trichlorobenzene	U		0.193	0.500	1	09/24/2020 18:34	WG1547998
1,1,1-Trichloroethane	U		0.0110	0.100	1	09/24/2020 18:34	WG1547998
1,1,2-Trichloroethane	U		0.0353	0.100	1	09/24/2020 18:34	WG1547998
Trichloroethene	0.0990		0.0160	0.0400	1	09/24/2020 18:34	WG1547998
Trichlorofluoromethane	U UJ	J0	0.0200	0.100	1	09/24/2020 18:34	WG1547998
1,2,3-Trichloropropane	U		0.204	0.500	1	09/24/2020 18:34	WG1547998
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	09/24/2020 18:34	WG1547998
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	09/24/2020 18:34	WG1547998
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	09/24/2020 18:34	WG1547998
Vinyl chloride	299		0.273	1.00	10	09/26/2020 01:53	WG1548950
Xylenes, Total	0.198	J	0.191	0.260	1	09/24/2020 18:34	WG1547998
Ethyl Ether	0.0870	J	0.0170	0.100	1	09/24/2020 18:34	WG1547998
Tetrahydrofuran	2.53		0.0900	0.500	1	09/24/2020 18:34	WG1547998
Iodomethane	U		0.242	0.500	1	09/24/2020 18:34	WG1547998
Allyl chloride	U		0.580	1.00	1	09/24/2020 18:34	WG1547998

JC 10/13/2020

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Trans-1,4-Dichloro-2-butene	U		0.0560	0.200	1	09/24/2020 18:34	WG1547998
(S) Toluene-d8	*108*			*75.0-131*		*09/24/2020 18:34*	WG1547998
(S) Toluene-d8	*103*			*75.0-131*		*09/26/2020 01:53*	WG1548950
(S) 4-Bromofluorobenzene	*89.1*			*67.0-138*		*09/24/2020 18:34*	WG1547998
(S) 4-Bromofluorobenzene	*102*			*67.0-138*		*09/26/2020 01:53*	WG1548950
(S) 1,2-Dichloroethane-d4	*114*			*70.0-130*		*09/24/2020 18:34*	WG1547998
(S) 1,2-Dichloroethane-d4	*101*			*70.0-130*		*09/26/2020 01:53*	WG1548950

JC 10/13/2020

Wet Chemistry by Method 2320 B-2011

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Alkalinity	713000		8450	20000	1	09/21/2020 12:43	WG1546227

Sample Narrative:

L1263397-04 WG1546227: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 9056A

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Chloride	56700		379	1000	1	09/18/2020 15:56	WG1545298
Nitrate	U		48.0	100	1	09/18/2020 15:56	WG1545298
Sulfate	48000		594	5000	1	09/18/2020 15:56	WG1545298

Wet Chemistry by Method 9060A

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
TOC (Total Organic Carbon)	32700		102	1000	1	09/21/2020 17:08	WG1546593

Metals (ICPMS) by Method 6020B

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Iron	19100		48.9	100	1	09/23/2020 19:37	WG1546505
Manganese	1960		1.32	5.00	1	09/23/2020 19:37	WG1546505

Volatile Organic Compounds (GC) by Method NWTPHGX

	Result		Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l			ug/l	ug/l		date / time	
Gasoline Range Organics-NWTPH	374	Z, J+	~~B~~	31.6	100	1	09/23/2020 07:57	WG1547402
(S) a,a,a-Trifluorotoluene(FID)	*111*				*78.0-120*		*09/23/2020 07:57*	WG1547402

JC 10/27/2020

Sample Narrative:

L1263397-04 WG1547402: No discernible petroleum pattern present

Volatile Organic Compounds (GC) by Method RSK175

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Methane	19800		2.87	6.78	10	09/24/2020 17:45	WG1548880
Ethane	343		0.296	1.29	1	09/24/2020 12:10	WG1548397
Ethene	468		0.422	1.27	1	09/24/2020 12:10	WG1548397

Volatile Organic Compounds (GC/MS) by Method 8260D

	Result		Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l			ug/l	ug/l		date / time	
Acetone	2.39			0.548	1.00	1	09/24/2020 18:53	WG1547998
Acrylonitrile	U			0.0760	0.500	1	09/24/2020 18:53	WG1547998
Benzene	0.178			0.0160	0.0400	1	09/24/2020 18:53	WG1547998
Bromobenzene	U			0.0420	0.500	1	09/24/2020 18:53	WG1547998
Bromodichloromethane	U			0.0315	0.100	1	09/24/2020 18:53	WG1547998
Bromoform	U			0.239	1.00	1	09/24/2020 18:53	WG1547998
Bromomethane	U	UJ	J0	0.148	0.500	1	09/24/2020 18:53	WG1547998
n-Butylbenzene	U			0.153	0.500	1	09/24/2020 18:53	WG1547998
sec-Butylbenzene	U			0.101	0.500	1	09/24/2020 18:53	WG1547998
tert-Butylbenzene	U			0.0620	0.200	1	09/24/2020 18:53	WG1547998

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloroethane	U	UJ J0	0.0432	0.200	1	09/24/2020 18:53	WG1547998
Chloroform	U		0.0166	0.100	1	09/24/2020 18:53	WG1547998
Chloromethane	U	UJ J0	0.0556	0.500	1	09/24/2020 18:53	WG1547998
2-Chlorotoluene	U		0.0368	0.100	1	09/24/2020 18:53	WG1547998
4-Chlorotoluene	U		0.0452	0.200	1	09/24/2020 18:53	WG1547998
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	09/24/2020 18:53	WG1547998
1,2-Dibromoethane	U		0.0210	0.100	1	09/24/2020 18:53	WG1547998
Dibromomethane	U		0.0400	0.200	1	09/24/2020 18:53	WG1547998
1,2-Dichlorobenzene	U		0.0580	0.200	1	09/24/2020 18:53	WG1547998
1,3-Dichlorobenzene	U		0.0680	0.200	1	09/24/2020 18:53	WG1547998
1,4-Dichlorobenzene	U		0.0788	0.200	1	09/24/2020 18:53	WG1547998
Dichlorodifluoromethane	U		0.0327	0.100	1	09/24/2020 18:53	WG1547998
1,1-Dichloroethane	U		0.0230	0.100	1	09/24/2020 18:53	WG1547998
1,2-Dichloroethane	U		0.0190	0.100	1	09/24/2020 18:53	WG1547998
1,1-Dichloroethene	0.752		0.0200	0.100	1	09/24/2020 18:53	WG1547998
cis-1,2-Dichloroethene	480		0.552	2.00	20	09/26/2020 02:13	WG1548950
trans-1,2-Dichloroethene	4.37		0.0572	0.200	1	09/24/2020 18:53	WG1547998
1,2-Dichloropropane	U		0.0508	0.200	1	09/24/2020 18:53	WG1547998
1,1-Dichloropropene	U		0.0280	0.100	1	09/24/2020 18:53	WG1547998
1,3-Dichloropropane	U		0.0700	0.200	1	09/24/2020 18:53	WG1547998
cis-1,3-Dichloropropene	U		0.0271	0.100	1	09/24/2020 18:53	WG1547998
trans-1,3-Dichloropropene	U		0.0612	0.200	1	09/24/2020 18:53	WG1547998
2,2-Dichloropropane	U		0.0317	0.100	1	09/24/2020 18:53	WG1547998
Di-isopropyl ether	U		0.0140	0.0400	1	09/24/2020 18:53	WG1547998
Ethylbenzene	0.188		0.0212	0.100	1	09/24/2020 18:53	WG1547998
Hexachloro-1,3-butadiene	U		0.508	1.00	1	09/24/2020 18:53	WG1547998
Isopropylbenzene	U		0.0345	0.100	1	09/24/2020 18:53	WG1547998
p-Isopropyltoluene	U		0.0932	0.200	1	09/24/2020 18:53	WG1547998
2-Butanone (MEK)	U		0.500	1.00	1	09/24/2020 18:53	WG1547998
Methylene Chloride	U		0.265	1.00	1	09/24/2020 18:53	WG1547998
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	09/24/2020 18:53	WG1547998
Methyl tert-butyl ether	U		0.0118	0.0400	1	09/24/2020 18:53	WG1547998
Naphthalene	U		0.124	0.500	1	09/24/2020 18:53	WG1547998
n-Propylbenzene	U		0.0472	0.200	1	09/24/2020 18:53	WG1547998
Styrene	U		0.109	0.500	1	09/24/2020 18:53	WG1547998
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	09/24/2020 18:53	WG1547998
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	09/24/2020 18:53	WG1547998
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	09/24/2020 18:53	WG1547998
Tetrachloroethene	0.0870	J	0.0280	0.100	1	09/24/2020 18:53	WG1547998
Toluene	2.01		0.0500	0.200	1	09/24/2020 18:53	WG1547998
1,2,3-Trichlorobenzene	U		0.0250	0.500	1	09/24/2020 18:53	WG1547998
1,2,4-Trichlorobenzene	U		0.193	0.500	1	09/24/2020 18:53	WG1547998
1,1,1-Trichloroethane	U		0.0110	0.100	1	09/24/2020 18:53	WG1547998
1,1,2-Trichloroethane	U		0.0353	0.100	1	09/24/2020 18:53	WG1547998
Trichloroethene	0.447		0.0160	0.0400	1	09/24/2020 18:53	WG1547998
Trichlorofluoromethane	U	UJ J0	0.0200	0.100	1	09/24/2020 18:53	WG1547998
1,2,3-Trichloropropane	U		0.204	0.500	1	09/24/2020 18:53	WG1547998
1,2,4-Trimethylbenzene	0.0890	J	0.0464	0.200	1	09/24/2020 18:53	WG1547998
1,2,3-Trimethylbenzene	0.0540	J	0.0460	0.200	1	09/24/2020 18:53	WG1547998
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	09/24/2020 18:53	WG1547998
Vinyl chloride	530		0.546	2.00	20	09/26/2020 02:13	WG1548950
Xylenes, Total	0.927		0.191	0.260	1	09/24/2020 18:53	WG1547998
Ethyl Ether	0.0740	J	0.0170	0.100	1	09/24/2020 18:53	WG1547998
Tetrahydrofuran	0.453	J	0.0900	0.500	1	09/24/2020 18:53	WG1547998
Iodomethane	U		0.242	0.500	1	09/24/2020 18:53	WG1547998
Allyl chloride	U		0.580	1.00	1	09/24/2020 18:53	WG1547998

JC 10/13/2020

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Trans-1,4-Dichloro-2-butene	U		0.0560	0.200	1	09/24/2020 18:53	WG1547998
(S) Toluene-d8	*108*			*75.0-131*		*09/24/2020 18:53*	WG1547998
(S) Toluene-d8	*103*			*75.0-131*		*09/26/2020 02:13*	WG1548950
(S) 4-Bromofluorobenzene	*91.0*			*67.0-138*		*09/24/2020 18:53*	WG1547998
(S) 4-Bromofluorobenzene	*103*			*67.0-138*		*09/26/2020 02:13*	WG1548950
(S) 1,2-Dichloroethane-d4	*113*			*70.0-130*		*09/24/2020 18:53*	WG1547998
(S) 1,2-Dichloroethane-d4	*99.9*			*70.0-130*		*09/26/2020 02:13*	WG1548950

JC 10/13/2020

Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	590000		8450	20000	1	09/21/2020 12:52	WG1546227

Sample Narrative:

L1263397-05 WG1546227: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	31100		379	1000	1	09/18/2020 16:11	WG1545298
Nitrate	U		48.0	100	1	09/18/2020 16:11	WG1545298
Sulfate	60500		594	5000	1	09/18/2020 16:11	WG1545298

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	16000		102	1000	1	09/21/2020 17:23	WG1546593

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	4920		48.9	100	1	09/23/2020 19:41	WG1546505
Manganese	778		1.32	5.00	1	09/23/2020 19:41	WG1546505

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	199	Z, J+ ~~B~~	31.6	100	1	09/23/2020 08:22	WG1547402
(S) a,a,a-Trifluorotoluene(FID)	*110*			*78.0-120*		*09/23/2020 08:22*	WG1547402

Sample Narrative:

JC 10/27/2020

L1263397-05 WG1547402: No discernible petroleum pattern present

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	11200		2.87	6.78	10	09/24/2020 17:48	WG1548880
Ethane	58.1		0.296	1.29	1	09/24/2020 13:20	WG1548397
Ethene	112		0.422	1.27	1	09/24/2020 13:20	WG1548397

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	1.38		0.548	1.00	1	09/24/2020 19:12	WG1547998
Acrylonitrile	U		0.0760	0.500	1	09/24/2020 19:12	WG1547998
Benzene	0.155		0.0160	0.0400	1	09/24/2020 19:12	WG1547998
Bromobenzene	U		0.0420	0.500	1	09/24/2020 19:12	WG1547998
Bromodichloromethane	U		0.0315	0.100	1	09/24/2020 19:12	WG1547998
Bromoform	U		0.239	1.00	1	09/24/2020 19:12	WG1547998
Bromomethane	U	UJ J0	0.148	0.500	1	09/24/2020 19:12	WG1547998
n-Butylbenzene	U		0.153	0.500	1	09/24/2020 19:12	WG1547998
sec-Butylbenzene	U		0.101	0.500	1	09/24/2020 19:12	WG1547998
tert-Butylbenzene	U		0.0620	0.200	1	09/24/2020 19:12	WG1547998

PRB-C5-091720 SAMPLE RESULTS - 05

Collected date/time: 09/17/20 13:55

L1263397

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloroethane	U UJ	J0	0.0432	0.200	1	09/24/2020 19:12	WG1547998
Chloroform	U		0.0166	0.100	1	09/24/2020 19:12	WG1547998
Chloromethane	U UJ	J0	0.0556	0.500	1	09/24/2020 19:12	WG1547998
2-Chlorotoluene	U		0.0368	0.100	1	09/24/2020 19:12	WG1547998
4-Chlorotoluene	U		0.0452	0.200	1	09/24/2020 19:12	WG1547998
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	09/24/2020 19:12	WG1547998
1,2-Dibromoethane	U		0.0210	0.100	1	09/24/2020 19:12	WG1547998
Dibromomethane	U		0.0400	0.200	1	09/24/2020 19:12	WG1547998
1,2-Dichlorobenzene	U		0.0580	0.200	1	09/24/2020 19:12	WG1547998
1,3-Dichlorobenzene	U		0.0680	0.200	1	09/24/2020 19:12	WG1547998
1,4-Dichlorobenzene	U		0.0788	0.200	1	09/24/2020 19:12	WG1547998
Dichlorodifluoromethane	U		0.0327	0.100	1	09/24/2020 19:12	WG1547998
1,1-Dichloroethane	U		0.0230	0.100	1	09/24/2020 19:12	WG1547998
1,2-Dichloroethane	U		0.0190	0.100	1	09/24/2020 19:12	WG1547998
1,1-Dichloroethene	0.607		0.0200	0.100	1	09/24/2020 19:12	WG1547998
cis-1,2-Dichloroethene	217		0.276	1.00	10	09/26/2020 02:33	WG1548950
trans-1,2-Dichloroethene	1.74		0.0572	0.200	1	09/24/2020 19:12	WG1547998
1,2-Dichloropropane	U		0.0508	0.200	1	09/24/2020 19:12	WG1547998
1,1-Dichloropropene	U		0.0280	0.100	1	09/24/2020 19:12	WG1547998
1,3-Dichloropropane	U		0.0700	0.200	1	09/24/2020 19:12	WG1547998
cis-1,3-Dichloropropene	U		0.0271	0.100	1	09/24/2020 19:12	WG1547998
trans-1,3-Dichloropropene	U		0.0612	0.200	1	09/24/2020 19:12	WG1547998
2,2-Dichloropropane	U		0.0317	0.100	1	09/24/2020 19:12	WG1547998
Di-isopropyl ether	U		0.0140	0.0400	1	09/24/2020 19:12	WG1547998
Ethylbenzene	0.125		0.0212	0.100	1	09/24/2020 19:12	WG1547998
Hexachloro-1,3-butadiene	U		0.508	1.00	1	09/24/2020 19:12	WG1547998
Isopropylbenzene	U		0.0345	0.100	1	09/24/2020 19:12	WG1547998
p-Isopropyltoluene	U		0.0932	0.200	1	09/24/2020 19:12	WG1547998
2-Butanone (MEK)	U		0.500	1.00	1	09/24/2020 19:12	WG1547998
Methylene Chloride	U		0.265	1.00	1	09/24/2020 19:12	WG1547998
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	09/24/2020 19:12	WG1547998
Methyl tert-butyl ether	U		0.0118	0.0400	1	09/24/2020 19:12	WG1547998
Naphthalene	U		0.124	0.500	1	09/24/2020 19:12	WG1547998
n-Propylbenzene	U		0.0472	0.200	1	09/24/2020 19:12	WG1547998
Styrene	U		0.109	0.500	1	09/24/2020 19:12	WG1547998
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	09/24/2020 19:12	WG1547998
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	09/24/2020 19:12	WG1547998
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	09/24/2020 19:12	WG1547998
Tetrachloroethene	0.0680	J	0.0280	0.100	1	09/24/2020 19:12	WG1547998
Toluene	1.22		0.0500	0.200	1	09/24/2020 19:12	WG1547998
1,2,3-Trichlorobenzene	U		0.0250	0.500	1	09/24/2020 19:12	WG1547998
1,2,4-Trichlorobenzene	U		0.193	0.500	1	09/24/2020 19:12	WG1547998
1,1,1-Trichloroethane	U		0.0110	0.100	1	09/24/2020 19:12	WG1547998
1,1,2-Trichloroethane	U		0.0353	0.100	1	09/24/2020 19:12	WG1547998
Trichloroethene	0.141		0.0160	0.0400	1	09/24/2020 19:12	WG1547998
Trichlorofluoromethane	U UJ	J0	0.0200	0.100	1	09/24/2020 19:12	WG1547998
1,2,3-Trichloropropane	U		0.204	0.500	1	09/24/2020 19:12	WG1547998
1,2,4-Trimethylbenzene	0.0640	J	0.0464	0.200	1	09/24/2020 19:12	WG1547998
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	09/24/2020 19:12	WG1547998
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	09/24/2020 19:12	WG1547998
Vinyl chloride	350		0.273	1.00	10	09/26/2020 02:33	WG1548950
Xylenes, Total	0.534		0.191	0.260	1	09/24/2020 19:12	WG1547998
Ethyl Ether	0.0680	J	0.0170	0.100	1	09/24/2020 19:12	WG1547998
Tetrahydrofuran	0.554		0.0900	0.500	1	09/24/2020 19:12	WG1547998
Iodomethane	U		0.242	0.500	1	09/24/2020 19:12	WG1547998
Allyl chloride	U		0.580	1.00	1	09/24/2020 19:12	WG1547998

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Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Trans-1,4-Dichloro-2-butene	U		0.0560	0.200	1	09/24/2020 19:12	WG1547998
(S) Toluene-d8	*107*			*75.0-131*		*09/24/2020 19:12*	WG1547998
(S) Toluene-d8	*103*			*75.0-131*		*09/26/2020 02:33*	WG1548950
(S) 4-Bromofluorobenzene	*89.6*			*67.0-138*		*09/24/2020 19:12*	WG1547998
(S) 4-Bromofluorobenzene	*104*			*67.0-138*		*09/26/2020 02:33*	WG1548950
(S) 1,2-Dichloroethane-d4	*116*			*70.0-130*		*09/24/2020 19:12*	WG1547998
(S) 1,2-Dichloroethane-d4	*101*			*70.0-130*		*09/26/2020 02:33*	WG1548950

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Wet Chemistry by Method 2320 B-2011

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Alkalinity	696000		8450	20000	1	09/21/2020 12:59	WG1546227

Sample Narrative:

L1263397-06 WG1546227: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 9056A

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Chloride	58700		379	1000	1	09/18/2020 16:26	WG1545298
Nitrate	U		48.0	100	1	09/18/2020 16:26	WG1545298
Sulfate	44300		594	5000	1	09/18/2020 16:26	WG1545298

Wet Chemistry by Method 9060A

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
TOC (Total Organic Carbon)	30700		102	1000	1	09/21/2020 17:41	WG1546593

Metals (ICPMS) by Method 6020B

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Iron	22200		48.9	100	1	09/23/2020 19:44	WG1546505
Manganese	1910		1.32	5.00	1	09/23/2020 19:44	WG1546505

Volatile Organic Compounds (GC) by Method NWTPHGX

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Gasoline Range Organics-NWTPH	652	Z, J+	31.6	100	1	09/23/2020 08:47	WG1547402
(S) a,a,a-Trifluorotoluene(FID)	*111*			*78.0-120*		*09/23/2020 08:47*	WG1547402

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Sample Narrative:

L1263397-06 WG1547402: No discernible petroleum pattern present

Volatile Organic Compounds (GC) by Method RSK175

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Methane	29100		2.87	6.78	10	09/24/2020 17:50	WG1548880
Ethane	609		0.296	1.29	1	09/24/2020 13:23	WG1548397
Ethene	671		0.422	1.27	1	09/24/2020 13:23	WG1548397

Volatile Organic Compounds (GC/MS) by Method 8260D

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Acetone	1.70		0.548	1.00	1	09/24/2020 19:31	WG1547998
Acrylonitrile	U		0.0760	0.500	1	09/24/2020 19:31	WG1547998
Benzene	0.165		0.0160	0.0400	1	09/24/2020 19:31	WG1547998
Bromobenzene	U		0.0420	0.500	1	09/24/2020 19:31	WG1547998
Bromodichloromethane	U		0.0315	0.100	1	09/24/2020 19:31	WG1547998
Bromoform	U		0.239	1.00	1	09/24/2020 19:31	WG1547998
Bromomethane	U	UJ J0	0.148	0.500	1	09/24/2020 19:31	WG1547998
n-Butylbenzene	U		0.153	0.500	1	09/24/2020 19:31	WG1547998
sec-Butylbenzene	U		0.101	0.500	1	09/24/2020 19:31	WG1547998
tert-Butylbenzene	U		0.0620	0.200	1	09/24/2020 19:31	WG1547998

PRB-B4-091720

Collected date/time: 09/17/20 14:33

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Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloroethane	U UJ	J0	0.0432	0.200	1	09/24/2020 19:31	WG1547998
Chloroform	U		0.0166	0.100	1	09/24/2020 19:31	WG1547998
Chloromethane	U UJ	J0	0.0556	0.500	1	09/24/2020 19:31	WG1547998
2-Chlorotoluene	U		0.0368	0.100	1	09/24/2020 19:31	WG1547998
4-Chlorotoluene	U		0.0452	0.200	1	09/24/2020 19:31	WG1547998
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	09/24/2020 19:31	WG1547998
1,2-Dibromoethane	U		0.0210	0.100	1	09/24/2020 19:31	WG1547998
Dibromomethane	U		0.0400	0.200	1	09/24/2020 19:31	WG1547998
1,2-Dichlorobenzene	U		0.0580	0.200	1	09/24/2020 19:31	WG1547998
1,3-Dichlorobenzene	U		0.0680	0.200	1	09/24/2020 19:31	WG1547998
1,4-Dichlorobenzene	U		0.0788	0.200	1	09/24/2020 19:31	WG1547998
Dichlorodifluoromethane	U		0.0327	0.100	1	09/24/2020 19:31	WG1547998
1,1-Dichloroethane	U		0.0230	0.100	1	09/24/2020 19:31	WG1547998
1,2-Dichloroethane	0.0440	J	0.0190	0.100	1	09/24/2020 19:31	WG1547998
1,1-Dichloroethene	1.45		0.0200	0.100	1	09/24/2020 19:31	WG1547998
cis-1,2-Dichloroethene	853		0.552	2.00	20	09/26/2020 02:54	WG1548950
trans-1,2-Dichloroethene	6.16		0.0572	0.200	1	09/24/2020 19:31	WG1547998
1,2-Dichloropropane	U		0.0508	0.200	1	09/24/2020 19:31	WG1547998
1,1-Dichloropropene	U		0.0280	0.100	1	09/24/2020 19:31	WG1547998
1,3-Dichloropropane	U		0.0700	0.200	1	09/24/2020 19:31	WG1547998
cis-1,3-Dichloropropene	U		0.0271	0.100	1	09/24/2020 19:31	WG1547998
trans-1,3-Dichloropropene	U		0.0612	0.200	1	09/24/2020 19:31	WG1547998
2,2-Dichloropropane	0.0380	J	0.0317	0.100	1	09/24/2020 19:31	WG1547998
Di-isopropyl ether	U		0.0140	0.0400	1	09/24/2020 19:31	WG1547998
Ethylbenzene	U		0.0212	0.100	1	09/24/2020 19:31	WG1547998
Hexachloro-1,3-butadiene	U		0.508	1.00	1	09/24/2020 19:31	WG1547998
Isopropylbenzene	U		0.0345	0.100	1	09/24/2020 19:31	WG1547998
p-Isopropyltoluene	U		0.0932	0.200	1	09/24/2020 19:31	WG1547998
2-Butanone (MEK)	U		0.500	1.00	1	09/24/2020 19:31	WG1547998
Methylene Chloride	U		0.265	1.00	1	09/24/2020 19:31	WG1547998
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	09/24/2020 19:31	WG1547998
Methyl tert-butyl ether	U		0.0118	0.0400	1	09/24/2020 19:31	WG1547998
Naphthalene	U		0.124	0.500	1	09/24/2020 19:31	WG1547998
n-Propylbenzene	U		0.0472	0.200	1	09/24/2020 19:31	WG1547998
Styrene	U		0.109	0.500	1	09/24/2020 19:31	WG1547998
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	09/24/2020 19:31	WG1547998
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	09/24/2020 19:31	WG1547998
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	09/24/2020 19:31	WG1547998
Tetrachloroethene	0.128		0.0280	0.100	1	09/24/2020 19:31	WG1547998
Toluene	0.613		0.0500	0.200	1	09/24/2020 19:31	WG1547998
1,2,3-Trichlorobenzene	U		0.0250	0.500	1	09/24/2020 19:31	WG1547998
1,2,4-Trichlorobenzene	U		0.193	0.500	1	09/24/2020 19:31	WG1547998
1,1,1-Trichloroethane	U		0.0110	0.100	1	09/24/2020 19:31	WG1547998
1,1,2-Trichloroethane	U		0.0353	0.100	1	09/24/2020 19:31	WG1547998
Trichloroethene	2.48		0.0160	0.0400	1	09/24/2020 19:31	WG1547998
Trichlorofluoromethane	U UJ	J0	0.0200	0.100	1	09/24/2020 19:31	WG1547998
1,2,3-Trichloropropane	U		0.204	0.500	1	09/24/2020 19:31	WG1547998
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	09/24/2020 19:31	WG1547998
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	09/24/2020 19:31	WG1547998
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	09/24/2020 19:31	WG1547998
Vinyl chloride	723		0.546	2.00	20	09/26/2020 02:54	WG1548950
Xylenes, Total	U		0.191	0.260	1	09/24/2020 19:31	WG1547998
Ethyl Ether	0.0660	J	0.0170	0.100	1	09/24/2020 19:31	WG1547998
Tetrahydrofuran	0.256	J	0.0900	0.500	1	09/24/2020 19:31	WG1547998
Iodomethane	U		0.242	0.500	1	09/24/2020 19:31	WG1547998
Allyl chloride	U		0.580	1.00	1	09/24/2020 19:31	WG1547998

JC
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1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Trans-1,4-Dichloro-2-butene	U		0.0560	0.200	1	09/24/2020 19:31	WG1547998
(S) Toluene-d8	*113*			*75.0-131*		*09/24/2020 19:31*	WG1547998
(S) Toluene-d8	*104*			*75.0-131*		*09/26/2020 02:54*	WG1548950
(S) 4-Bromofluorobenzene	*88.6*			*67.0-138*		*09/24/2020 19:31*	WG1547998
(S) 4-Bromofluorobenzene	*102*			*67.0-138*		*09/26/2020 02:54*	WG1548950
(S) 1,2-Dichloroethane-d4	*116*			*70.0-130*		*09/24/2020 19:31*	WG1547998
(S) 1,2-Dichloroethane-d4	*102*			*70.0-130*		*09/26/2020 02:54*	WG1548950

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Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	176000		8450	20000	1	09/23/2020 10:20	WG1546972

Sample Narrative:

L1263961-01 WG1546972: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	28500		379	1000	1	09/19/2020 14:43	WG1545941
Nitrate	U		48.0	100	1	09/19/2020 14:43	WG1545941
Sulfate	6430		594	5000	1	09/19/2020 14:43	WG1545941

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	2960		102	1000	1	09/22/2020 17:39	WG1547126

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	9580 J		489	1000	10	09/24/2020 16:47	WG1547538
Manganese	268		13.2	50.0	10	09/24/2020 16:47	WG1547538

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	53.6 U	~~B J~~	31.6	100	1	09/29/2020 15:59	WG1550737
(S) a,a,a-Trifluorotoluene(FID)	*115*			*78.0-120*		*09/29/2020 15:59*	WG1550737

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	U		2.87	6.78	10	09/28/2020 12:00	WG1550396
Ethane	16.3		0.296	1.29	1	09/25/2020 15:56	WG1548884
Ethene	170		0.422	1.27	1	09/25/2020 15:56	WG1548884

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	1.42 U	~~B~~	0.548	1.00	1	09/25/2020 20:27	WG1549409
Acrylonitrile	U		0.0760	0.500	1	09/25/2020 20:27	WG1549409
Benzene	0.0847		0.0160	0.0400	1	09/25/2020 20:27	WG1549409
Bromobenzene	U		0.0420	0.500	1	09/25/2020 20:27	WG1549409
Bromodichloromethane	U		0.0315	0.100	1	09/25/2020 20:27	WG1549409
Bromoform	U		0.239	1.00	1	09/25/2020 20:27	WG1549409
Bromomethane	U		0.148	0.500	1	09/25/2020 20:27	WG1549409
n-Butylbenzene	U		0.153	0.500	1	09/25/2020 20:27	WG1549409
sec-Butylbenzene	U		0.101	0.500	1	09/25/2020 20:27	WG1549409
tert-Butylbenzene	U		0.0620	0.200	1	09/25/2020 20:27	WG1549409
Carbon tetrachloride	U		0.0432	0.200	1	09/25/2020 20:27	WG1549409
Chlorobenzene	U		0.0229	0.100	1	09/25/2020 20:27	WG1549409
Chlorodibromomethane	U		0.0180	0.100	1	09/25/2020 20:27	WG1549409

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PRB-101-091820

Collected date/time: 09/18/20 08:00

SAMPLE RESULTS - 01

L1263961

Volatile Organic Compounds (GC/MS) by Method 8260D

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Chloroethane	U		0.0432	0.200	1	09/25/2020 20:27	WG1549409
Chloroform	U		0.0166	0.100	1	09/25/2020 20:27	WG1549409
Chloromethane	U		0.0556	0.500	1	09/25/2020 20:27	WG1549409
2-Chlorotoluene	U		0.0368	0.100	1	09/25/2020 20:27	WG1549409
4-Chlorotoluene	U		0.0452	0.200	1	09/25/2020 20:27	WG1549409
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	09/25/2020 20:27	WG1549409
1,2-Dibromoethane	U		0.0210	0.100	1	09/25/2020 20:27	WG1549409
Dibromomethane	U		0.0400	0.200	1	09/25/2020 20:27	WG1549409
1,2-Dichlorobenzene	U		0.0580	0.200	1	09/25/2020 20:27	WG1549409
1,3-Dichlorobenzene	U		0.0680	0.200	1	09/25/2020 20:27	WG1549409
1,4-Dichlorobenzene	U		0.0788	0.200	1	09/25/2020 20:27	WG1549409
Dichlorodifluoromethane	U		0.0327	0.100	1	09/25/2020 20:27	WG1549409
1,1-Dichloroethane	U		0.0230	0.100	1	09/25/2020 20:27	WG1549409
1,2-Dichloroethane	U		0.0190	0.100	1	09/25/2020 20:27	WG1549409
1,1-Dichloroethene	U		0.0200	0.100	1	09/25/2020 20:27	WG1549409
cis-1,2-Dichloroethene	U		0.0276	0.100	1	09/25/2020 20:27	WG1549409
trans-1,2-Dichloroethene	U		0.0572	0.200	1	09/25/2020 20:27	WG1549409
1,2-Dichloropropane	U		0.0508	0.200	1	09/25/2020 20:27	WG1549409
1,1-Dichloropropene	U		0.0280	0.100	1	09/25/2020 20:27	WG1549409
1,3-Dichloropropane	U		0.0700	0.200	1	09/25/2020 20:27	WG1549409
cis-1,3-Dichloropropene	U		0.0271	0.100	1	09/25/2020 20:27	WG1549409
trans-1,3-Dichloropropene	U		0.0612	0.200	1	09/25/2020 20:27	WG1549409
2,2-Dichloropropane	U		0.0317	0.100	1	09/25/2020 20:27	WG1549409
Di-isopropyl ether	U		0.0140	0.0400	1	09/25/2020 20:27	WG1549409
Ethylbenzene	U		0.0212	0.100	1	09/25/2020 20:27	WG1549409
Hexachloro-1,3-butadiene	U		0.508	1.00	1	09/25/2020 20:27	WG1549409
Isopropylbenzene	U		0.0345	0.100	1	09/25/2020 20:27	WG1549409
p-Isopropyltoluene	U		0.0932	0.200	1	09/25/2020 20:27	WG1549409
2-Butanone (MEK)	U		0.500	1.00	1	09/25/2020 20:27	WG1549409
Methylene Chloride	U		0.265	1.00	1	09/25/2020 20:27	WG1549409
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	09/25/2020 20:27	WG1549409
Methyl tert-butyl ether	U		0.0118	0.0400	1	09/25/2020 20:27	WG1549409
Naphthalene	U		0.124	0.500	1	09/25/2020 20:27	WG1549409
n-Propylbenzene	U		0.0472	0.200	1	09/25/2020 20:27	WG1549409
Styrene	U		0.109	0.500	1	09/25/2020 20:27	WG1549409
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	09/25/2020 20:27	WG1549409
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	09/25/2020 20:27	WG1549409
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	09/25/2020 20:27	WG1549409
Tetrachloroethene	U		0.0280	0.100	1	09/25/2020 20:27	WG1549409
Toluene	1.28		0.0500	0.200	1	09/25/2020 20:27	WG1549409
1,2,3-Trichlorobenzene	U		0.0250	0.500	1	09/29/2020 16:06	WG1550162
1,2,4-Trichlorobenzene	U		0.193	0.500	1	09/25/2020 20:27	WG1549409
1,1,1-Trichloroethane	U		0.0110	0.100	1	09/25/2020 20:27	WG1549409
1,1,2-Trichloroethane	U		0.0353	0.100	1	09/25/2020 20:27	WG1549409
Trichloroethene	U		0.0160	0.0400	1	09/29/2020 16:06	WG1550162
Trichlorofluoromethane	U		0.0200	0.100	1	09/25/2020 20:27	WG1549409
1,2,3-Trichloropropane	U		0.204	0.500	1	09/25/2020 20:27	WG1549409
1,2,4-Trimethylbenzene	0.107	J	0.0464	0.200	1	09/25/2020 20:27	WG1549409
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	09/25/2020 20:27	WG1549409
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	09/25/2020 20:27	WG1549409
Vinyl chloride	U		0.0273	0.100	1	09/25/2020 20:27	WG1549409
Xylenes, Total	U		0.191	0.260	1	09/25/2020 20:27	WG1549409
Ethyl Ether	U		0.0170	0.100	1	09/25/2020 20:27	WG1549409
Tetrahydrofuran	U		0.0900	0.500	1	09/25/2020 20:27	WG1549409
Iodomethane	U		0.242	0.500	1	09/25/2020 20:27	WG1549409
Allyl chloride	U		0.580	1.00	1	09/25/2020 20:27	WG1549409

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Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Trans-1,4-Dichloro-2-butene	U		0.0560	0.200	1	09/25/2020 20:27	WG1549409
(S) Toluene-d8	*102*			*75.0-131*		*09/25/2020 20:27*	WG1549409
(S) Toluene-d8	*104*			*75.0-131*		*09/29/2020 16:06*	WG1550162
(S) 4-Bromofluorobenzene	*102*			*67.0-138*		*09/25/2020 20:27*	WG1549409
(S) 4-Bromofluorobenzene	*104*			*67.0-138*		*09/29/2020 16:06*	WG1550162
(S) 1,2-Dichloroethane-d4	*98.7*			*70.0-130*		*09/25/2020 20:27*	WG1549409
(S) 1,2-Dichloroethane-d4	*107*			*70.0-130*		*09/29/2020 16:06*	WG1550162

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SAMPLE RESULTS - 02

L1263961

Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	230000		8450	20000	1	09/23/2020 10:29	WG1546972

Sample Narrative:

L1263961-02 WG1546972: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	25700		379	1000	1	09/19/2020 14:56	WG1545941
Nitrate	U		48.0	100	1	09/19/2020 14:56	WG1545941
Sulfate	25700		594	5000	1	09/19/2020 14:56	WG1545941

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	4980		102	1000	1	09/22/2020 19:43	WG1547126

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	4410		489	1000	10	09/24/2020 16:50	WG1547538
Manganese	1410		13.2	50.0	10	09/24/2020 16:50	WG1547538

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	523	Z, J+	31.6	100	1	09/25/2020 08:29	WG1548979
(S) a,a,a-Trifluorotoluene(FID)	*94.3*			*78.0-120*		*09/25/2020 08:29*	WG1548979

Sample Narrative:

L1263961-02 WG1548979: No discernible petroleum pattern present

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	420		0.287	0.678	1	09/25/2020 15:59	WG1548884
Ethane	U		0.296	1.29	1	09/25/2020 15:59	WG1548884
Ethene	U		0.422	1.27	1	09/25/2020 15:59	WG1548884

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	0.624	U ~~B J~~	0.548	1.00	1	09/25/2020 20:48	WG1549409
Acrylonitrile	U		0.0760	0.500	1	09/25/2020 20:48	WG1549409
Benzene	U		0.0160	0.0400	1	09/25/2020 20:48	WG1549409
Bromobenzene	U		0.0420	0.500	1	09/25/2020 20:48	WG1549409
Bromodichloromethane	U		0.0315	0.100	1	09/25/2020 20:48	WG1549409
Bromoform	U		0.239	1.00	1	09/25/2020 20:48	WG1549409
Bromomethane	U		0.148	0.500	1	09/25/2020 20:48	WG1549409
n-Butylbenzene	U		0.153	0.500	1	09/25/2020 20:48	WG1549409
sec-Butylbenzene	U		0.101	0.500	1	09/25/2020 20:48	WG1549409
tert-Butylbenzene	U		0.0620	0.200	1	09/25/2020 20:48	WG1549409

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Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloroethane	9.87		0.0432	0.200	1	09/25/2020 20:48	WG1549409
Chloroform	0.257		0.0166	0.100	1	09/25/2020 20:48	WG1549409
Chloromethane	U		0.0556	0.500	1	09/25/2020 20:48	WG1549409
2-Chlorotoluene	U		0.0368	0.100	1	09/25/2020 20:48	WG1549409
4-Chlorotoluene	U		0.0452	0.200	1	09/25/2020 20:48	WG1549409
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	09/25/2020 20:48	WG1549409
1,2-Dibromoethane	U		0.0210	0.100	1	09/25/2020 20:48	WG1549409
Dibromomethane	U		0.0400	0.200	1	09/25/2020 20:48	WG1549409
1,2-Dichlorobenzene	U		0.0580	0.200	1	09/25/2020 20:48	WG1549409
1,3-Dichlorobenzene	U		0.0680	0.200	1	09/25/2020 20:48	WG1549409
1,4-Dichlorobenzene	U		0.0788	0.200	1	09/25/2020 20:48	WG1549409
Dichlorodifluoromethane	U		0.0327	0.100	1	09/25/2020 20:48	WG1549409
1,1-Dichloroethane	U		0.0230	0.100	1	09/25/2020 20:48	WG1549409
1,2-Dichloroethane	U		0.0190	0.100	1	09/25/2020 20:48	WG1549409
1,1-Dichloroethene	8.87		0.0200	0.100	1	09/25/2020 20:48	WG1549409
cis-1,2-Dichloroethene	1010		0.690	2.50	25	09/29/2020 16:24	WG1550162
trans-1,2-Dichloroethene	17.3		0.0572	0.200	1	09/25/2020 20:48	WG1549409
1,2-Dichloropropane	U		0.0508	0.200	1	09/25/2020 20:48	WG1549409
1,1-Dichloropropene	U		0.0280	0.100	1	09/25/2020 20:48	WG1549409
1,3-Dichloropropane	U		0.0700	0.200	1	09/25/2020 20:48	WG1549409
cis-1,3-Dichloropropene	U		0.0271	0.100	1	09/25/2020 20:48	WG1549409
trans-1,3-Dichloropropene	U		0.0612	0.200	1	09/25/2020 20:48	WG1549409
2,2-Dichloropropane	U		0.0317	0.100	1	09/25/2020 20:48	WG1549409
Di-isopropyl ether	U		0.0140	0.0400	1	09/25/2020 20:48	WG1549409
Ethylbenzene	U		0.0212	0.100	1	09/25/2020 20:48	WG1549409
Hexachloro-1,3-butadiene	U		0.508	1.00	1	09/25/2020 20:48	WG1549409
Isopropylbenzene	U		0.0345	0.100	1	09/25/2020 20:48	WG1549409
p-Isopropyltoluene	U		0.0932	0.200	1	09/25/2020 20:48	WG1549409
2-Butanone (MEK)	U		0.500	1.00	1	09/25/2020 20:48	WG1549409
Methylene Chloride	U		0.265	1.00	1	09/25/2020 20:48	WG1549409
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	09/25/2020 20:48	WG1549409
Methyl tert-butyl ether	U		0.0118	0.0400	1	09/25/2020 20:48	WG1549409
Naphthalene	U		0.124	0.500	1	09/25/2020 20:48	WG1549409
n-Propylbenzene	U		0.0472	0.200	1	09/25/2020 20:48	WG1549409
Styrene	U		0.109	0.500	1	09/25/2020 20:48	WG1549409
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	09/25/2020 20:48	WG1549409
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	09/25/2020 20:48	WG1549409
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	09/25/2020 20:48	WG1549409
Tetrachloroethene	14.1		0.0280	0.100	1	09/25/2020 20:48	WG1549409
Toluene	0.128 U	~~J~~	0.0500	0.200	1	09/25/2020 20:48	WG1549409
1,2,3-Trichlorobenzene	U		0.625	12.5	25	09/29/2020 16:24	WG1550162
1,2,4-Trichlorobenzene	U		0.193	0.500	1	09/25/2020 20:48	WG1549409
1,1,1-Trichloroethane	U		0.0110	0.100	1	09/25/2020 20:48	WG1549409
1,1,2-Trichloroethane	U		0.0353	0.100	1	09/25/2020 20:48	WG1549409
Trichloroethene	22.3		0.400	1.00	25	09/29/2020 16:24	WG1550162
Trichlorofluoromethane	U		0.0200	0.100	1	09/25/2020 20:48	WG1549409
1,2,3-Trichloropropane	U		0.204	0.500	1	09/25/2020 20:48	WG1549409
1,2,4-Trimethylbenzene	0.101	J	0.0464	0.200	1	09/25/2020 20:48	WG1549409
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	09/25/2020 20:48	WG1549409
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	09/25/2020 20:48	WG1549409
Vinyl chloride	813		0.682	2.50	25	09/29/2020 16:24	WG1550162
Xylenes, Total	U		0.191	0.260	1	09/25/2020 20:48	WG1549409
Ethyl Ether	U		0.0170	0.100	1	09/25/2020 20:48	WG1549409
Tetrahydrofuran	7.73		0.0900	0.500	1	09/25/2020 20:48	WG1549409
Iodomethane	U		0.242	0.500	1	09/25/2020 20:48	WG1549409
Allyl chloride	U		0.580	1.00	1	09/25/2020 20:48	WG1549409

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Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Trans-1,4-Dichloro-2-butene	U		0.0560	0.200	1	09/25/2020 20:48	WG1549409
(S) Toluene-d8	*102*			*75.0-131*		*09/25/2020 20:48*	WG1549409
(S) Toluene-d8	*102*			*75.0-131*		*09/29/2020 16:24*	WG1550162
(S) 4-Bromofluorobenzene	*104*			*67.0-138*		*09/25/2020 20:48*	WG1549409
(S) 4-Bromofluorobenzene	*108*			*67.0-138*		*09/29/2020 16:24*	WG1550162
(S) 1,2-Dichloroethane-d4	*98.2*			*70.0-130*		*09/25/2020 20:48*	WG1549409
(S) 1,2-Dichloroethane-d4	*104*			*70.0-130*		*09/29/2020 16:24*	WG1550162

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1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Wet Chemistry by Method 2320 B-2011

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Alkalinity	200000		8450	20000	1	09/23/2020 10:39	WG1546972

Sample Narrative:

L1263961-03 WG1546972: Endpoint pH 4.5

Wet Chemistry by Method 9056A

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Chloride	22800		379	1000	1	09/19/2020 15:09	WG1545941
Nitrate	U		48.0	100	1	09/19/2020 15:09	WG1545941
Sulfate	149000		2970	25000	5	09/21/2020 08:12	WG1546224

Wet Chemistry by Method 9060A

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
TOC (Total Organic Carbon)	2110	~~B~~	102	1000	1	09/22/2020 20:45	WG1547126

Metals (ICPMS) by Method 6020B

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Iron	15300		489	1000	10	09/24/2020 17:08	WG1547538
Manganese	756		13.2	50.0	10	09/24/2020 17:08	WG1547538

Volatile Organic Compounds (GC) by Method NWTPHGX

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Gasoline Range Organics-NWTPH	56.7 U	~~B J~~	31.6	100	1	09/25/2020 10:14	WG1548979
(S) a,a,a-Trifluorotoluene(FID)	*95.9*			*78.0-120*		*09/25/2020 10:14*	WG1548979

Volatile Organic Compounds (GC) by Method RSK175

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Methane	453		0.287	0.678	1	09/25/2020 16:15	WG1548884
Ethane	U		0.296	1.29	1	09/25/2020 16:15	WG1548884
Ethene	U		0.422	1.27	1	09/25/2020 16:15	WG1548884

Volatile Organic Compounds (GC/MS) by Method 8260D

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Acetone	0.940 U	~~B J~~	0.548	1.00	1	09/25/2020 21:08	WG1549409
Acrylonitrile	U		0.0760	0.500	1	09/25/2020 21:08	WG1549409
Benzene	U		0.0160	0.0400	1	09/25/2020 21:08	WG1549409
Bromobenzene	U		0.0420	0.500	1	09/25/2020 21:08	WG1549409
Bromodichloromethane	U		0.0315	0.100	1	09/25/2020 21:08	WG1549409
Bromoform	U		0.239	1.00	1	09/25/2020 21:08	WG1549409
Bromomethane	U		0.148	0.500	1	09/25/2020 21:08	WG1549409
n-Butylbenzene	U		0.153	0.500	1	09/25/2020 21:08	WG1549409
sec-Butylbenzene	U		0.101	0.500	1	09/25/2020 21:08	WG1549409
tert-Butylbenzene	U		0.0620	0.200	1	09/25/2020 21:08	WG1549409
Carbon tetrachloride	U		0.0432	0.200	1	09/25/2020 21:08	WG1549409
Chlorobenzene	U		0.0229	0.100	1	09/25/2020 21:08	WG1549409
Chlorodibromomethane	U		0.0180	0.100	1	09/25/2020 21:08	WG1549409

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PRB-D13-091820

Collected date/time: 09/18/20 10:37

SAMPLE RESULTS - 03

L1263961

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloroethane	U		0.0432	0.200	1	09/25/2020 21:08	WG1549409
Chloroform	0.188		0.0166	0.100	1	09/25/2020 21:08	WG1549409
Chloromethane	U		0.0556	0.500	1	09/25/2020 21:08	WG1549409
2-Chlorotoluene	U		0.0368	0.100	1	09/25/2020 21:08	WG1549409
4-Chlorotoluene	U		0.0452	0.200	1	09/25/2020 21:08	WG1549409
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	09/25/2020 21:08	WG1549409
1,2-Dibromoethane	U		0.0210	0.100	1	09/25/2020 21:08	WG1549409
Dibromomethane	U		0.0400	0.200	1	09/25/2020 21:08	WG1549409
1,2-Dichlorobenzene	U		0.0580	0.200	1	09/25/2020 21:08	WG1549409
1,3-Dichlorobenzene	U		0.0680	0.200	1	09/25/2020 21:08	WG1549409
1,4-Dichlorobenzene	U		0.0788	0.200	1	09/25/2020 21:08	WG1549409
Dichlorodifluoromethane	U		0.0327	0.100	1	09/25/2020 21:08	WG1549409
1,1-Dichloroethane	U		0.0230	0.100	1	09/25/2020 21:08	WG1549409
1,2-Dichloroethane	U		0.0190	0.100	1	09/25/2020 21:08	WG1549409
1,1-Dichloroethene	U		0.0200	0.100	1	09/25/2020 21:08	WG1549409
cis-1,2-Dichloroethene	0.869		0.0276	0.100	1	09/29/2020 16:43	WG1550162
trans-1,2-Dichloroethene	U		0.0572	0.200	1	09/25/2020 21:08	WG1549409
1,2-Dichloropropane	U		0.0508	0.200	1	09/25/2020 21:08	WG1549409
1,1-Dichloropropene	U		0.0280	0.100	1	09/25/2020 21:08	WG1549409
1,3-Dichloropropane	U		0.0700	0.200	1	09/25/2020 21:08	WG1549409
cis-1,3-Dichloropropene	U		0.0271	0.100	1	09/25/2020 21:08	WG1549409
trans-1,3-Dichloropropene	U		0.0612	0.200	1	09/25/2020 21:08	WG1549409
2,2-Dichloropropane	U		0.0317	0.100	1	09/25/2020 21:08	WG1549409
Di-isopropyl ether	U		0.0140	0.0400	1	09/25/2020 21:08	WG1549409
Ethylbenzene	U		0.0212	0.100	1	09/25/2020 21:08	WG1549409
Hexachloro-1,3-butadiene	U		0.508	1.00	1	09/25/2020 21:08	WG1549409
Isopropylbenzene	U		0.0345	0.100	1	09/25/2020 21:08	WG1549409
p-Isopropyltoluene	U		0.0932	0.200	1	09/25/2020 21:08	WG1549409
2-Butanone (MEK)	U		0.500	1.00	1	09/25/2020 21:08	WG1549409
Methylene Chloride	U		0.265	1.00	1	09/25/2020 21:08	WG1549409
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	09/25/2020 21:08	WG1549409
Methyl tert-butyl ether	U		0.0118	0.0400	1	09/25/2020 21:08	WG1549409
Naphthalene	U		0.124	0.500	1	09/25/2020 21:08	WG1549409
n-Propylbenzene	U		0.0472	0.200	1	09/25/2020 21:08	WG1549409
Styrene	U		0.109	0.500	1	09/25/2020 21:08	WG1549409
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	09/25/2020 21:08	WG1549409
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	09/25/2020 21:08	WG1549409
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	09/25/2020 21:08	WG1549409
Tetrachloroethene	0.178		0.0280	0.100	1	09/25/2020 21:08	WG1549409
Toluene	0.975		0.0500	0.200	1	09/25/2020 21:08	WG1549409
1,2,3-Trichlorobenzene	U		0.0250	0.500	1	09/29/2020 16:43	WG1550162
1,2,4-Trichlorobenzene	U		0.193	0.500	1	09/25/2020 21:08	WG1549409
1,1,1-Trichloroethane	U		0.0110	0.100	1	09/25/2020 21:08	WG1549409
1,1,2-Trichloroethane	U		0.0353	0.100	1	09/25/2020 21:08	WG1549409
Trichloroethene	0.0780		0.0160	0.0400	1	09/29/2020 16:43	WG1550162
Trichlorofluoromethane	U		0.0200	0.100	1	09/25/2020 21:08	WG1549409
1,2,3-Trichloropropane	U		0.204	0.500	1	09/25/2020 21:08	WG1549409
1,2,4-Trimethylbenzene	0.101	J	0.0464	0.200	1	09/25/2020 21:08	WG1549409
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	09/25/2020 21:08	WG1549409
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	09/25/2020 21:08	WG1549409
Vinyl chloride	3.27		0.0273	0.100	1	09/29/2020 16:43	WG1550162
Xylenes, Total	U		0.191	0.260	1	09/25/2020 21:08	WG1549409
Ethyl Ether	U		0.0170	0.100	1	09/25/2020 21:08	WG1549409
Tetrahydrofuran	U		0.0900	0.500	1	09/25/2020 21:08	WG1549409
Iodomethane	U		0.242	0.500	1	09/25/2020 21:08	WG1549409
Allyl chloride	U		0.580	1.00	1	09/25/2020 21:08	WG1549409

JC 10/13/2020

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Trans-1,4-Dichloro-2-butene	U		0.0560	0.200	1	09/25/2020 21:08	WG1549409
(S) Toluene-d8	*102*			*75.0-131*		*09/25/2020 21:08*	WG1549409
(S) Toluene-d8	*104*			*75.0-131*		*09/29/2020 16:43*	WG1550162
(S) 4-Bromofluorobenzene	*102*			*67.0-138*		*09/25/2020 21:08*	WG1549409
(S) 4-Bromofluorobenzene	*108*			*67.0-138*		*09/29/2020 16:43*	WG1550162
(S) 1,2-Dichloroethane-d4	*100*			*70.0-130*		*09/25/2020 21:08*	WG1549409
(S) 1,2-Dichloroethane-d4	*113*			*70.0-130*		*09/29/2020 16:43*	WG1550162

JC 10/13/2020

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	255000		8450	20000	1	09/23/2020 10:48	WG1546972

Sample Narrative:

L1263961-04 WG1546972: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	30900		379	1000	1	09/19/2020 15:22	WG1545941
Nitrate	U		48.0	100	1	09/19/2020 15:22	WG1545941
Sulfate	26600		594	5000	1	09/19/2020 15:22	WG1545941

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	5330		102	1000	1	09/22/2020 21:04	WG1547126

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	4260		489	1000	10	09/24/2020 17:12	WG1547538
Manganese	680		13.2	50.0	10	09/24/2020 17:12	WG1547538

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	61.0	U ~~BJ~~	31.6	100	1	09/25/2020 10:59	WG1548979
(S) a,a,a-Trifluorotoluene(FID)	*94.3*			*78.0-120*		*09/25/2020 10:59*	WG1548979

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	54.7		0.287	0.678	1	09/25/2020 16:04	WG1548884
Ethane	U		0.296	1.29	1	09/25/2020 16:04	WG1548884
Ethene	U		0.422	1.27	1	09/25/2020 16:04	WG1548884

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	0.854	U ~~B J~~	0.548	1.00	1	09/25/2020 21:28	WG1549409
Acrylonitrile	U		0.0760	0.500	1	09/25/2020 21:28	WG1549409
Benzene	U		0.0160	0.0400	1	09/25/2020 21:28	WG1549409
Bromobenzene	U		0.0420	0.500	1	09/25/2020 21:28	WG1549409
Bromodichloromethane	U		0.0315	0.100	1	09/25/2020 21:28	WG1549409
Bromoform	U		0.239	1.00	1	09/25/2020 21:28	WG1549409
Bromomethane	U		0.148	0.500	1	09/25/2020 21:28	WG1549409
n-Butylbenzene	U		0.153	0.500	1	09/25/2020 21:28	WG1549409
sec-Butylbenzene	U		0.101	0.500	1	09/25/2020 21:28	WG1549409
tert-Butylbenzene	U		0.0620	0.200	1	09/25/2020 21:28	WG1549409
Carbon tetrachloride	U		0.0432	0.200	1	09/25/2020 21:28	WG1549409
Chlorobenzene	U		0.0229	0.100	1	09/25/2020 21:28	WG1549409
Chlorodibromomethane	U		0.0180	0.100	1	09/25/2020 21:28	WG1549409

JC 10/13/2020

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloroethane	1.61		0.0432	0.200	1	09/25/2020 21:28	WG1549409
Chloroform	U		0.0166	0.100	1	09/25/2020 21:28	WG1549409
Chloromethane	U		0.0556	0.500	1	09/25/2020 21:28	WG1549409
2-Chlorotoluene	U		0.0368	0.100	1	09/25/2020 21:28	WG1549409
4-Chlorotoluene	U		0.0452	0.200	1	09/25/2020 21:28	WG1549409
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	09/25/2020 21:28	WG1549409
1,2-Dibromoethane	U		0.0210	0.100	1	09/25/2020 21:28	WG1549409
Dibromomethane	U		0.0400	0.200	1	09/25/2020 21:28	WG1549409
1,2-Dichlorobenzene	U		0.0580	0.200	1	09/25/2020 21:28	WG1549409
1,3-Dichlorobenzene	U		0.0680	0.200	1	09/25/2020 21:28	WG1549409
1,4-Dichlorobenzene	U		0.0788	0.200	1	09/25/2020 21:28	WG1549409
Dichlorodifluoromethane	U		0.0327	0.100	1	09/25/2020 21:28	WG1549409
1,1-Dichloroethane	U		0.0230	0.100	1	09/25/2020 21:28	WG1549409
1,2-Dichloroethane	U		0.0190	0.100	1	09/25/2020 21:28	WG1549409
1,1-Dichloroethene	0.655		0.0200	0.100	1	09/25/2020 21:28	WG1549409
cis-1,2-Dichloroethene	16.8		0.0276	0.100	1	09/25/2020 21:28	WG1549409
trans-1,2-Dichloroethene	0.677		0.0572	0.200	1	09/25/2020 21:28	WG1549409
1,2-Dichloropropane	U		0.0508	0.200	1	09/25/2020 21:28	WG1549409
1,1-Dichloropropene	U		0.0280	0.100	1	09/25/2020 21:28	WG1549409
1,3-Dichloropropane	U		0.0700	0.200	1	09/25/2020 21:28	WG1549409
cis-1,3-Dichloropropene	U		0.0271	0.100	1	09/25/2020 21:28	WG1549409
trans-1,3-Dichloropropene	U		0.0612	0.200	1	09/25/2020 21:28	WG1549409
2,2-Dichloropropane	U		0.0317	0.100	1	09/25/2020 21:28	WG1549409
Di-isopropyl ether	U		0.0140	0.0400	1	09/25/2020 21:28	WG1549409
Ethylbenzene	U		0.0212	0.100	1	09/25/2020 21:28	WG1549409
Hexachloro-1,3-butadiene	U		0.508	1.00	1	09/25/2020 21:28	WG1549409
Isopropylbenzene	U		0.0345	0.100	1	09/25/2020 21:28	WG1549409
p-Isopropyltoluene	U		0.0932	0.200	1	09/25/2020 21:28	WG1549409
2-Butanone (MEK)	U		0.500	1.00	1	09/25/2020 21:28	WG1549409
Methylene Chloride	U		0.265	1.00	1	09/25/2020 21:28	WG1549409
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	09/25/2020 21:28	WG1549409
Methyl tert-butyl ether	U		0.0118	0.0400	1	09/25/2020 21:28	WG1549409
Naphthalene	U		0.124	0.500	1	09/25/2020 21:28	WG1549409
n-Propylbenzene	U		0.0472	0.200	1	09/25/2020 21:28	WG1549409
Styrene	U		0.109	0.500	1	09/25/2020 21:28	WG1549409
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	09/25/2020 21:28	WG1549409
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	09/25/2020 21:28	WG1549409
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	09/25/2020 21:28	WG1549409
Tetrachloroethene	U		0.0280	0.100	1	09/25/2020 21:28	WG1549409
Toluene	U		0.0500	0.200	1	09/25/2020 21:28	WG1549409
1,2,3-Trichlorobenzene	U		0.500	10.0	20	09/29/2020 17:02	WG1550162
1,2,4-Trichlorobenzene	U		0.193	0.500	1	09/25/2020 21:28	WG1549409
1,1,1-Trichloroethane	U		0.0110	0.100	1	09/25/2020 21:28	WG1549409
1,1,2-Trichloroethane	U		0.0353	0.100	1	09/25/2020 21:28	WG1549409
Trichloroethene	0.500	J	0.320	0.800	20	09/29/2020 17:02	WG1550162
Trichlorofluoromethane	U		0.0200	0.100	1	09/25/2020 21:28	WG1549409
1,2,3-Trichloropropane	U		0.204	0.500	1	09/25/2020 21:28	WG1549409
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	09/25/2020 21:28	WG1549409
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	09/25/2020 21:28	WG1549409
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	09/25/2020 21:28	WG1549409
Vinyl chloride	446		0.546	2.00	20	09/29/2020 17:02	WG1550162
Xylenes, Total	U		0.191	0.260	1	09/25/2020 21:28	WG1549409
Ethyl Ether	U		0.0170	0.100	1	09/25/2020 21:28	WG1549409
Tetrahydrofuran	U		0.0900	0.500	1	09/25/2020 21:28	WG1549409
Iodomethane	U		0.242	0.500	1	09/25/2020 21:28	WG1549409
Allyl chloride	U		0.580	1.00	1	09/25/2020 21:28	WG1549409

JC 10/13/2020

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Trans-1,4-Dichloro-2-butene	U		0.0560	0.200	1	09/25/2020 21:28	WG1549409
(S) Toluene-d8	*102*			*75.0-131*		*09/25/2020 21:28*	WG1549409
(S) Toluene-d8	*103*			*75.0-131*		*09/29/2020 17:02*	WG1550162
(S) 4-Bromofluorobenzene	*103*			*67.0-138*		*09/25/2020 21:28*	WG1549409
(S) 4-Bromofluorobenzene	*101*			*67.0-138*		*09/29/2020 17:02*	WG1550162
(S) 1,2-Dichloroethane-d4	*99.1*			*70.0-130*		*09/25/2020 21:28*	WG1549409
(S) 1,2-Dichloroethane-d4	*106*			*70.0-130*		*09/29/2020 17:02*	WG1550162

JC 10/13/2020

Wet Chemistry by Method 2320 B-2011

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Alkalinity	173000		8450	20000	1	09/23/2020 10:56	WG1546972

Sample Narrative:

L1263961-05 WG1546972: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 9056A

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Chloride	27900		379	1000	1	09/19/2020 15:35	WG1545941
Nitrate	50.3	J	48.0	100	1	09/19/2020 15:35	WG1545941
Sulfate	6650		594	5000	1	09/19/2020 15:35	WG1545941

Wet Chemistry by Method 9060A

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
TOC (Total Organic Carbon)	2530		102	1000	1	09/22/2020 21:20	WG1547126

Metals (ICPMS) by Method 6020B

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Iron	17400 J		489	1000	10	09/24/2020 17:15	WG1547538
Manganese	395		13.2	50.0	10	09/24/2020 17:15	WG1547538

Volatile Organic Compounds (GC) by Method NWTPHGX

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Gasoline Range Organics-NWTPH	49.0 U	~~B J~~	31.6	100	1	09/25/2020 11:20	WG1548979
(S) a,a,a-Trifluorotoluene(FID)	*94.3*			*78.0-120*		*09/25/2020 11:20*	WG1548979

Volatile Organic Compounds (GC) by Method RSK175

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Methane	48.4		0.287	0.678	1	09/25/2020 16:13	WG1548884
Ethane	U		0.296	1.29	1	09/25/2020 16:13	WG1548884
Ethene	U		0.422	1.27	1	09/25/2020 16:13	WG1548884

Volatile Organic Compounds (GC/MS) by Method 8260D

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Acetone	1.04 U	~~B~~	0.548	1.00	1	09/25/2020 21:49	WG1549409
Acrylonitrile	U		0.0760	0.500	1	09/25/2020 21:49	WG1549409
Benzene	0.0979		0.0160	0.0400	1	09/25/2020 21:49	WG1549409
Bromobenzene	U		0.0420	0.500	1	09/25/2020 21:49	WG1549409
Bromodichloromethane	U		0.0315	0.100	1	09/25/2020 21:49	WG1549409
Bromoform	U		0.239	1.00	1	09/25/2020 21:49	WG1549409
Bromomethane	U		0.148	0.500	1	09/25/2020 21:49	WG1549409
n-Butylbenzene	U		0.153	0.500	1	09/25/2020 21:49	WG1549409
sec-Butylbenzene	U		0.101	0.500	1	09/25/2020 21:49	WG1549409
tert-Butylbenzene	U		0.0620	0.200	1	09/25/2020 21:49	WG1549409
Carbon tetrachloride	U		0.0432	0.200	1	09/25/2020 21:49	WG1549409
Chlorobenzene	U		0.0229	0.100	1	09/25/2020 21:49	WG1549409
Chlorodibromomethane	U		0.0180	0.100	1	09/25/2020 21:49	WG1549409

JC 10/13/2020

PRB-D23-091820
Collected date/time: 09/18/20 13:25

SAMPLE RESULTS - 05

L1263961

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloroethane	U		0.0432	0.200	1	09/25/2020 21:49	WG1549409
Chloroform	U		0.0166	0.100	1	09/25/2020 21:49	WG1549409
Chloromethane	U		0.0556	0.500	1	09/25/2020 21:49	WG1549409
2-Chlorotoluene	U		0.0368	0.100	1	09/25/2020 21:49	WG1549409
4-Chlorotoluene	U		0.0452	0.200	1	09/25/2020 21:49	WG1549409
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	09/25/2020 21:49	WG1549409
1,2-Dibromoethane	U		0.0210	0.100	1	09/25/2020 21:49	WG1549409
Dibromomethane	U		0.0400	0.200	1	09/25/2020 21:49	WG1549409
1,2-Dichlorobenzene	U		0.0580	0.200	1	09/25/2020 21:49	WG1549409
1,3-Dichlorobenzene	U		0.0680	0.200	1	09/25/2020 21:49	WG1549409
1,4-Dichlorobenzene	U		0.0788	0.200	1	09/25/2020 21:49	WG1549409
Dichlorodifluoromethane	U		0.0327	0.100	1	09/25/2020 21:49	WG1549409
1,1-Dichloroethane	U		0.0230	0.100	1	09/25/2020 21:49	WG1549409
1,2-Dichloroethane	U		0.0190	0.100	1	09/25/2020 21:49	WG1549409
1,1-Dichloroethene	U		0.0200	0.100	1	09/25/2020 21:49	WG1549409
cis-1,2-Dichloroethene	0.113		0.0276	0.100	1	09/25/2020 21:49	WG1549409
trans-1,2-Dichloroethene	U		0.0572	0.200	1	09/25/2020 21:49	WG1549409
1,2-Dichloropropane	U		0.0508	0.200	1	09/25/2020 21:49	WG1549409
1,1-Dichloropropene	U		0.0280	0.100	1	09/25/2020 21:49	WG1549409
1,3-Dichloropropane	U		0.0700	0.200	1	09/25/2020 21:49	WG1549409
cis-1,3-Dichloropropene	U		0.0271	0.100	1	09/25/2020 21:49	WG1549409
trans-1,3-Dichloropropene	U		0.0612	0.200	1	09/25/2020 21:49	WG1549409
2,2-Dichloropropane	U		0.0317	0.100	1	09/25/2020 21:49	WG1549409
Di-isopropyl ether	U		0.0140	0.0400	1	09/25/2020 21:49	WG1549409
Ethylbenzene	U		0.0212	0.100	1	09/25/2020 21:49	WG1549409
Hexachloro-1,3-butadiene	U		0.508	1.00	1	09/25/2020 21:49	WG1549409
Isopropylbenzene	U		0.0345	0.100	1	09/25/2020 21:49	WG1549409
p-Isopropyltoluene	U		0.0932	0.200	1	09/25/2020 21:49	WG1549409
2-Butanone (MEK)	U		0.500	1.00	1	09/25/2020 21:49	WG1549409
Methylene Chloride	U		0.265	1.00	1	09/25/2020 21:49	WG1549409
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	09/25/2020 21:49	WG1549409
Methyl tert-butyl ether	U		0.0118	0.0400	1	09/25/2020 21:49	WG1549409
Naphthalene	U		0.124	0.500	1	09/25/2020 21:49	WG1549409
n-Propylbenzene	U		0.0472	0.200	1	09/25/2020 21:49	WG1549409
Styrene	U		0.109	0.500	1	09/25/2020 21:49	WG1549409
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	09/25/2020 21:49	WG1549409
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	09/25/2020 21:49	WG1549409
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	09/25/2020 21:49	WG1549409
Tetrachloroethene	U		0.0280	0.100	1	09/25/2020 21:49	WG1549409
Toluene	1.32		0.0500	0.200	1	09/25/2020 21:49	WG1549409
1,2,3-Trichlorobenzene	U		0.0250	0.500	1	09/29/2020 17:21	WG1550162
1,2,4-Trichlorobenzene	U		0.193	0.500	1	09/25/2020 21:49	WG1549409
1,1,1-Trichloroethane	U		0.0110	0.100	1	09/25/2020 21:49	WG1549409
1,1,2-Trichloroethane	U		0.0353	0.100	1	09/25/2020 21:49	WG1549409
Trichloroethene	U		0.0160	0.0400	1	09/29/2020 17:21	WG1550162
Trichlorofluoromethane	U		0.0200	0.100	1	09/25/2020 21:49	WG1549409
1,2,3-Trichloropropane	U		0.204	0.500	1	09/25/2020 21:49	WG1549409
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	09/25/2020 21:49	WG1549409
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	09/25/2020 21:49	WG1549409
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	09/25/2020 21:49	WG1549409
Vinyl chloride	U		0.0273	0.100	1	09/29/2020 17:21	WG1550162
Xylenes, Total	U		0.191	0.260	1	09/25/2020 21:49	WG1549409
Ethyl Ether	U		0.0170	0.100	1	09/25/2020 21:49	WG1549409
Tetrahydrofuran	0.277	U ~~B J~~	0.0900	0.500	1	09/25/2020 21:49	WG1549409
Iodomethane	U		0.242	0.500	1	09/25/2020 21:49	WG1549409
Allyl chloride	U		0.580	1.00	1	09/25/2020 21:49	WG1549409

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Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Trans-1,4-Dichloro-2-butene	U		0.0560	0.200	1	09/25/2020 21:49	WG1549409
(S) Toluene-d8	*104*			*75.0-131*		*09/25/2020 21:49*	WG1549409
(S) Toluene-d8	*102*			*75.0-131*		*09/29/2020 17:21*	WG1550162
(S) 4-Bromofluorobenzene	*103*			*67.0-138*		*09/25/2020 21:49*	WG1549409
(S) 4-Bromofluorobenzene	*107*			*67.0-138*		*09/29/2020 17:21*	WG1550162
(S) 1,2-Dichloroethane-d4	*98.6*			*70.0-130*		*09/25/2020 21:49*	WG1549409
(S) 1,2-Dichloroethane-d4	*110*			*70.0-130*		*09/29/2020 17:21*	WG1550162

JC 10/13/2020

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Wet Chemistry by Method 2320 B-2011

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Alkalinity	433000		8450	20000	1	09/23/2020 11:22	WG1546972

Sample Narrative:

L1263961-06 WG1546972: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 9056A

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Chloride	45300		379	1000	1	09/19/2020 15:48	WG1545941
Nitrate	U		48.0	100	1	09/19/2020 15:48	WG1545941
Sulfate	62000		594	5000	1	09/19/2020 15:48	WG1545941

Wet Chemistry by Method 9060A

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
TOC (Total Organic Carbon)	37000		102	1000	1	09/22/2020 21:40	WG1547126

Metals (ICPMS) by Method 6020B

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Iron	4450		489	1000	10	09/24/2020 17:18	WG1547538
Manganese	416		13.2	50.0	10	09/24/2020 17:18	WG1547538

Volatile Organic Compounds (GC) by Method NWTPHGX

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Gasoline Range Organics-NWTPH	42.2 U	~~B J~~	31.6	100	1	09/25/2020 11:40	WG1548979
(S) a,a,a-Trifluorotoluene(FID)	*93.7*			*78.0-120*		*09/25/2020 11:40*	WG1548979

Volatile Organic Compounds (GC) by Method RSK175

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Methane	10800		2.87	6.78	10	09/29/2020 09:33	WG1550715
Ethane	U		0.296	1.29	1	09/28/2020 17:35	WG1548887
Ethene	2010		0.422	1.27	1	09/28/2020 17:35	WG1548887

Volatile Organic Compounds (GC/MS) by Method 8260D

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Acetone	2.04 U	~~B~~	0.548	1.00	1	09/25/2020 22:09	WG1549409
Acrylonitrile	U		0.0760	0.500	1	09/25/2020 22:09	WG1549409
Benzene	U		0.0160	0.0400	1	09/25/2020 22:09	WG1549409
Bromobenzene	U		0.0420	0.500	1	09/25/2020 22:09	WG1549409
Bromodichloromethane	U		0.0315	0.100	1	09/25/2020 22:09	WG1549409
Bromoform	U		0.239	1.00	1	09/25/2020 22:09	WG1549409
Bromomethane	U		0.148	0.500	1	09/25/2020 22:09	WG1549409
n-Butylbenzene	U		0.153	0.500	1	09/25/2020 22:09	WG1549409
sec-Butylbenzene	U		0.101	0.500	1	09/25/2020 22:09	WG1549409
tert-Butylbenzene	U		0.0620	0.200	1	09/25/2020 22:09	WG1549409
Carbon tetrachloride	U		0.0432	0.200	1	09/25/2020 22:09	WG1549409
Chlorobenzene	U		0.0229	0.100	1	09/25/2020 22:09	WG1549409
Chlorodibromomethane	U		0.0180	0.100	1	09/25/2020 22:09	WG1549409

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Volatile Organic Compounds (GC/MS) by Method 8260D

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Chloroethane	U		0.0432	0.200	1	09/25/2020 22:09	WG1549409
Chloroform	U		0.0166	0.100	1	09/25/2020 22:09	WG1549409
Chloromethane	U		0.0556	0.500	1	09/25/2020 22:09	WG1549409
2-Chlorotoluene	U		0.0368	0.100	1	09/25/2020 22:09	WG1549409
4-Chlorotoluene	U		0.0452	0.200	1	09/25/2020 22:09	WG1549409
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	09/25/2020 22:09	WG1549409
1,2-Dibromoethane	U		0.0210	0.100	1	09/25/2020 22:09	WG1549409
Dibromomethane	U		0.0400	0.200	1	09/25/2020 22:09	WG1549409
1,2-Dichlorobenzene	U		0.0580	0.200	1	09/25/2020 22:09	WG1549409
1,3-Dichlorobenzene	U		0.0680	0.200	1	09/25/2020 22:09	WG1549409
1,4-Dichlorobenzene	U		0.0788	0.200	1	09/25/2020 22:09	WG1549409
Dichlorodifluoromethane	U		0.0327	0.100	1	09/25/2020 22:09	WG1549409
1,1-Dichloroethane	U		0.0230	0.100	1	09/25/2020 22:09	WG1549409
1,2-Dichloroethane	U		0.0190	0.100	1	09/25/2020 22:09	WG1549409
1,1-Dichloroethene	U		0.0200	0.100	1	09/25/2020 22:09	WG1549409
cis-1,2-Dichloroethene	0.646		0.0276	0.100	1	09/25/2020 22:09	WG1549409
trans-1,2-Dichloroethene	U		0.0572	0.200	1	09/25/2020 22:09	WG1549409
1,2-Dichloropropane	U		0.0508	0.200	1	09/25/2020 22:09	WG1549409
1,1-Dichloropropene	U		0.0280	0.100	1	09/25/2020 22:09	WG1549409
1,3-Dichloropropane	U		0.0700	0.200	1	09/25/2020 22:09	WG1549409
cis-1,3-Dichloropropene	U		0.0271	0.100	1	09/25/2020 22:09	WG1549409
trans-1,3-Dichloropropene	U		0.0612	0.200	1	09/25/2020 22:09	WG1549409
2,2-Dichloropropane	U		0.0317	0.100	1	09/25/2020 22:09	WG1549409
Di-isopropyl ether	U		0.0140	0.0400	1	09/25/2020 22:09	WG1549409
Ethylbenzene	U		0.0212	0.100	1	09/25/2020 22:09	WG1549409
Hexachloro-1,3-butadiene	U		0.508	1.00	1	09/25/2020 22:09	WG1549409
Isopropylbenzene	U		0.0345	0.100	1	09/25/2020 22:09	WG1549409
p-Isopropyltoluene	U		0.0932	0.200	1	09/25/2020 22:09	WG1549409
2-Butanone (MEK)	0.810	J	0.500	1.00	1	09/25/2020 22:09	WG1549409
Methylene Chloride	U		0.265	1.00	1	09/25/2020 22:09	WG1549409
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	09/25/2020 22:09	WG1549409
Methyl tert-butyl ether	U		0.0118	0.0400	1	09/25/2020 22:09	WG1549409
Naphthalene	U		0.124	0.500	1	09/25/2020 22:09	WG1549409
n-Propylbenzene	U		0.0472	0.200	1	09/25/2020 22:09	WG1549409
Styrene	U		0.109	0.500	1	09/25/2020 22:09	WG1549409
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	09/25/2020 22:09	WG1549409
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	09/25/2020 22:09	WG1549409
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	09/25/2020 22:09	WG1549409
Tetrachloroethene	U		0.0280	0.100	1	09/25/2020 22:09	WG1549409
Toluene	0.172	U ~~J~~	0.0500	0.200	1	09/25/2020 22:09	WG1549409
1,2,3-Trichlorobenzene	U		0.0250	0.500	1	09/29/2020 17:40	WG1550162
1,2,4-Trichlorobenzene	U		0.193	0.500	1	09/25/2020 22:09	WG1549409
1,1,1-Trichloroethane	U		0.0110	0.100	1	09/25/2020 22:09	WG1549409
1,1,2-Trichloroethane	U		0.0353	0.100	1	09/25/2020 22:09	WG1549409
Trichloroethene	U		0.0160	0.0400	1	09/29/2020 17:40	WG1550162
Trichlorofluoromethane	U		0.0200	0.100	1	09/25/2020 22:09	WG1549409
1,2,3-Trichloropropane	U		0.204	0.500	1	09/25/2020 22:09	WG1549409
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	09/25/2020 22:09	WG1549409
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	09/25/2020 22:09	WG1549409
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	09/25/2020 22:09	WG1549409
Vinyl chloride	15.6		0.0273	0.100	1	09/25/2020 22:09	WG1549409
Xylenes, Total	U		0.191	0.260	1	09/25/2020 22:09	WG1549409
Ethyl Ether	U		0.0170	0.100	1	09/25/2020 22:09	WG1549409
Tetrahydrofuran	U		0.0900	0.500	1	09/25/2020 22:09	WG1549409
Iodomethane	U		0.242	0.500	1	09/25/2020 22:09	WG1549409
Allyl chloride	U		0.580	1.00	1	09/25/2020 22:09	WG1549409

JC 10/13/2020

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Trans-1,4-Dichloro-2-butene	U		0.0560	0.200	1	09/25/2020 22:09	WG1549409
(S) Toluene-d8	*103*			*75.0-131*		*09/25/2020 22:09*	WG1549409
(S) Toluene-d8	*94.9*			*75.0-131*		*09/29/2020 17:40*	WG1550162
(S) 4-Bromofluorobenzene	*104*			*67.0-138*		*09/25/2020 22:09*	WG1549409
(S) 4-Bromofluorobenzene	*102*			*67.0-138*		*09/29/2020 17:40*	WG1550162
(S) 1,2-Dichloroethane-d4	*99.1*			*70.0-130*		*09/25/2020 22:09*	WG1549409
(S) 1,2-Dichloroethane-d4	*113*			*70.0-130*		*09/29/2020 17:40*	WG1550162

JC 10/13/2020

Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	261000		8450	20000	1	09/24/2020 13:16	WG1548048

Sample Narrative:

L1265092-01 WG1548048: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	39000		379	1000	1	09/23/2020 17:04	WG1547834
Nitrate	U UJ	T8	48.0	100	1	09/23/2020 17:04	WG1547834
Sulfate	20000		594	5000	1	09/23/2020 17:04	WG1547834

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	6530		102	1000	1	09/25/2020 12:35	WG1548552

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	8340		244	500	5	09/29/2020 16:08	WG1549469
Manganese	1060		6.60	25.0	5	09/29/2020 16:08	WG1549469

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	134 Z, J+	~~B~~	31.6	100	1	09/29/2020 21:35	WG1550769
(S) a,a,a-Trifluorotoluene(FID)	*117*			*78.0-120*		*09/29/2020 21:35*	WG1550769

Sample Narrative:

L1265092-01 WG1550769: No discernible petroleum pattern present

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	10500		2.87	6.78	10	09/30/2020 10:59	WG1551544
Ethane	9.58		0.296	1.29	1	09/29/2020 11:51	WG1550399
Ethene	671		0.422	1.27	1	09/29/2020 11:51	WG1550399

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	1.54 J	J0	0.548	1.00	1	10/02/2020 12:21	WG1553080
Acrylonitrile	U		0.0760	0.500	1	10/02/2020 12:21	WG1553080
Benzene	0.0460	~~B~~	0.0160	0.0400	1	10/02/2020 12:21	WG1553080
Bromobenzene	U		0.0420	0.500	1	10/02/2020 12:21	WG1553080
Bromodichloromethane	U		0.0315	0.100	1	10/02/2020 12:21	WG1553080
Bromoform	U		0.239	1.00	1	10/02/2020 12:21	WG1553080
Bromomethane	U		0.148	0.500	1	10/02/2020 12:21	WG1553080
n-Butylbenzene	U		0.153	0.500	1	10/02/2020 12:21	WG1553080
sec-Butylbenzene	U		0.101	0.500	1	10/02/2020 12:21	WG1553080
tert-Butylbenzene	U		0.0620	0.200	1	10/02/2020 12:21	WG1553080

JC 10/27/2020

PRB-D17-092120

Collected date/time: 09/21/20 12:50

SAMPLE RESULTS - 01

L1265092

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloroethane	2.36		0.0432	0.200	1	10/02/2020 12:21	WG1553080
Chloroform	U		0.0166	0.100	1	10/02/2020 12:21	WG1553080
Chloromethane	U		0.0556	0.500	1	10/02/2020 12:21	WG1553080
2-Chlorotoluene	U		0.0368	0.100	1	10/02/2020 12:21	WG1553080
4-Chlorotoluene	U		0.0452	0.200	1	10/02/2020 12:21	WG1553080
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	10/02/2020 12:21	WG1553080
1,2-Dibromoethane	U		0.0210	0.100	1	10/02/2020 12:21	WG1553080
Dibromomethane	U		0.0400	0.200	1	10/02/2020 12:21	WG1553080
1,2-Dichlorobenzene	U		0.0580	0.200	1	10/02/2020 12:21	WG1553080
1,3-Dichlorobenzene	U		0.0680	0.200	1	10/02/2020 12:21	WG1553080
1,4-Dichlorobenzene	U		0.0788	0.200	1	10/02/2020 12:21	WG1553080
Dichlorodifluoromethane	U		0.0327	0.100	1	10/02/2020 12:21	WG1553080
1,1-Dichloroethane	U		0.0230	0.100	1	10/02/2020 12:21	WG1553080
1,2-Dichloroethane	U		0.0190	0.100	1	10/02/2020 12:21	WG1553080
1,1-Dichloroethene	0.373		0.0200	0.100	1	10/02/2020 12:21	WG1553080
cis-1,2-Dichloroethene	100		0.0276	0.100	1	10/02/2020 12:21	WG1553080
trans-1,2-Dichloroethene	0.492		0.0572	0.200	1	10/02/2020 12:21	WG1553080
1,2-Dichloropropane	U		0.0508	0.200	1	10/02/2020 12:21	WG1553080
1,1-Dichloropropene	U		0.0280	0.100	1	10/02/2020 12:21	WG1553080
1,3-Dichloropropane	U		0.0700	0.200	1	10/02/2020 12:21	WG1553080
cis-1,3-Dichloropropene	U		0.0271	0.100	1	10/02/2020 12:21	WG1553080
trans-1,3-Dichloropropene	U		0.0612	0.200	1	10/02/2020 12:21	WG1553080
2,2-Dichloropropane	U		0.0317	0.100	1	10/02/2020 12:21	WG1553080
Di-isopropyl ether	U		0.0140	0.0400	1	10/02/2020 12:21	WG1553080
Ethylbenzene	U		0.0212	0.100	1	10/02/2020 12:21	WG1553080
Hexachloro-1,3-butadiene	U		0.508	1.00	1	10/02/2020 12:21	WG1553080
Isopropylbenzene	U		0.0345	0.100	1	10/02/2020 12:21	WG1553080
p-Isopropyltoluene	U		0.0932	0.200	1	10/02/2020 12:21	WG1553080
2-Butanone (MEK)	U		0.500	1.00	1	10/02/2020 12:21	WG1553080
Methylene Chloride	U		0.265	1.00	1	10/02/2020 12:21	WG1553080
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	10/02/2020 12:21	WG1553080
Methyl tert-butyl ether	U UJ	J0	0.0118	0.0400	1	10/02/2020 12:21	WG1553080
Naphthalene	U		0.124	0.500	1	10/02/2020 12:21	WG1553080
n-Propylbenzene	U		0.0472	0.200	1	10/02/2020 12:21	WG1553080
Styrene	U		0.109	0.500	1	10/02/2020 12:21	WG1553080
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	10/02/2020 12:21	WG1553080
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	10/02/2020 12:21	WG1553080
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	10/02/2020 12:21	WG1553080
Tetrachloroethene	0.0750	J	0.0280	0.100	1	10/02/2020 12:21	WG1553080
Toluene	0.342		0.0500	0.200	1	10/02/2020 12:21	WG1553080
1,2,3-Trichlorobenzene	U		0.0250	0.500	1	10/02/2020 12:21	WG1553080
1,2,4-Trichlorobenzene	U		0.193	0.500	1	10/02/2020 12:21	WG1553080
1,1,1-Trichloroethane	U		0.0110	0.100	1	10/02/2020 12:21	WG1553080
1,1,2-Trichloroethane	U		0.0353	0.100	1	10/02/2020 12:21	WG1553080
Trichloroethene	0.0860		0.0160	0.0400	1	10/02/2020 12:21	WG1553080
Trichlorofluoromethane	U		0.0200	0.100	1	10/02/2020 12:21	WG1553080
1,2,3-Trichloropropane	U		0.204	0.500	1	10/02/2020 12:21	WG1553080
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	10/02/2020 12:21	WG1553080
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	10/02/2020 12:21	WG1553080
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	10/02/2020 12:21	WG1553080
Vinyl chloride	476		0.682	2.50	25	10/04/2020 09:36	WG1553199
Xylenes, Total	U		0.191	0.260	1	10/02/2020 12:21	WG1553080
Ethyl Ether	U		0.0170	0.100	1	10/02/2020 12:21	WG1553080
Tetrahydrofuran	1.28 J	J0	0.0900	0.500	1	10/02/2020 12:21	WG1553080
Iodomethane	U		0.242	0.500	1	10/02/2020 12:21	WG1553080
Allyl chloride	U		0.580	1.00	1	10/02/2020 12:21	WG1553080

JC 10/13/2020

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Trans-1,4-Dichloro-2-butene	U		0.0560	0.200	1	10/02/2020 12:21	WG1553080
(S) Toluene-d8	*115*			*75.0-131*		*10/02/2020 12:21*	WG1553080
(S) Toluene-d8	*114*			*75.0-131*		*10/04/2020 09:36*	WG1553199
(S) 4-Bromofluorobenzene	*90.0*			*67.0-138*		*10/02/2020 12:21*	WG1553080
(S) 4-Bromofluorobenzene	*87.6*			*67.0-138*		*10/04/2020 09:36*	WG1553199
(S) 1,2-Dichloroethane-d4	*111*			*70.0-130*		*10/02/2020 12:21*	WG1553080
(S) 1,2-Dichloroethane-d4	*116*			*70.0-130*		*10/04/2020 09:36*	WG1553199

JC 10/13/2020

MEMORANDUM

TO:	Project File	**DATE:**	November 30, 2020
FROM:	Jessie Compeau		
SUBJECT:	Laboratory Data Validation Review		
PROJECT:	American Linen Data Validation		
PROJECT #:	1413.001.02.501G and 1413.001.05.601		
TASK:	EIM Data Validation Level EPA2A for 4th Quarter Monitoring – Groundwater Samples – Group 1		
LAB:	Pace Sample Delivery Groups (SDGs): L1281756, L1281775, L1283261, and L1283292		

Thirty-seven (37) groundwater samples including a field duplicate and one trip blank was collected as part of the 4th Quarterly Monitoring Round for 2020 for the ongoing Remedial Investigation (RI) sampling at the Former American Linen Supply Site, in Seattle, Washington in November 2020. The samples were shipped and delivered to Pace Lab Sciences (Pace) of Mount Juliet, TN for laboratory analysis. Selected samples were analyzed for the following:

- Volatile organic compounds (VOCs) by United States Environmental Protection Agency (USEPA) Method 8260D;
- VOCs (dissolved gases – methane, ethane, and ethene) by EPA SOP RSK 175;
- Anion (sulfate) by USEPA Method 9056A;
- Total Organic Carbon (TOC) by USEPA Method 9060A; and
- Metals (iron and manganese) by USEPA Method 6020B.

Results are reported in multiple SDGs from Pace. Pace SDGs are reviewed in small groups for each data validation report. Group 1 analytical results are reported in SDGs L1281756, L1281775, L1283261, and L1283292. The quality assurance review of the laboratory data associated with Group 1 is summarized below.

DATA QUALIFICATIONS

Guidelines established by USEPA for a limited data validation review of analytical data along with Pace control limit criteria were used to validate the data. The comments presented in this memorandum refer to the laboratory's performance in meeting the quality control criteria outlined in the USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (USEPA, 2017) and USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Superfund Methods Data Review (USEPA, 2017). Following Guidelines, non-project-specific laboratory duplicates and matrix spike results were not evaluated as part of this data validation.

DATA VALIDATION

Completeness

All samples were collected and analyzed as requested with the following exceptions:

- SDG L1281775: Chain of custody does not show a request for analysis on the trip blank sample (TripBlank-110320). PES confirmed VOC analysis on Trip blank on 11/4/2020.

Sample Collection and Preservation

Samples were collected in laboratory-supplied sample containers preserved as appropriate for the individual analyses conducted. The samples were packed on ice in coolers and delivered by courier to the analytical laboratory. The laboratory reported that the coolers were received at a cooler temperature less than the recommended temperature preservation of 6°C. Samples were received in good condition. No data were qualified based upon the sample collection and preservation information.

Holding Times

USEPA Method 8260D:
All samples were analyzed for VOCs within the EPA recommended holding time of fourteen days for preserved waters from the date of collection. All holding time criteria are met.

Dissolved Gases (Methane, Ethane, and Ethene) by RSK 175:
All samples were analyzed within the WA State recommended holding time of fourteen days for preserved waters from the date of sample collection. All holding time criteria are met.

USEPA Method 6020B:
All samples were analyzed within the USEPA recommended holding time for iron and manganese of 180 days for preserved waters from the date of sample collection. All holding time criteria are met.

General Chemistry (Sulfate and TOC):
All samples were analyzed within the USEPA recommended holding time for sulfate (28 days) and TOC (28 days) for preserved waters from the date of sample collection. All holding time criteria are met.

Initial and Continuing Calibration

Calibration data for this project are not required for this deliverable however Pace’s notes indicate the following:

- Multiple SDGs - *USEPA Method 8260D:* Continuing calibration verification (CCV) issues were noted by Pace for multiple compounds associated with analytical batches in each SDG. These compounds are qualified by the laboratory “J0” to indicate that percent

difference CCV is outside of laboratory acceptance criteria. **Associated sample results with laboratory qualified (J0) results are estimated and qualified (J/UJ).**

- Multiple SDGs - *USEPA Method 8260D:* Continuing calibration verification (CCV) issues were noted by Pace for multiple compounds associated with analytical batches in each SDG. These compounds are qualified by the laboratory "C4" to indicate that percent difference CCV is below laboratory acceptance criteria and showing low bias. **Associated sample results with laboratory qualified (C4) results are estimated and qualified (J-/UJ). Results reported below the RDL are estimated (J) and bias is not assigned.**

- Multiple SDGs - *USEPA Method 8260D:* Continuing calibration verification (CCV) issues were noted by Pace for multiple compounds associated with analytical batches in each SDG. These compounds are qualified by the laboratory "C3" to indicate that percent difference CCV is below laboratory acceptance criteria and showing low bias. **Associated sample results with laboratory qualified (C3) results are estimated and qualified (J-/UJ). Results reported below the RDL are estimated (J) and bias is not assigned.**

Method Blank Results

USEPA Method 8260D:
Laboratory method blanks were included with the analytical batches per method requirement. The target analytes were not detected in the method blanks at or above the reporting detection limits (RDLs) with the following exception:

- SDG L1281775 - Analytical batch WG1573882: Low levels of sec-butylbenzene, p-isopropyltoluene, naphthalene, and 1,2,3-trichlorobenzene are detected in the method blank. No action is required since these analytes are not detected in the associated trip blank sample (TRIPBLANK-110320).

- SDG L1281775 - Analytical batch WG1574660: Low levels of sec-butylbenzene, naphthalene, tetrahydrofuran, and 1,2,3-trichlorobenzene are detected in the method blank. No action is required since these analytes are not detected in the associated samples.

- SDGs L1283261 and L1283292 - Analytical batch WG1575337: Low levels of sec-butylbenzene, naphthalene, tetrahydrofuran, and 1,2,3-trichlorobenzene are detected in the method blank. No action is required since these analytes are not detected in the associated samples with the following exceptions:

    - SDG L1283261: A low level of tetrahydrofuran, below the RDL, is detected in samples (MW-176-110520, MW-173-110520, MW-175-110520, MW-941-110520 MW-165-110520, MW-167-110520, and MW-166-110520) and results are laboratory qualified (BJ). **Tetrahydrofuran detections in these samples are qualified as not detected (U).**

- SDG L1283292 - Analytical batch WG1576904: Low levels of n-butylbenzene, tert-butylbenzene, p-isopropyltoluene 1,2,3-trichlorobenzene, 1,2,4-trichlorobenzene, 1,2,4-trimethylbenzene, and 1,3,5-trimethylbenzene are detected in the method blank. No action is required since these analytes are not detected in the associated samples with the following exception:
    - SDG L1283292: A low level of 1,2,4-trimethylbenzene, below the RDL, is detected in sample MW-308-110620 and result is laboratory qualified (BJ). **1,2,4-trimethylbenzene detection in sample MW-308-110620 is qualified as not detected (U).**

Dissolved Gases (Methane, Ethane, and Ethene) by RSK 175:
Laboratory method blanks were included with the analytical batches per method requirement. The target analytes (dissolved gases) are not detected in the method blanks at or above the RDLs.

USEPA Method 6020B and General Chemistry (Sulfate and TOC):
Laboratory method blanks were included with the analytical batches per method requirement. The target analytes were detected in the method blanks below the RDLs. Per Guidance, no action is taken for blank detections less than the RDL when associated sample detections are greater than the RDL. General chemistry and metal blank detections are shown below:

SDG	Batch	Method	Analyte	Method Blank Result	Qualifier	RDL	Units	Associated Result(s) Qualified
L1281756	WG1574696	9060A	TOC	258	J	1000	µg/L	NO
L1281775	WG1574696	9060A	TOC	258	J	1000	µg/L	NO
L1283261	WG1576989	9060A	TOC	362	J	1000	µg/L	NO

Target analytes were detected in method blanks at low levels with no impact to the associated samples.

Trip Blank Results

USEPA Method 8260D:
One trip blank (TRIPBLANK-110320) was collected and analyzed for VOCs. A low level of acetone was detected in the trip blank. No action is needed since acetone was either not detected or detected greater than the action level in the associated samples.

Field, Rinsate, or Equipment Blank Results

All Analytical Methods:
Field, rinsate, and/or equipment blanks were not collected.

Field Duplicate Analyses

A field duplicate pair was submitted and analyzed. Field duplicate sample pair is as follows:

- SDG L1283261: Sample MW-165-110520 and field duplicate MW-941-110520

Target analyte results are comparable and within a relative percent difference (RPD) of 30% (± 1x RDL for groundwater results <5X the RDL) for the field duplicate pair.

Laboratory Duplicate Analyses

USEPA Method 8260D:
Laboratory duplicate samples were not analyzed. Refer to laboratory control sample/sample duplicate (LCS/LCSD) or matrix spike/matrix spike duplicate (MS/MSD) results for precision data.

Dissolved Gases (Methane, Ethane, and Ethene) by RSK 175:
Laboratory duplicate sample analyses were performed on non-client samples within the analytical batches. The primary/duplicate RPDs for dissolved gas analyses are within the laboratory control limit of 20%.

USEPA Method 6020B:
Laboratory duplicate samples were not analyzed. Refer to MS/MSD results for precision data.

General Chemistry (Sulfate and TOC):
Laboratory duplicate sample analyses were performed on client samples and/or on non-client samples. The primary/duplicate RPDs for general chemistry parameters are within the laboratory control RPD limits or ± 1x RDL for groundwater results <5X the RDL.

Surrogate Recoveries

USEPA Method 8260D:
The surrogate recovery results for the samples, laboratory control samples, matrix spike samples, and the method blanks are within the laboratory surrogate control limits for all the analyses.

Laboratory Control Samples

USEPA Method 8260D:
Laboratory control sample/laboratory control sample duplicate (LCS/LCSD) or laboratory control sample (LCS) were analyzed by USEPA Method 8260D method. The LCS % Rs or LCS/LCSD % Rs and RPDs for all target compounds are within the laboratory control criteria for waters with the following discussions:

- SDGs L1281756 and L1281775 - Analytical batch WG1571846: LCS/LCSD dichlorodifluoromethane and tetrahydrofuran RPDs are greater than laboratory acceptance criteria and laboratory qualified (J3). No action is taken since the recoveries are within criteria but are recovered wide.

- SDG L1283292 - Analytical batch WG1576904: LCS/LCSD % recoveries for bromomethane, chloroethane, and vinyl chloride are above laboratory acceptance criteria and laboratory qualified (J4). No action is needed for these compound as they are not detected in the associated samples.

Dissolved Gases (Methane, Ethane, and Ethene) by RSK 175:
The LCS/LCSD % Rs and RPDs for the target compound (dissolved gases) are within the laboratory control criteria for waters.

USEPA Method 6020B:
The LCS/LCSD % Rs and RPDs for the target compound (iron and manganese) are within the laboratory control criteria for waters.

General Chemistry (Sulfate and TOC):
The LCS % Rs for general chemistry parameters are within the laboratory control criteria for waters.

Matrix Spike/Matrix Spike Duplicates

USEPA Method 8260D:
Matrix spike/matrix spike duplicate (MS/MSD) analyses were performed on client and on non-client samples within select analytical batches. The MS/MSD % Rs and RPD were acceptable and within laboratory control limit criteria for water samples.

Dissolved Gases (Methane, Ethane, and Ethene) by RSK 175:
MS or MS/MSD analyses were performed on client and/or non-client samples within the analytical batches. In cases where MS/MSD spike analyses are not performed refer to LCS/LCSD or laboratory duplicate data for accuracy and precision data. The MS/MSD % Rs and RPDs are acceptable and within laboratory control limit criteria for water samples with the following discussion:

- SDG L1281775: Matrix spikes were performed on non-client samples with poor matrix spike recoveries outside of criteria. No action is taken on this basis since the spikes were performed on non-client samples. Refer to LCS/LCSD results for accuracy and precision data.

USEPA Method 6020B:
MS/MSD analyses were performed on client and on non-client samples within the analytical batches. The MS/MSD % Rs and RPD were acceptable and within laboratory control limit criteria for water samples with the following discussions:

- SDGs L1281756 and L1281775: Matrix spike analysis was performed on client sample MW-179-110320 (SDG L1281775) and manganese spike results are laboratory qualified (V) to indicate that the sample concentration is greater than 4X the spike amount. Per Guidance no action is taken.

- SDG L1283261: Matrix spike analysis was performed on a non-client sample and manganese spike results are laboratory qualified (V) to indicate that the sample concentration is greater than 4X the spike amount. Per Guidance no action is taken.

General Chemistry (Sulfate and TOC):

MS or MS/MSD analyses were performed on client and/or non-client samples within the analytical batches. In cases where MS/MSD spike analyses are not performed refer to LCS/LCSD or laboratory duplicate data for accuracy and precision data. The MS/MSD % Rs and RPDs are acceptable and within laboratory control limit criteria for water samples with the following discussion:

- SDG L1281775: Matrix spikes were performed on client and on non-client samples. Spike results are laboratory qualified (E) to indicate that the sample amount exceeds the upper calibration limit. Matrix spike recoveries and RPDs are within criteria. No action is taken other than to note this.

Other Quality Control Issues

No laboratory quality control issues were identified in the laboratory report with the following discussion:

- Electronic data deliverables (EDDs) for these SDGs were provided by the laboratory and data validator qualifiers were entered. In some cases, different chemical synonyms are used between the EDD and the hardcopy however associated Chemical Abstracts Service (CAS) numbers are provided in the EDD to confirm chemical identifications.

Compound Identification and Quantitation Limits

Results of the analyses were reported based on laboratory RDLs for all compounds. RDLs for selected compounds are elevated due to method-required dilutions. No action is taken other than to note this.

Data Assessment

The laboratory data reported for this project were reviewed based on the criteria outlined in:

- USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (USEPA, 2017); and
- USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Superfund Methods Data Review (USEPA, 2017).

Data qualifiers are assigned and laboratory report pages with qualifiers are attached. All data, including qualified data, are judged to be acceptable for their intended use.

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	2.05 J	J0	0.548	1.00	1	11/06/2020 04:09	WG1571846
Acrylonitrile	U		0.0760	0.500	1	11/06/2020 04:09	WG1571846
Benzene	U		0.0160	0.0400	1	11/06/2020 04:09	WG1571846
Bromobenzene	U		0.0420	0.500	1	11/06/2020 04:09	WG1571846
Bromodichloromethane	U		0.0315	0.100	1	11/06/2020 04:09	WG1571846
Bromoform	U		0.239	1.00	1	11/06/2020 04:09	WG1571846
Bromomethane	U		0.148	0.500	1	11/06/2020 04:09	WG1571846
n-Butylbenzene	U		0.153	0.500	1	11/06/2020 04:09	WG1571846
sec-Butylbenzene	U		0.101	0.500	1	11/06/2020 04:09	WG1571846
tert-Butylbenzene	U		0.0620	0.200	1	11/06/2020 04:09	WG1571846
Carbon tetrachloride	U		0.0432	0.200	1	11/06/2020 04:09	WG1571846
Chlorobenzene	U		0.0229	0.100	1	11/06/2020 04:09	WG1571846
Chlorodibromomethane	U		0.0180	0.100	1	11/06/2020 04:09	WG1571846
Chloroethane	U		0.0432	0.200	1	11/06/2020 04:09	WG1571846
Chloroform	U		0.0166	0.100	1	11/06/2020 04:09	WG1571846
Chloromethane	U		0.0556	0.500	1	11/06/2020 04:09	WG1571846
2-Chlorotoluene	U		0.0368	0.100	1	11/06/2020 04:09	WG1571846
4-Chlorotoluene	U		0.0452	0.200	1	11/06/2020 04:09	WG1571846
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	11/06/2020 04:09	WG1571846
1,2-Dibromoethane	U		0.0210	0.100	1	11/06/2020 04:09	WG1571846
Dibromomethane	U		0.0400	0.200	1	11/06/2020 04:09	WG1571846
1,2-Dichlorobenzene	U		0.0580	0.200	1	11/06/2020 04:09	WG1571846
1,3-Dichlorobenzene	U		0.0680	0.200	1	11/06/2020 04:09	WG1571846
1,4-Dichlorobenzene	U		0.0788	0.200	1	11/06/2020 04:09	WG1571846
Dichlorodifluoromethane	U	J3	0.0327	0.100	1	11/06/2020 04:09	WG1571846
1,1-Dichloroethane	U		0.0230	0.100	1	11/06/2020 04:09	WG1571846
1,2-Dichloroethane	U		0.0190	0.100	1	11/06/2020 04:09	WG1571846
1,1-Dichloroethene	U		0.0200	0.100	1	11/06/2020 04:09	WG1571846
cis-1,2-Dichloroethene	U		0.0276	0.100	1	11/06/2020 04:09	WG1571846
trans-1,2-Dichloroethene	U		0.0572	0.200	1	11/06/2020 04:09	WG1571846
1,2-Dichloropropane	U		0.0508	0.200	1	11/06/2020 04:09	WG1571846
1,1-Dichloropropene	U		0.0280	0.100	1	11/06/2020 04:09	WG1571846
1,3-Dichloropropane	U		0.0700	0.200	1	11/06/2020 04:09	WG1571846
cis-1,3-Dichloropropene	U		0.0271	0.100	1	11/06/2020 04:09	WG1571846
trans-1,3-Dichloropropene	U		0.0612	0.200	1	11/06/2020 04:09	WG1571846
2,2-Dichloropropane	U		0.0317	0.100	1	11/06/2020 04:09	WG1571846
Di-isopropyl ether	U		0.0140	0.0400	1	11/06/2020 04:09	WG1571846
Ethylbenzene	0.0460	J	0.0212	0.100	1	11/06/2020 04:09	WG1571846
Hexachloro-1,3-butadiene	U		0.508	1.00	1	11/06/2020 04:09	WG1571846
Isopropylbenzene	U		0.0345	0.100	1	11/06/2020 04:09	WG1571846
p-Isopropyltoluene	U		0.0932	0.200	1	11/06/2020 04:09	WG1571846
2-Butanone (MEK)	U		0.500	1.00	1	11/06/2020 04:09	WG1571846
Methylene Chloride	U		0.265	1.00	1	11/06/2020 04:09	WG1571846
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	11/06/2020 04:09	WG1571846
Methyl tert-butyl ether	U		0.0118	0.0400	1	11/06/2020 04:09	WG1571846
Naphthalene	U		0.124	0.500	1	11/06/2020 04:09	WG1571846
n-Propylbenzene	U		0.0472	0.200	1	11/06/2020 04:09	WG1571846
Styrene	U		0.109	0.500	1	11/06/2020 04:09	WG1571846
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	11/06/2020 04:09	WG1571846
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	11/06/2020 04:09	WG1571846
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	11/06/2020 04:09	WG1571846
Tetrachloroethene	U		0.0280	0.100	1	11/06/2020 04:09	WG1571846
Toluene	0.162	J	0.0500	0.200	1	11/06/2020 04:09	WG1571846
1,2,3-Trichlorobenzene	U UJ	C4	0.0250	0.500	1	11/06/2020 04:09	WG1571846
1,2,4-Trichlorobenzene	U		0.193	0.500	1	11/06/2020 04:09	WG1571846
1,1,1-Trichloroethane	U		0.0110	0.100	1	11/06/2020 04:09	WG1571846

JC 12/7/2020

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Volatile Organic Compounds (GC/MS) by Method 8260D

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
1,1,2-Trichloroethane	U		0.0353	0.100	1	11/06/2020 04:09	WG1571846
Trichloroethene	U		0.0160	0.0400	1	11/06/2020 04:09	WG1571846
Trichlorofluoromethane	U		0.0200	0.100	1	11/06/2020 04:09	WG1571846
1,2,3-Trichloropropane	U		0.204	0.500	1	11/06/2020 04:09	WG1571846
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	11/06/2020 04:09	WG1571846
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	11/06/2020 04:09	WG1571846
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	11/06/2020 04:09	WG1571846
Vinyl chloride	U		0.0273	0.100	1	11/06/2020 04:09	WG1571846
Xylenes, Total	0.198	J	0.191	0.260	1	11/06/2020 04:09	WG1571846
Ethyl Ether	U		0.0170	0.100	1	11/06/2020 04:09	WG1571846
Tetrahydrofuran	U	~~J3~~	0.0900	0.500	1	11/06/2020 04:09	WG1571846
Iodomethane	U		0.242	0.500	1	11/06/2020 04:09	WG1571846
Allyl chloride	U		0.580	1.00	1	11/06/2020 04:09	WG1571846
Trans-1,4-Dichloro-2-butene	U		0.0560	0.200	1	11/06/2020 04:09	WG1571846
(S) Toluene-d8	*112*			*75.0-131*		*11/06/2020 04:09*	WG1571846
(S) 4-Bromofluorobenzene	*98.8*			*67.0-138*		*11/06/2020 04:09*	WG1571846
(S) 1,2-Dichloroethane-d4	*106*			*70.0-130*		*11/06/2020 04:09*	WG1571846

JC 12/7/2020

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Sulfate	5770		594	5000	1	11/10/2020 01:19	WG1572754

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	1590	~~B~~	102	1000	1	11/11/2020 19:39	WG1574696

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	24600		562	2000	20	11/11/2020 12:13	WG1573382
Manganese	888		14.1	100	20	11/11/2020 12:13	WG1573382

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	164		2.91	10.0	1	11/10/2020 16:29	WG1573445
Ethane	U		4.07	13.0	1	11/10/2020 16:29	WG1573445
Ethene	U		4.26	13.0	1	11/10/2020 16:29	WG1573445

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U		0.548	1.00	1	11/06/2020 04:28	WG1571846
Acrylonitrile	U		0.0760	0.500	1	11/06/2020 04:28	WG1571846
Benzene	0.0270	J	0.0160	0.0400	1	11/06/2020 04:28	WG1571846
Bromobenzene	U		0.0420	0.500	1	11/06/2020 04:28	WG1571846
Bromodichloromethane	U		0.0315	0.100	1	11/06/2020 04:28	WG1571846
Bromoform	U		0.239	1.00	1	11/06/2020 04:28	WG1571846
Bromomethane	U		0.148	0.500	1	11/06/2020 04:28	WG1571846
n-Butylbenzene	U		0.153	0.500	1	11/06/2020 04:28	WG1571846
sec-Butylbenzene	U		0.101	0.500	1	11/06/2020 04:28	WG1571846
tert-Butylbenzene	U		0.0620	0.200	1	11/06/2020 04:28	WG1571846
Carbon tetrachloride	U		0.0432	0.200	1	11/06/2020 04:28	WG1571846
Chlorobenzene	U		0.0229	0.100	1	11/06/2020 04:28	WG1571846
Chlorodibromomethane	U		0.0180	0.100	1	11/06/2020 04:28	WG1571846
Chloroethane	U		0.0432	0.200	1	11/06/2020 04:28	WG1571846
Chloroform	U		0.0166	0.100	1	11/06/2020 04:28	WG1571846
Chloromethane	U		0.0556	0.500	1	11/06/2020 04:28	WG1571846
2-Chlorotoluene	U		0.0368	0.100	1	11/06/2020 04:28	WG1571846
4-Chlorotoluene	U		0.0452	0.200	1	11/06/2020 04:28	WG1571846
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	11/06/2020 04:28	WG1571846
1,2-Dibromoethane	U		0.0210	0.100	1	11/06/2020 04:28	WG1571846
Dibromomethane	U		0.0400	0.200	1	11/06/2020 04:28	WG1571846
1,2-Dichlorobenzene	U		0.0580	0.200	1	11/06/2020 04:28	WG1571846
1,3-Dichlorobenzene	U		0.0680	0.200	1	11/06/2020 04:28	WG1571846
1,4-Dichlorobenzene	U		0.0788	0.200	1	11/06/2020 04:28	WG1571846
Dichlorodifluoromethane	U	~~J3~~	0.0327	0.100	1	11/06/2020 04:28	WG1571846
1,1-Dichloroethane	U		0.0230	0.100	1	11/06/2020 04:28	WG1571846
1,2-Dichloroethane	U		0.0190	0.100	1	11/06/2020 04:28	WG1571846
1,1-Dichloroethene	0.111		0.0200	0.100	1	11/06/2020 04:28	WG1571846
cis-1,2-Dichloroethene	2.75		0.0276	0.100	1	11/06/2020 04:28	WG1571846
trans-1,2-Dichloroethene	0.0590	J	0.0572	0.200	1	11/06/2020 04:28	WG1571846
1,2-Dichloropropane	U		0.0508	0.200	1	11/06/2020 04:28	WG1571846

JC 12/7/2020

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,1-Dichloropropene	U		0.0280	0.100	1	11/06/2020 04:28	WG1571846
1,3-Dichloropropane	U		0.0700	0.200	1	11/06/2020 04:28	WG1571846
cis-1,3-Dichloropropene	U		0.0271	0.100	1	11/06/2020 04:28	WG1571846
trans-1,3-Dichloropropene	U		0.0612	0.200	1	11/06/2020 04:28	WG1571846
2,2-Dichloropropane	U		0.0317	0.100	1	11/06/2020 04:28	WG1571846
Di-isopropyl ether	U		0.0140	0.0400	1	11/06/2020 04:28	WG1571846
Ethylbenzene	U		0.0212	0.100	1	11/06/2020 04:28	WG1571846
Hexachloro-1,3-butadiene	U		0.508	1.00	1	11/06/2020 04:28	WG1571846
Isopropylbenzene	U		0.0345	0.100	1	11/06/2020 04:28	WG1571846
p-Isopropyltoluene	U		0.0932	0.200	1	11/06/2020 04:28	WG1571846
2-Butanone (MEK)	U		0.500	1.00	1	11/06/2020 04:28	WG1571846
Methylene Chloride	U		0.265	1.00	1	11/06/2020 04:28	WG1571846
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	11/06/2020 04:28	WG1571846
Methyl tert-butyl ether	U		0.0118	0.0400	1	11/06/2020 04:28	WG1571846
Naphthalene	U		0.124	0.500	1	11/06/2020 04:28	WG1571846
n-Propylbenzene	U		0.0472	0.200	1	11/06/2020 04:28	WG1571846
Styrene	U		0.109	0.500	1	11/06/2020 04:28	WG1571846
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	11/06/2020 04:28	WG1571846
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	11/06/2020 04:28	WG1571846
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	11/06/2020 04:28	WG1571846
Tetrachloroethene	U		0.0280	0.100	1	11/06/2020 04:28	WG1571846
Toluene	0.158	J	0.0500	0.200	1	11/06/2020 04:28	WG1571846
1,2,3-Trichlorobenzene	U UJ	C4	0.0250	0.500	1	11/06/2020 04:28	WG1571846
1,2,4-Trichlorobenzene	U		0.193	0.500	1	11/06/2020 04:28	WG1571846
1,1,1-Trichloroethane	U		0.0110	0.100	1	11/06/2020 04:28	WG1571846
1,1,2-Trichloroethane	U		0.0353	0.100	1	11/06/2020 04:28	WG1571846
Trichloroethene	0.0800		0.0160	0.0400	1	11/06/2020 04:28	WG1571846
Trichlorofluoromethane	U		0.0200	0.100	1	11/06/2020 04:28	WG1571846
1,2,3-Trichloropropane	U		0.204	0.500	1	11/06/2020 04:28	WG1571846
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	11/06/2020 04:28	WG1571846
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	11/06/2020 04:28	WG1571846
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	11/06/2020 04:28	WG1571846
Vinyl chloride	2.22		0.0273	0.100	1	11/06/2020 04:28	WG1571846
Xylenes, Total	U		0.191	0.260	1	11/06/2020 04:28	WG1571846
Ethyl Ether	U		0.0170	0.100	1	11/06/2020 04:28	WG1571846
Tetrahydrofuran	U	~~J3~~	0.0900	0.500	1	11/06/2020 04:28	WG1571846
Iodomethane	U		0.242	0.500	1	11/06/2020 04:28	WG1571846
Allyl chloride	U		0.580	1.00	1	11/06/2020 04:28	WG1571846
Trans-1,4-Dichloro-2-butene	U		0.0560	0.200	1	11/06/2020 04:28	WG1571846
(S) Toluene-d8	*109*			*75.0-131*		*11/06/2020 04:28*	WG1571846
(S) 4-Bromofluorobenzene	*96.6*			*67.0-138*		*11/06/2020 04:28*	WG1571846
(S) 1,2-Dichloroethane-d4	*108*			*70.0-130*		*11/06/2020 04:28*	WG1571846

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

JC 12/7/2020

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U		0.548	1.00	1	11/06/2020 04:47	WG1571846
Acrylonitrile	U		0.0760	0.500	1	11/06/2020 04:47	WG1571846
Benzene	0.0190	J	0.0160	0.0400	1	11/06/2020 04:47	WG1571846
Bromobenzene	U		0.0420	0.500	1	11/06/2020 04:47	WG1571846
Bromodichloromethane	U		0.0315	0.100	1	11/06/2020 04:47	WG1571846
Bromoform	U		0.239	1.00	1	11/06/2020 04:47	WG1571846
Bromomethane	U		0.148	0.500	1	11/06/2020 04:47	WG1571846
n-Butylbenzene	U		0.153	0.500	1	11/06/2020 04:47	WG1571846
sec-Butylbenzene	U		0.101	0.500	1	11/06/2020 04:47	WG1571846
tert-Butylbenzene	U		0.0620	0.200	1	11/06/2020 04:47	WG1571846
Carbon tetrachloride	U		0.0432	0.200	1	11/06/2020 04:47	WG1571846
Chlorobenzene	U		0.0229	0.100	1	11/06/2020 04:47	WG1571846
Chlorodibromomethane	U		0.0180	0.100	1	11/06/2020 04:47	WG1571846
Chloroethane	U		0.0432	0.200	1	11/06/2020 04:47	WG1571846
Chloroform	U		0.0166	0.100	1	11/06/2020 04:47	WG1571846
Chloromethane	U		0.0556	0.500	1	11/06/2020 04:47	WG1571846
2-Chlorotoluene	U		0.0368	0.100	1	11/06/2020 04:47	WG1571846
4-Chlorotoluene	U		0.0452	0.200	1	11/06/2020 04:47	WG1571846
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	11/06/2020 04:47	WG1571846
1,2-Dibromoethane	U		0.0210	0.100	1	11/06/2020 04:47	WG1571846
Dibromomethane	U		0.0400	0.200	1	11/06/2020 04:47	WG1571846
1,2-Dichlorobenzene	U		0.0580	0.200	1	11/06/2020 04:47	WG1571846
1,3-Dichlorobenzene	U		0.0680	0.200	1	11/06/2020 04:47	WG1571846
1,4-Dichlorobenzene	U		0.0788	0.200	1	11/06/2020 04:47	WG1571846
Dichlorodifluoromethane	U	~~J3~~	0.0327	0.100	1	11/06/2020 04:47	WG1571846
1,1-Dichloroethane	U		0.0230	0.100	1	11/06/2020 04:47	WG1571846
1,2-Dichloroethane	U		0.0190	0.100	1	11/06/2020 04:47	WG1571846
1,1-Dichloroethene	U		0.0200	0.100	1	11/06/2020 04:47	WG1571846
cis-1,2-Dichloroethene	U		0.0276	0.100	1	11/06/2020 04:47	WG1571846
trans-1,2-Dichloroethene	U		0.0572	0.200	1	11/06/2020 04:47	WG1571846
1,2-Dichloropropane	U		0.0508	0.200	1	11/06/2020 04:47	WG1571846
1,1-Dichloropropene	U		0.0280	0.100	1	11/06/2020 04:47	WG1571846
1,3-Dichloropropane	U		0.0700	0.200	1	11/06/2020 04:47	WG1571846
cis-1,3-Dichloropropene	U		0.0271	0.100	1	11/06/2020 04:47	WG1571846
trans-1,3-Dichloropropene	U		0.0612	0.200	1	11/06/2020 04:47	WG1571846
2,2-Dichloropropane	U		0.0317	0.100	1	11/06/2020 04:47	WG1571846
Di-isopropyl ether	U		0.0140	0.0400	1	11/06/2020 04:47	WG1571846
Ethylbenzene	U		0.0212	0.100	1	11/06/2020 04:47	WG1571846
Hexachloro-1,3-butadiene	U		0.508	1.00	1	11/06/2020 04:47	WG1571846
Isopropylbenzene	U		0.0345	0.100	1	11/06/2020 04:47	WG1571846
p-Isopropyltoluene	U		0.0932	0.200	1	11/06/2020 04:47	WG1571846
2-Butanone (MEK)	U		0.500	1.00	1	11/06/2020 04:47	WG1571846
Methylene Chloride	U		0.265	1.00	1	11/06/2020 04:47	WG1571846
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	11/06/2020 04:47	WG1571846
Methyl tert-butyl ether	U		0.0118	0.0400	1	11/06/2020 04:47	WG1571846
Naphthalene	U		0.124	0.500	1	11/06/2020 04:47	WG1571846
n-Propylbenzene	U		0.0472	0.200	1	11/06/2020 04:47	WG1571846
Styrene	U		0.109	0.500	1	11/06/2020 04:47	WG1571846
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	11/06/2020 04:47	WG1571846
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	11/06/2020 04:47	WG1571846
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	11/06/2020 04:47	WG1571846
Tetrachloroethene	U		0.0280	0.100	1	11/06/2020 04:47	WG1571846
Toluene	0.120	J	0.0500	0.200	1	11/06/2020 04:47	WG1571846
1,2,3-Trichlorobenzene	U UJ	C4	0.0250	0.500	1	11/06/2020 04:47	WG1571846
1,2,4-Trichlorobenzene	U		0.193	0.500	1	11/06/2020 04:47	WG1571846
1,1,1-Trichloroethane	U		0.0110	0.100	1	11/06/2020 04:47	WG1571846

JC 12/7/2020

MW-316-110220

Collected date/time: 11/02/20 11:25

SAMPLE RESULTS - 03

L1281756

Volatile Organic Compounds (GC/MS) by Method 8260D

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
1,1,2-Trichloroethane	U		0.0353	0.100	1	11/06/2020 04:47	WG1571846
Trichloroethene	U		0.0160	0.0400	1	11/06/2020 04:47	WG1571846
Trichlorofluoromethane	U		0.0200	0.100	1	11/06/2020 04:47	WG1571846
1,2,3-Trichloropropane	U		0.204	0.500	1	11/06/2020 04:47	WG1571846
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	11/06/2020 04:47	WG1571846
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	11/06/2020 04:47	WG1571846
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	11/06/2020 04:47	WG1571846
Vinyl chloride	U		0.0273	0.100	1	11/06/2020 04:47	WG1571846
Xylenes, Total	U		0.191	0.260	1	11/06/2020 04:47	WG1571846
Ethyl Ether	U		0.0170	0.100	1	11/06/2020 04:47	WG1571846
Tetrahydrofuran	U	~~J3~~	0.0900	0.500	1	11/06/2020 04:47	WG1571846
Iodomethane	U		0.242	0.500	1	11/06/2020 04:47	WG1571846
Allyl chloride	U		0.580	1.00	1	11/06/2020 04:47	WG1571846
Trans-1,4-Dichloro-2-butene	U		0.0560	0.200	1	11/06/2020 04:47	WG1571846
(S) Toluene-d8	*106*			*75.0-131*		*11/06/2020 04:47*	WG1571846
(S) 4-Bromofluorobenzene	*100*			*67.0-138*		*11/06/2020 04:47*	WG1571846
(S) 1,2-Dichloroethane-d4	*111*			*70.0-130*		*11/06/2020 04:47*	WG1571846

JC 12/7/2020

SAMPLE RESULTS - 04

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Sulfate	31800		594	5000	1	11/10/2020 02:27	WG1572754

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	1550	~~B~~	102	1000	1	11/11/2020 19:50	WG1574696

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	18800		281	1000	10	11/11/2020 12:17	WG1573382
Manganese	653		7.04	50.0	10	11/11/2020 12:17	WG1573382

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	484		2.91	10.0	1	11/10/2020 16:34	WG1573445
Ethane	47.8		4.07	13.0	1	11/10/2020 16:34	WG1573445
Ethene	23.8		4.26	13.0	1	11/10/2020 16:34	WG1573445

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U		0.548	1.00	1	11/06/2020 05:06	WG1571846
Acrylonitrile	U		0.0760	0.500	1	11/06/2020 05:06	WG1571846
Benzene	0.0230	J	0.0160	0.0400	1	11/06/2020 05:06	WG1571846
Bromobenzene	U		0.0420	0.500	1	11/06/2020 05:06	WG1571846
Bromodichloromethane	U		0.0315	0.100	1	11/06/2020 05:06	WG1571846
Bromoform	U		0.239	1.00	1	11/06/2020 05:06	WG1571846
Bromomethane	U		0.148	0.500	1	11/06/2020 05:06	WG1571846
n-Butylbenzene	U		0.153	0.500	1	11/06/2020 05:06	WG1571846
sec-Butylbenzene	U		0.101	0.500	1	11/06/2020 05:06	WG1571846
tert-Butylbenzene	U		0.0620	0.200	1	11/06/2020 05:06	WG1571846
Carbon tetrachloride	U		0.0432	0.200	1	11/06/2020 05:06	WG1571846
Chlorobenzene	U		0.0229	0.100	1	11/06/2020 05:06	WG1571846
Chlorodibromomethane	U		0.0180	0.100	1	11/06/2020 05:06	WG1571846
Chloroethane	U		0.0432	0.200	1	11/06/2020 05:06	WG1571846
Chloroform	U		0.0166	0.100	1	11/06/2020 05:06	WG1571846
Chloromethane	U		0.0556	0.500	1	11/06/2020 05:06	WG1571846
2-Chlorotoluene	U		0.0368	0.100	1	11/06/2020 05:06	WG1571846
4-Chlorotoluene	U		0.0452	0.200	1	11/06/2020 05:06	WG1571846
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	11/06/2020 05:06	WG1571846
1,2-Dibromoethane	U		0.0210	0.100	1	11/06/2020 05:06	WG1571846
Dibromomethane	U		0.0400	0.200	1	11/06/2020 05:06	WG1571846
1,2-Dichlorobenzene	U		0.0580	0.200	1	11/06/2020 05:06	WG1571846
1,3-Dichlorobenzene	U		0.0680	0.200	1	11/06/2020 05:06	WG1571846
1,4-Dichlorobenzene	U		0.0788	0.200	1	11/06/2020 05:06	WG1571846
Dichlorodifluoromethane	U	~~J3~~	0.0327	0.100	1	11/06/2020 05:06	WG1571846
1,1-Dichloroethane	U		0.0230	0.100	1	11/06/2020 05:06	WG1571846
1,2-Dichloroethane	U		0.0190	0.100	1	11/06/2020 05:06	WG1571846
1,1-Dichloroethene	0.358		0.0200	0.100	1	11/06/2020 05:06	WG1571846
cis-1,2-Dichloroethene	56.2		0.0276	0.100	1	11/06/2020 05:06	WG1571846
trans-1,2-Dichloroethene	U		0.0572	0.200	1	11/06/2020 05:06	WG1571846
1,2-Dichloropropane	U		0.0508	0.200	1	11/06/2020 05:06	WG1571846

JC 12/7/2020

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,1-Dichloropropene	U		0.0280	0.100	1	11/06/2020 05:06	WG1571846
1,3-Dichloropropane	U		0.0700	0.200	1	11/06/2020 05:06	WG1571846
cis-1,3-Dichloropropene	U		0.0271	0.100	1	11/06/2020 05:06	WG1571846
trans-1,3-Dichloropropene	U		0.0612	0.200	1	11/06/2020 05:06	WG1571846
2,2-Dichloropropane	U		0.0317	0.100	1	11/06/2020 05:06	WG1571846
Di-isopropyl ether	U		0.0140	0.0400	1	11/06/2020 05:06	WG1571846
Ethylbenzene	U		0.0212	0.100	1	11/06/2020 05:06	WG1571846
Hexachloro-1,3-butadiene	U		0.508	1.00	1	11/06/2020 05:06	WG1571846
Isopropylbenzene	U		0.0345	0.100	1	11/06/2020 05:06	WG1571846
p-Isopropyltoluene	U		0.0932	0.200	1	11/06/2020 05:06	WG1571846
2-Butanone (MEK)	U		0.500	1.00	1	11/06/2020 05:06	WG1571846
Methylene Chloride	U		0.265	1.00	1	11/06/2020 05:06	WG1571846
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	11/06/2020 05:06	WG1571846
Methyl tert-butyl ether	U		0.0118	0.0400	1	11/06/2020 05:06	WG1571846
Naphthalene	U		0.124	0.500	1	11/06/2020 05:06	WG1571846
n-Propylbenzene	U		0.0472	0.200	1	11/06/2020 05:06	WG1571846
Styrene	U		0.109	0.500	1	11/06/2020 05:06	WG1571846
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	11/06/2020 05:06	WG1571846
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	11/06/2020 05:06	WG1571846
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	11/06/2020 05:06	WG1571846
Tetrachloroethene	U		0.0280	0.100	1	11/06/2020 05:06	WG1571846
Toluene	0.225		0.0500	0.200	1	11/06/2020 05:06	WG1571846
1,2,3-Trichlorobenzene	U	UJ C4	0.0250	0.500	1	11/06/2020 05:06	WG1571846
1,2,4-Trichlorobenzene	U		0.193	0.500	1	11/06/2020 05:06	WG1571846
1,1,1-Trichloroethane	U		0.0110	0.100	1	11/06/2020 05:06	WG1571846
1,1,2-Trichloroethane	U		0.0353	0.100	1	11/06/2020 05:06	WG1571846
Trichloroethene	0.161		0.0160	0.0400	1	11/06/2020 05:06	WG1571846
Trichlorofluoromethane	U		0.0200	0.100	1	11/06/2020 05:06	WG1571846
1,2,3-Trichloropropane	U		0.204	0.500	1	11/06/2020 05:06	WG1571846
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	11/06/2020 05:06	WG1571846
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	11/06/2020 05:06	WG1571846
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	11/06/2020 05:06	WG1571846
Vinyl chloride	118		0.137	0.500	5	11/12/2020 11:24	WG1574660
Xylenes, Total	U		0.191	0.260	1	11/06/2020 05:06	WG1571846
Ethyl Ether	0.103		0.0170	0.100	1	11/06/2020 05:06	WG1571846
Tetrahydrofuran	U	~~J3~~	0.0900	0.500	1	11/06/2020 05:06	WG1571846
Iodomethane	U		0.242	0.500	1	11/06/2020 05:06	WG1571846
Allyl chloride	U		0.580	1.00	1	11/06/2020 05:06	WG1571846
Trans-1,4-Dichloro-2-butene	U		0.0560	0.200	1	11/06/2020 05:06	WG1571846
(S) Toluene-d8	*107*			*75.0-131*		*11/06/2020 05:06*	WG1571846
(S) Toluene-d8	*105*			*75.0-131*		*11/12/2020 11:24*	WG1574660
(S) 4-Bromofluorobenzene	*99.3*			*67.0-138*		*11/06/2020 05:06*	WG1571846
(S) 4-Bromofluorobenzene	*105*			*67.0-138*		*11/12/2020 11:24*	WG1574660
(S) 1,2-Dichloroethane-d4	*110*			*70.0-130*		*11/06/2020 05:06*	WG1571846
(S) 1,2-Dichloroethane-d4	*101*			*70.0-130*		*11/12/2020 11:24*	WG1574660

JC 12/7/2020

MW-325-110220
Collected date/time: 11/02/20 13:00

SAMPLE RESULTS - 05

L1281756

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U		0.548	1.00	1	11/06/2020 05:25	WG1571846
Acrylonitrile	U		0.0760	0.500	1	11/06/2020 05:25	WG1571846
Benzene	U		0.0160	0.0400	1	11/06/2020 05:25	WG1571846
Bromobenzene	U		0.0420	0.500	1	11/06/2020 05:25	WG1571846
Bromodichloromethane	U		0.0315	0.100	1	11/06/2020 05:25	WG1571846
Bromoform	U		0.239	1.00	1	11/06/2020 05:25	WG1571846
Bromomethane	U		0.148	0.500	1	11/06/2020 05:25	WG1571846
n-Butylbenzene	U		0.153	0.500	1	11/06/2020 05:25	WG1571846
sec-Butylbenzene	U		0.101	0.500	1	11/06/2020 05:25	WG1571846
tert-Butylbenzene	U		0.0620	0.200	1	11/06/2020 05:25	WG1571846
Carbon tetrachloride	U		0.0432	0.200	1	11/06/2020 05:25	WG1571846
Chlorobenzene	U		0.0229	0.100	1	11/06/2020 05:25	WG1571846
Chlorodibromomethane	U		0.0180	0.100	1	11/06/2020 05:25	WG1571846
Chloroethane	U		0.0432	0.200	1	11/06/2020 05:25	WG1571846
Chloroform	U		0.0166	0.100	1	11/06/2020 05:25	WG1571846
Chloromethane	U		0.0556	0.500	1	11/06/2020 05:25	WG1571846
2-Chlorotoluene	U		0.0368	0.100	1	11/06/2020 05:25	WG1571846
4-Chlorotoluene	U		0.0452	0.200	1	11/06/2020 05:25	WG1571846
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	11/06/2020 05:25	WG1571846
1,2-Dibromoethane	U		0.0210	0.100	1	11/06/2020 05:25	WG1571846
Dibromomethane	U		0.0400	0.200	1	11/06/2020 05:25	WG1571846
1,2-Dichlorobenzene	U		0.0580	0.200	1	11/06/2020 05:25	WG1571846
1,3-Dichlorobenzene	U		0.0680	0.200	1	11/06/2020 05:25	WG1571846
1,4-Dichlorobenzene	U		0.0788	0.200	1	11/06/2020 05:25	WG1571846
Dichlorodifluoromethane	U	~~J3~~	0.0327	0.100	1	11/06/2020 05:25	WG1571846
1,1-Dichloroethane	U		0.0230	0.100	1	11/06/2020 05:25	WG1571846
1,2-Dichloroethane	U		0.0190	0.100	1	11/06/2020 05:25	WG1571846
1,1-Dichloroethene	U		0.0200	0.100	1	11/06/2020 05:25	WG1571846
cis-1,2-Dichloroethene	0.802		0.0276	0.100	1	11/06/2020 05:25	WG1571846
trans-1,2-Dichloroethene	U		0.0572	0.200	1	11/06/2020 05:25	WG1571846
1,2-Dichloropropane	U		0.0508	0.200	1	11/06/2020 05:25	WG1571846
1,1-Dichloropropene	U		0.0280	0.100	1	11/06/2020 05:25	WG1571846
1,3-Dichloropropane	U		0.0700	0.200	1	11/06/2020 05:25	WG1571846
cis-1,3-Dichloropropene	U		0.0271	0.100	1	11/06/2020 05:25	WG1571846
trans-1,3-Dichloropropene	U		0.0612	0.200	1	11/06/2020 05:25	WG1571846
2,2-Dichloropropane	U		0.0317	0.100	1	11/06/2020 05:25	WG1571846
Di-isopropyl ether	U		0.0140	0.0400	1	11/06/2020 05:25	WG1571846
Ethylbenzene	U		0.0212	0.100	1	11/06/2020 05:25	WG1571846
Hexachloro-1,3-butadiene	U		0.508	1.00	1	11/06/2020 05:25	WG1571846
Isopropylbenzene	U		0.0345	0.100	1	11/06/2020 05:25	WG1571846
p-Isopropyltoluene	U		0.0932	0.200	1	11/06/2020 05:25	WG1571846
2-Butanone (MEK)	U		0.500	1.00	1	11/06/2020 05:25	WG1571846
Methylene Chloride	U		0.265	1.00	1	11/06/2020 05:25	WG1571846
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	11/06/2020 05:25	WG1571846
Methyl tert-butyl ether	U		0.0118	0.0400	1	11/06/2020 05:25	WG1571846
Naphthalene	U		0.124	0.500	1	11/06/2020 05:25	WG1571846
n-Propylbenzene	U		0.0472	0.200	1	11/06/2020 05:25	WG1571846
Styrene	U		0.109	0.500	1	11/06/2020 05:25	WG1571846
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	11/06/2020 05:25	WG1571846
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	11/06/2020 05:25	WG1571846
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	11/06/2020 05:25	WG1571846
Tetrachloroethene	U		0.0280	0.100	1	11/06/2020 05:25	WG1571846
Toluene	U		0.0500	0.200	1	11/06/2020 05:25	WG1571846
1,2,3-Trichlorobenzene	U UJ	C4	0.0250	0.500	1	11/06/2020 05:25	WG1571846
1,2,4-Trichlorobenzene	U		0.193	0.500	1	11/06/2020 05:25	WG1571846
1,1,1-Trichloroethane	U		0.0110	0.100	1	11/06/2020 05:25	WG1571846

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Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,1,2-Trichloroethane	U		0.0353	0.100	1	11/06/2020 05:25	WG1571846
Trichloroethene	U		0.0160	0.0400	1	11/06/2020 05:25	WG1571846
Trichlorofluoromethane	U		0.0200	0.100	1	11/06/2020 05:25	WG1571846
1,2,3-Trichloropropane	U		0.204	0.500	1	11/06/2020 05:25	WG1571846
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	11/06/2020 05:25	WG1571846
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	11/06/2020 05:25	WG1571846
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	11/06/2020 05:25	WG1571846
Vinyl chloride	U		0.0273	0.100	1	11/06/2020 05:25	WG1571846
Xylenes, Total	U		0.191	0.260	1	11/06/2020 05:25	WG1571846
Ethyl Ether	U		0.0170	0.100	1	11/06/2020 05:25	WG1571846
Tetrahydrofuran	U	~~J3~~	0.0900	0.500	1	11/06/2020 05:25	WG1571846
Iodomethane	U		0.242	0.500	1	11/06/2020 05:25	WG1571846
Allyl chloride	U		0.580	1.00	1	11/06/2020 05:25	WG1571846
Trans-1,4-Dichloro-2-butene	U		0.0560	0.200	1	11/06/2020 05:25	WG1571846
(S) Toluene-d8	*109*			*75.0-131*		*11/06/2020 05:25*	WG1571846
(S) 4-Bromofluorobenzene	*101*			*67.0-138*		*11/06/2020 05:25*	WG1571846
(S) 1,2-Dichloroethane-d4	*110*			*70.0-130*		*11/06/2020 05:25*	WG1571846

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

JC 12/7/2020

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U		0.548	1.00	1	11/06/2020 05:44	WG1571846
Acrylonitrile	U		0.0760	0.500	1	11/06/2020 05:44	WG1571846
Benzene	0.0740		0.0160	0.0400	1	11/06/2020 05:44	WG1571846
Bromobenzene	U		0.0420	0.500	1	11/06/2020 05:44	WG1571846
Bromodichloromethane	U		0.0315	0.100	1	11/06/2020 05:44	WG1571846
Bromoform	U		0.239	1.00	1	11/06/2020 05:44	WG1571846
Bromomethane	U		0.148	0.500	1	11/06/2020 05:44	WG1571846
n-Butylbenzene	U		0.153	0.500	1	11/06/2020 05:44	WG1571846
sec-Butylbenzene	U		0.101	0.500	1	11/06/2020 05:44	WG1571846
tert-Butylbenzene	U		0.0620	0.200	1	11/06/2020 05:44	WG1571846
Carbon tetrachloride	U		0.0432	0.200	1	11/06/2020 05:44	WG1571846
Chlorobenzene	U		0.0229	0.100	1	11/06/2020 05:44	WG1571846
Chlorodibromomethane	U		0.0180	0.100	1	11/06/2020 05:44	WG1571846
Chloroethane	U		0.0432	0.200	1	11/06/2020 05:44	WG1571846
Chloroform	U		0.0166	0.100	1	11/06/2020 05:44	WG1571846
Chloromethane	U		0.0556	0.500	1	11/06/2020 05:44	WG1571846
2-Chlorotoluene	U		0.0368	0.100	1	11/06/2020 05:44	WG1571846
4-Chlorotoluene	U		0.0452	0.200	1	11/06/2020 05:44	WG1571846
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	11/06/2020 05:44	WG1571846
1,2-Dibromoethane	U		0.0210	0.100	1	11/06/2020 05:44	WG1571846
Dibromomethane	U		0.0400	0.200	1	11/06/2020 05:44	WG1571846
1,2-Dichlorobenzene	U		0.0580	0.200	1	11/06/2020 05:44	WG1571846
1,3-Dichlorobenzene	U		0.0680	0.200	1	11/06/2020 05:44	WG1571846
1,4-Dichlorobenzene	U		0.0788	0.200	1	11/06/2020 05:44	WG1571846
Dichlorodifluoromethane	U	~~J3~~	0.0327	0.100	1	11/06/2020 05:44	WG1571846
1,1-Dichloroethane	U		0.0230	0.100	1	11/06/2020 05:44	WG1571846
1,2-Dichloroethane	U		0.0190	0.100	1	11/06/2020 05:44	WG1571846
1,1-Dichloroethene	U		0.0200	0.100	1	11/06/2020 05:44	WG1571846
cis-1,2-Dichloroethene	0.224		0.0276	0.100	1	11/06/2020 05:44	WG1571846
trans-1,2-Dichloroethene	U		0.0572	0.200	1	11/06/2020 05:44	WG1571846
1,2-Dichloropropane	U		0.0508	0.200	1	11/06/2020 05:44	WG1571846
1,1-Dichloropropene	U		0.0280	0.100	1	11/06/2020 05:44	WG1571846
1,3-Dichloropropane	U		0.0700	0.200	1	11/06/2020 05:44	WG1571846
cis-1,3-Dichloropropene	U		0.0271	0.100	1	11/06/2020 05:44	WG1571846
trans-1,3-Dichloropropene	U		0.0612	0.200	1	11/06/2020 05:44	WG1571846
2,2-Dichloropropane	U		0.0317	0.100	1	11/06/2020 05:44	WG1571846
Di-isopropyl ether	U		0.0140	0.0400	1	11/06/2020 05:44	WG1571846
Ethylbenzene	U		0.0212	0.100	1	11/06/2020 05:44	WG1571846
Hexachloro-1,3-butadiene	U		0.508	1.00	1	11/06/2020 05:44	WG1571846
Isopropylbenzene	U		0.0345	0.100	1	11/06/2020 05:44	WG1571846
p-Isopropyltoluene	U		0.0932	0.200	1	11/06/2020 05:44	WG1571846
2-Butanone (MEK)	U		0.500	1.00	1	11/06/2020 05:44	WG1571846
Methylene Chloride	U		0.265	1.00	1	11/06/2020 05:44	WG1571846
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	11/06/2020 05:44	WG1571846
Methyl tert-butyl ether	U		0.0118	0.0400	1	11/06/2020 05:44	WG1571846
Naphthalene	U		0.124	0.500	1	11/06/2020 05:44	WG1571846
n-Propylbenzene	U		0.0472	0.200	1	11/06/2020 05:44	WG1571846
Styrene	U		0.109	0.500	1	11/06/2020 05:44	WG1571846
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	11/06/2020 05:44	WG1571846
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	11/06/2020 05:44	WG1571846
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	11/06/2020 05:44	WG1571846
Tetrachloroethene	U		0.0280	0.100	1	11/06/2020 05:44	WG1571846
Toluene	0.165	J	0.0500	0.200	1	11/06/2020 05:44	WG1571846
1,2,3-Trichlorobenzene	U	UJ C4	0.0250	0.500	1	11/06/2020 05:44	WG1571846
1,2,4-Trichlorobenzene	U		0.193	0.500	1	11/06/2020 05:44	WG1571846
1,1,1-Trichloroethane	U		0.0110	0.100	1	11/06/2020 05:44	WG1571846

JC 12/7/2020

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,1,2-Trichloroethane	U		0.0353	0.100	1	11/06/2020 05:44	WG1571846
Trichloroethene	0.0260	J	0.0160	0.0400	1	11/06/2020 05:44	WG1571846
Trichlorofluoromethane	U		0.0200	0.100	1	11/06/2020 05:44	WG1571846
1,2,3-Trichloropropane	U		0.204	0.500	1	11/06/2020 05:44	WG1571846
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	11/06/2020 05:44	WG1571846
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	11/06/2020 05:44	WG1571846
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	11/06/2020 05:44	WG1571846
Vinyl chloride	0.332		0.0273	0.100	1	11/06/2020 05:44	WG1571846
Xylenes, Total	U		0.191	0.260	1	11/06/2020 05:44	WG1571846
Ethyl Ether	U		0.0170	0.100	1	11/06/2020 05:44	WG1571846
Tetrahydrofuran	U	~~J3~~	0.0900	0.500	1	11/06/2020 05:44	WG1571846
Iodomethane	U		0.242	0.500	1	11/06/2020 05:44	WG1571846
Allyl chloride	U		0.580	1.00	1	11/06/2020 05:44	WG1571846
Trans-1,4-Dichloro-2-butene	U		0.0560	0.200	1	11/06/2020 05:44	WG1571846
(S) Toluene-d8	*108*			*75.0-131*		*11/06/2020 05:44*	WG1571846
(S) 4-Bromofluorobenzene	*101*			*67.0-138*		*11/06/2020 05:44*	WG1571846
(S) 1,2-Dichloroethane-d4	*109*			*70.0-130*		*11/06/2020 05:44*	WG1571846

JC 12/7/2020

MW109-110220
Collected date/time: 11/02/20 15:00

SAMPLE RESULTS - 07

L1281756

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Sulfate	8890		594	5000	1	11/10/2020 03:01	WG1572754

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	8690		102	1000	1	11/11/2020 20:04	WG1574696

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	14600		562	2000	20	11/11/2020 12:20	WG1573382
Manganese	3940		14.1	100	20	11/11/2020 12:20	WG1573382

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	2620		2.91	10.0	1	11/10/2020 16:36	WG1573445
Ethane	31.5		4.07	13.0	1	11/10/2020 16:36	WG1573445
Ethene	U		4.26	13.0	1	11/10/2020 16:36	WG1573445

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U		0.548	1.00	1	11/06/2020 06:03	WG1571846
Acrylonitrile	U		0.0760	0.500	1	11/06/2020 06:03	WG1571846
Benzene	0.0550		0.0160	0.0400	1	11/06/2020 06:03	WG1571846
Bromobenzene	U		0.0420	0.500	1	11/06/2020 06:03	WG1571846
Bromodichloromethane	U		0.0315	0.100	1	11/06/2020 06:03	WG1571846
Bromoform	U		0.239	1.00	1	11/06/2020 06:03	WG1571846
Bromomethane	U		0.148	0.500	1	11/06/2020 06:03	WG1571846
n-Butylbenzene	U		0.153	0.500	1	11/06/2020 06:03	WG1571846
sec-Butylbenzene	U		0.101	0.500	1	11/06/2020 06:03	WG1571846
tert-Butylbenzene	U		0.0620	0.200	1	11/06/2020 06:03	WG1571846
Carbon tetrachloride	U		0.0432	0.200	1	11/06/2020 06:03	WG1571846
Chlorobenzene	U		0.0229	0.100	1	11/06/2020 06:03	WG1571846
Chlorodibromomethane	U		0.0180	0.100	1	11/06/2020 06:03	WG1571846
Chloroethane	U		0.0432	0.200	1	11/06/2020 06:03	WG1571846
Chloroform	U		0.0166	0.100	1	11/06/2020 06:03	WG1571846
Chloromethane	U		0.0556	0.500	1	11/06/2020 06:03	WG1571846
2-Chlorotoluene	U		0.0368	0.100	1	11/06/2020 06:03	WG1571846
4-Chlorotoluene	U		0.0452	0.200	1	11/06/2020 06:03	WG1571846
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	11/06/2020 06:03	WG1571846
1,2-Dibromoethane	U		0.0210	0.100	1	11/06/2020 06:03	WG1571846
Dibromomethane	U		0.0400	0.200	1	11/06/2020 06:03	WG1571846
1,2-Dichlorobenzene	U		0.0580	0.200	1	11/06/2020 06:03	WG1571846
1,3-Dichlorobenzene	U		0.0680	0.200	1	11/06/2020 06:03	WG1571846
1,4-Dichlorobenzene	U		0.0788	0.200	1	11/06/2020 06:03	WG1571846
Dichlorodifluoromethane	U	~~J3~~	0.0327	0.100	1	11/06/2020 06:03	WG1571846
1,1-Dichloroethane	U		0.0230	0.100	1	11/06/2020 06:03	WG1571846
1,2-Dichloroethane	U		0.0190	0.100	1	11/06/2020 06:03	WG1571846
1,1-Dichloroethene	0.0900	J	0.0200	0.100	1	11/06/2020 06:03	WG1571846
cis-1,2-Dichloroethene	32.1		0.0276	0.100	1	11/06/2020 06:03	WG1571846
trans-1,2-Dichloroethene	0.220		0.0572	0.200	1	11/06/2020 06:03	WG1571846
1,2-Dichloropropane	U		0.0508	0.200	1	11/06/2020 06:03	WG1571846

JC 12/7/2020

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,1-Dichloropropene	U		0.0280	0.100	1	11/06/2020 06:03	WG1571846
1,3-Dichloropropane	U		0.0700	0.200	1	11/06/2020 06:03	WG1571846
cis-1,3-Dichloropropene	U		0.0271	0.100	1	11/06/2020 06:03	WG1571846
trans-1,3-Dichloropropene	U		0.0612	0.200	1	11/06/2020 06:03	WG1571846
2,2-Dichloropropane	U		0.0317	0.100	1	11/06/2020 06:03	WG1571846
Di-isopropyl ether	U		0.0140	0.0400	1	11/06/2020 06:03	WG1571846
Ethylbenzene	U		0.0212	0.100	1	11/06/2020 06:03	WG1571846
Hexachloro-1,3-butadiene	U		0.508	1.00	1	11/06/2020 06:03	WG1571846
Isopropylbenzene	U		0.0345	0.100	1	11/06/2020 06:03	WG1571846
p-Isopropyltoluene	U		0.0932	0.200	1	11/06/2020 06:03	WG1571846
2-Butanone (MEK)	U		0.500	1.00	1	11/06/2020 06:03	WG1571846
Methylene Chloride	U		0.265	1.00	1	11/06/2020 06:03	WG1571846
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	11/06/2020 06:03	WG1571846
Methyl tert-butyl ether	U		0.0118	0.0400	1	11/06/2020 06:03	WG1571846
Naphthalene	U		0.124	0.500	1	11/06/2020 06:03	WG1571846
n-Propylbenzene	U		0.0472	0.200	1	11/06/2020 06:03	WG1571846
Styrene	U		0.109	0.500	1	11/06/2020 06:03	WG1571846
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	11/06/2020 06:03	WG1571846
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	11/06/2020 06:03	WG1571846
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	11/06/2020 06:03	WG1571846
Tetrachloroethene	U		0.0280	0.100	1	11/06/2020 06:03	WG1571846
Toluene	0.105	J	0.0500	0.200	1	11/06/2020 06:03	WG1571846
1,2,3-Trichlorobenzene	U	UJ C4	0.0250	0.500	1	11/06/2020 06:03	WG1571846
1,2,4-Trichlorobenzene	U		0.193	0.500	1	11/06/2020 06:03	WG1571846
1,1,1-Trichloroethane	U		0.0110	0.100	1	11/06/2020 06:03	WG1571846
1,1,2-Trichloroethane	U		0.0353	0.100	1	11/06/2020 06:03	WG1571846
Trichloroethene	0.126		0.0160	0.0400	1	11/06/2020 06:03	WG1571846
Trichlorofluoromethane	U		0.0200	0.100	1	11/06/2020 06:03	WG1571846
1,2,3-Trichloropropane	U		0.204	0.500	1	11/06/2020 06:03	WG1571846
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	11/06/2020 06:03	WG1571846
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	11/06/2020 06:03	WG1571846
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	11/06/2020 06:03	WG1571846
Vinyl chloride	14.5		0.0273	0.100	1	11/06/2020 06:03	WG1571846
Xylenes, Total	U		0.191	0.260	1	11/06/2020 06:03	WG1571846
Ethyl Ether	0.391		0.0170	0.100	1	11/06/2020 06:03	WG1571846
Tetrahydrofuran	U	~~J3~~	0.0900	0.500	1	11/06/2020 06:03	WG1571846
Iodomethane	U		0.242	0.500	1	11/06/2020 06:03	WG1571846
Allyl chloride	U		0.580	1.00	1	11/06/2020 06:03	WG1571846
Trans-1,4-Dichloro-2-butene	U		0.0560	0.200	1	11/06/2020 06:03	WG1571846
(S) Toluene-d8	*107*			*75.0-131*		*11/06/2020 06:03*	WG1571846
(S) 4-Bromofluorobenzene	*99.8*			*67.0-138*		*11/06/2020 06:03*	WG1571846
(S) 1,2-Dichloroethane-d4	*109*			*70.0-130*		*11/06/2020 06:03*	WG1571846

JC 12/7/2020

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U		5.48	10.0	10	11/06/2020 08:36	WG1571846
Acrylonitrile	U		0.760	5.00	10	11/06/2020 08:36	WG1571846
Benzene	0.380	J	0.160	0.400	10	11/06/2020 08:36	WG1571846
Bromobenzene	U		0.420	5.00	10	11/06/2020 08:36	WG1571846
Bromodichloromethane	U		0.315	1.00	10	11/06/2020 08:36	WG1571846
Bromoform	U		2.39	10.0	10	11/06/2020 08:36	WG1571846
Bromomethane	U		1.48	5.00	10	11/06/2020 08:36	WG1571846
n-Butylbenzene	U		1.53	5.00	10	11/06/2020 08:36	WG1571846
sec-Butylbenzene	U		1.01	5.00	10	11/06/2020 08:36	WG1571846
tert-Butylbenzene	U		0.620	2.00	10	11/06/2020 08:36	WG1571846
Carbon tetrachloride	U		0.432	2.00	10	11/06/2020 08:36	WG1571846
Chlorobenzene	U		0.229	1.00	10	11/06/2020 08:36	WG1571846
Chlorodibromomethane	U		0.180	1.00	10	11/06/2020 08:36	WG1571846
Chloroethane	U		0.432	2.00	10	11/06/2020 08:36	WG1571846
Chloroform	U		0.166	1.00	10	11/06/2020 08:36	WG1571846
Chloromethane	U		0.556	5.00	10	11/06/2020 08:36	WG1571846
2-Chlorotoluene	U		0.368	1.00	10	11/06/2020 08:36	WG1571846
4-Chlorotoluene	U		0.452	2.00	10	11/06/2020 08:36	WG1571846
1,2-Dibromo-3-Chloropropane	U		2.04	10.0	10	11/06/2020 08:36	WG1571846
1,2-Dibromoethane	U		0.210	1.00	10	11/06/2020 08:36	WG1571846
Dibromomethane	U		0.400	2.00	10	11/06/2020 08:36	WG1571846
1,2-Dichlorobenzene	U		0.580	2.00	10	11/06/2020 08:36	WG1571846
1,3-Dichlorobenzene	U		0.680	2.00	10	11/06/2020 08:36	WG1571846
1,4-Dichlorobenzene	U		0.788	2.00	10	11/06/2020 08:36	WG1571846
Dichlorodifluoromethane	U	~~J3~~	0.327	1.00	10	11/06/2020 08:36	WG1571846
1,1-Dichloroethane	U		0.230	1.00	10	11/06/2020 08:36	WG1571846
1,2-Dichloroethane	U		0.190	1.00	10	11/06/2020 08:36	WG1571846
1,1-Dichloroethene	2.02		0.200	1.00	10	11/06/2020 08:36	WG1571846
cis-1,2-Dichloroethene	1160		1.38	5.00	50	11/12/2020 11:44	WG1574660
trans-1,2-Dichloroethene	3.16		0.572	2.00	10	11/06/2020 08:36	WG1571846
1,2-Dichloropropane	U		0.508	2.00	10	11/06/2020 08:36	WG1571846
1,1-Dichloropropene	U		0.280	1.00	10	11/06/2020 08:36	WG1571846
1,3-Dichloropropane	U		0.700	2.00	10	11/06/2020 08:36	WG1571846
cis-1,3-Dichloropropene	U		0.271	1.00	10	11/06/2020 08:36	WG1571846
trans-1,3-Dichloropropene	U		0.612	2.00	10	11/06/2020 08:36	WG1571846
2,2-Dichloropropane	U		0.317	1.00	10	11/06/2020 08:36	WG1571846
Di-isopropyl ether	U		0.140	0.400	10	11/06/2020 08:36	WG1571846
Ethylbenzene	U		0.212	1.00	10	11/06/2020 08:36	WG1571846
Hexachloro-1,3-butadiene	U		5.08	10.0	10	11/06/2020 08:36	WG1571846
Isopropylbenzene	U		0.345	1.00	10	11/06/2020 08:36	WG1571846
p-Isopropyltoluene	U		0.932	2.00	10	11/06/2020 08:36	WG1571846
2-Butanone (MEK)	U		5.00	10.0	10	11/06/2020 08:36	WG1571846
Methylene Chloride	U		2.65	10.0	10	11/06/2020 08:36	WG1571846
4-Methyl-2-pentanone (MIBK)	U		4.00	10.0	10	11/06/2020 08:36	WG1571846
Methyl tert-butyl ether	U		0.118	0.400	10	11/06/2020 08:36	WG1571846
Naphthalene	U		1.24	5.00	10	11/06/2020 08:36	WG1571846
n-Propylbenzene	U		0.472	2.00	10	11/06/2020 08:36	WG1571846
Styrene	U		1.09	5.00	10	11/06/2020 08:36	WG1571846
1,1,1,2-Tetrachloroethane	U		0.200	1.00	10	11/06/2020 08:36	WG1571846
1,1,2,2-Tetrachloroethane	U		0.156	1.00	10	11/06/2020 08:36	WG1571846
1,1,2-Trichlorotrifluoroethane	U		0.270	1.00	10	11/06/2020 08:36	WG1571846
Tetrachloroethene	235	J0	0.280	1.00	10	11/06/2020 08:36	WG1571846
Toluene	U		0.500	2.00	10	11/06/2020 08:36	WG1571846
1,2,3-Trichlorobenzene	U UJ	C4	0.250	5.00	10	11/06/2020 08:36	WG1571846
1,2,4-Trichlorobenzene	U		1.93	5.00	10	11/06/2020 08:36	WG1571846
1,1,1-Trichloroethane	U		0.110	1.00	10	11/06/2020 08:36	WG1571846

JC 12/7/2020

MW-335-110220

Collected date/time: 11/02/20 15:40

SAMPLE RESULTS - 08

L1281756

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,1,2-Trichloroethane	U		0.353	1.00	10	11/06/2020 08:36	WG1571846
Trichloroethene	302		0.160	0.400	10	11/06/2020 08:36	WG1571846
Trichlorofluoromethane	U		0.200	1.00	10	11/06/2020 08:36	WG1571846
1,2,3-Trichloropropane	U		2.04	5.00	10	11/06/2020 08:36	WG1571846
1,2,4-Trimethylbenzene	U		0.464	2.00	10	11/06/2020 08:36	WG1571846
1,2,3-Trimethylbenzene	U		0.460	2.00	10	11/06/2020 08:36	WG1571846
1,3,5-Trimethylbenzene	U		0.432	2.00	10	11/06/2020 08:36	WG1571846
Vinyl chloride	5.08		0.273	1.00	10	11/06/2020 08:36	WG1571846
Xylenes, Total	U		1.91	2.60	10	11/06/2020 08:36	WG1571846
Ethyl Ether	U		0.170	1.00	10	11/06/2020 08:36	WG1571846
Tetrahydrofuran	U	~~J3~~	0.900	5.00	10	11/06/2020 08:36	WG1571846
Iodomethane	U		2.42	5.00	10	11/06/2020 08:36	WG1571846
Allyl chloride	U		5.80	10.0	10	11/06/2020 08:36	WG1571846
Trans-1,4-Dichloro-2-butene	U		0.560	2.00	10	11/06/2020 08:36	WG1571846
(S) Toluene-d8	*107*			*75.0-131*		*11/06/2020 08:36*	WG1571846
(S) Toluene-d8	*106*			*75.0-131*		*11/12/2020 11:44*	WG1574660
(S) 4-Bromofluorobenzene	*101*			*67.0-138*		*11/06/2020 08:36*	WG1571846
(S) 4-Bromofluorobenzene	*106*			*67.0-138*		*11/12/2020 11:44*	WG1574660
(S) 1,2-Dichloroethane-d4	*113*			*70.0-130*		*11/06/2020 08:36*	WG1571846
(S) 1,2-Dichloroethane-d4	*100*			*70.0-130*		*11/12/2020 11:44*	WG1574660

JC 12/7/2020

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U		0.548	1.00	1	11/06/2020 06:22	WG1571846
Acrylonitrile	U		0.0760	0.500	1	11/06/2020 06:22	WG1571846
Benzene	0.0620		0.0160	0.0400	1	11/06/2020 06:22	WG1571846
Bromobenzene	U		0.0420	0.500	1	11/06/2020 06:22	WG1571846
Bromodichloromethane	U		0.0315	0.100	1	11/06/2020 06:22	WG1571846
Bromoform	U		0.239	1.00	1	11/06/2020 06:22	WG1571846
Bromomethane	U		0.148	0.500	1	11/06/2020 06:22	WG1571846
n-Butylbenzene	U		0.153	0.500	1	11/06/2020 06:22	WG1571846
sec-Butylbenzene	U		0.101	0.500	1	11/06/2020 06:22	WG1571846
tert-Butylbenzene	U		0.0620	0.200	1	11/06/2020 06:22	WG1571846
Carbon tetrachloride	U		0.0432	0.200	1	11/06/2020 06:22	WG1571846
Chlorobenzene	U		0.0229	0.100	1	11/06/2020 06:22	WG1571846
Chlorodibromomethane	U		0.0180	0.100	1	11/06/2020 06:22	WG1571846
Chloroethane	U		0.0432	0.200	1	11/06/2020 06:22	WG1571846
Chloroform	U		0.0166	0.100	1	11/06/2020 06:22	WG1571846
Chloromethane	2.80		0.0556	0.500	1	11/06/2020 06:22	WG1571846
2-Chlorotoluene	U		0.0368	0.100	1	11/06/2020 06:22	WG1571846
4-Chlorotoluene	U		0.0452	0.200	1	11/06/2020 06:22	WG1571846
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	11/06/2020 06:22	WG1571846
1,2-Dibromoethane	U		0.0210	0.100	1	11/06/2020 06:22	WG1571846
Dibromomethane	U		0.0400	0.200	1	11/06/2020 06:22	WG1571846
1,2-Dichlorobenzene	U		0.0580	0.200	1	11/06/2020 06:22	WG1571846
1,3-Dichlorobenzene	U		0.0680	0.200	1	11/06/2020 06:22	WG1571846
1,4-Dichlorobenzene	U		0.0788	0.200	1	11/06/2020 06:22	WG1571846
Dichlorodifluoromethane	U	~~J3~~	0.0327	0.100	1	11/06/2020 06:22	WG1571846
1,1-Dichloroethane	U		0.0230	0.100	1	11/06/2020 06:22	WG1571846
1,2-Dichloroethane	U		0.0190	0.100	1	11/06/2020 06:22	WG1571846
1,1-Dichloroethene	0.727		0.0200	0.100	1	11/06/2020 06:22	WG1571846
cis-1,2-Dichloroethene	276		0.276	1.00	10	11/12/2020 12:04	WG1574660
trans-1,2-Dichloroethene	1.31		0.0572	0.200	1	11/06/2020 06:22	WG1571846
1,2-Dichloropropane	U		0.0508	0.200	1	11/06/2020 06:22	WG1571846
1,1-Dichloropropene	U		0.0280	0.100	1	11/06/2020 06:22	WG1571846
1,3-Dichloropropane	U		0.0700	0.200	1	11/06/2020 06:22	WG1571846
cis-1,3-Dichloropropene	U		0.0271	0.100	1	11/06/2020 06:22	WG1571846
trans-1,3-Dichloropropene	U		0.0612	0.200	1	11/06/2020 06:22	WG1571846
2,2-Dichloropropane	U		0.0317	0.100	1	11/06/2020 06:22	WG1571846
Di-isopropyl ether	U		0.0140	0.0400	1	11/06/2020 06:22	WG1571846
Ethylbenzene	U		0.0212	0.100	1	11/06/2020 06:22	WG1571846
Hexachloro-1,3-butadiene	U		0.508	1.00	1	11/06/2020 06:22	WG1571846
Isopropylbenzene	U		0.0345	0.100	1	11/06/2020 06:22	WG1571846
p-Isopropyltoluene	U		0.0932	0.200	1	11/06/2020 06:22	WG1571846
2-Butanone (MEK)	U		0.500	1.00	1	11/06/2020 06:22	WG1571846
Methylene Chloride	U		0.265	1.00	1	11/06/2020 06:22	WG1571846
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	11/06/2020 06:22	WG1571846
Methyl tert-butyl ether	U		0.0118	0.0400	1	11/06/2020 06:22	WG1571846
Naphthalene	U		0.124	0.500	1	11/06/2020 06:22	WG1571846
n-Propylbenzene	U		0.0472	0.200	1	11/06/2020 06:22	WG1571846
Styrene	U		0.109	0.500	1	11/06/2020 06:22	WG1571846
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	11/06/2020 06:22	WG1571846
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	11/06/2020 06:22	WG1571846
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	11/06/2020 06:22	WG1571846
Tetrachloroethene	U		0.0280	0.100	1	11/06/2020 06:22	WG1571846
Toluene	0.430		0.0500	0.200	1	11/06/2020 06:22	WG1571846
1,2,3-Trichlorobenzene	U	UJ C4	0.0250	0.500	1	11/06/2020 06:22	WG1571846
1,2,4-Trichlorobenzene	U		0.193	0.500	1	11/06/2020 06:22	WG1571846
1,1,1-Trichloroethane	U		0.0110	0.100	1	11/06/2020 06:22	WG1571846

JC 12/7/2020

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,1,2-Trichloroethane	U		0.0353	0.100	1	11/06/2020 06:22	WG1571846
Trichloroethene	0.766		0.0160	0.0400	1	11/06/2020 06:22	WG1571846
Trichlorofluoromethane	U		0.0200	0.100	1	11/06/2020 06:22	WG1571846
1,2,3-Trichloropropane	U		0.204	0.500	1	11/06/2020 06:22	WG1571846
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	11/06/2020 06:22	WG1571846
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	11/06/2020 06:22	WG1571846
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	11/06/2020 06:22	WG1571846
Vinyl chloride	489		0.273	1.00	10	11/12/2020 12:04	WG1574660
Xylenes, Total	U		0.191	0.260	1	11/06/2020 06:22	WG1571846
Ethyl Ether	0.325		0.0170	0.100	1	11/06/2020 06:22	WG1571846
Tetrahydrofuran	U	~~J3~~	0.0900	0.500	1	11/06/2020 06:22	WG1571846
Iodomethane	U		0.242	0.500	1	11/06/2020 06:22	WG1571846
Allyl chloride	U		0.580	1.00	1	11/06/2020 06:22	WG1571846
Trans-1,4-Dichloro-2-butene	U		0.0560	0.200	1	11/06/2020 06:22	WG1571846
(S) Toluene-d8	*107*			*75.0-131*		*11/06/2020 06:22*	WG1571846
(S) Toluene-d8	*105*			*75.0-131*		*11/12/2020 12:04*	WG1574660
(S) 4-Bromofluorobenzene	*100*			*67.0-138*		*11/06/2020 06:22*	WG1571846
(S) 4-Bromofluorobenzene	*105*			*67.0-138*		*11/12/2020 12:04*	WG1574660
(S) 1,2-Dichloroethane-d4	*107*			*70.0-130*		*11/06/2020 06:22*	WG1571846
(S) 1,2-Dichloroethane-d4	*101*			*70.0-130*		*11/12/2020 12:04*	WG1574660

JC 12/7/2020

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U		0.548	1.00	1	11/06/2020 06:41	WG1571846
Acrylonitrile	U		0.0760	0.500	1	11/06/2020 06:41	WG1571846
Benzene	0.215		0.0160	0.0400	1	11/06/2020 06:41	WG1571846
Bromobenzene	U		0.0420	0.500	1	11/06/2020 06:41	WG1571846
Bromodichloromethane	U		0.0315	0.100	1	11/06/2020 06:41	WG1571846
Bromoform	U		0.239	1.00	1	11/06/2020 06:41	WG1571846
Bromomethane	U		0.148	0.500	1	11/06/2020 06:41	WG1571846
n-Butylbenzene	U		0.153	0.500	1	11/06/2020 06:41	WG1571846
sec-Butylbenzene	U		0.101	0.500	1	11/06/2020 06:41	WG1571846
tert-Butylbenzene	U		0.0620	0.200	1	11/06/2020 06:41	WG1571846
Carbon tetrachloride	U		0.0432	0.200	1	11/06/2020 06:41	WG1571846
Chlorobenzene	U		0.0229	0.100	1	11/06/2020 06:41	WG1571846
Chlorodibromomethane	U		0.0180	0.100	1	11/06/2020 06:41	WG1571846
Chloroethane	U		0.0432	0.200	1	11/06/2020 06:41	WG1571846
Chloroform	U		0.0166	0.100	1	11/06/2020 06:41	WG1571846
Chloromethane	U		0.0556	0.500	1	11/06/2020 06:41	WG1571846
2-Chlorotoluene	U		0.0368	0.100	1	11/06/2020 06:41	WG1571846
4-Chlorotoluene	U		0.0452	0.200	1	11/06/2020 06:41	WG1571846
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	11/06/2020 06:41	WG1571846
1,2-Dibromoethane	U		0.0210	0.100	1	11/06/2020 06:41	WG1571846
Dibromomethane	U		0.0400	0.200	1	11/06/2020 06:41	WG1571846
1,2-Dichlorobenzene	U		0.0580	0.200	1	11/06/2020 06:41	WG1571846
1,3-Dichlorobenzene	U		0.0680	0.200	1	11/06/2020 06:41	WG1571846
1,4-Dichlorobenzene	U		0.0788	0.200	1	11/06/2020 06:41	WG1571846
Dichlorodifluoromethane	U	~~J3~~	0.0327	0.100	1	11/06/2020 06:41	WG1571846
1,1-Dichloroethane	U		0.0230	0.100	1	11/06/2020 06:41	WG1571846
1,2-Dichloroethane	U		0.0190	0.100	1	11/06/2020 06:41	WG1571846
1,1-Dichloroethene	0.203		0.0200	0.100	1	11/06/2020 06:41	WG1571846
cis-1,2-Dichloroethene	137		0.138	0.500	5	11/12/2020 12:25	WG1574660
trans-1,2-Dichloroethene	0.0910	J	0.0572	0.200	1	11/06/2020 06:41	WG1571846
1,2-Dichloropropane	U		0.0508	0.200	1	11/06/2020 06:41	WG1571846
1,1-Dichloropropene	U		0.0280	0.100	1	11/06/2020 06:41	WG1571846
1,3-Dichloropropane	U		0.0700	0.200	1	11/06/2020 06:41	WG1571846
cis-1,3-Dichloropropene	U		0.0271	0.100	1	11/06/2020 06:41	WG1571846
trans-1,3-Dichloropropene	U		0.0612	0.200	1	11/06/2020 06:41	WG1571846
2,2-Dichloropropane	U		0.0317	0.100	1	11/06/2020 06:41	WG1571846
Di-isopropyl ether	U		0.0140	0.0400	1	11/06/2020 06:41	WG1571846
Ethylbenzene	U		0.0212	0.100	1	11/06/2020 06:41	WG1571846
Hexachloro-1,3-butadiene	U		0.508	1.00	1	11/06/2020 06:41	WG1571846
Isopropylbenzene	U		0.0345	0.100	1	11/06/2020 06:41	WG1571846
p-Isopropyltoluene	U		0.0932	0.200	1	11/06/2020 06:41	WG1571846
2-Butanone (MEK)	U		0.500	1.00	1	11/06/2020 06:41	WG1571846
Methylene Chloride	U		0.265	1.00	1	11/06/2020 06:41	WG1571846
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	11/06/2020 06:41	WG1571846
Methyl tert-butyl ether	U		0.0118	0.0400	1	11/06/2020 06:41	WG1571846
Naphthalene	U		0.124	0.500	1	11/06/2020 06:41	WG1571846
n-Propylbenzene	U		0.0472	0.200	1	11/06/2020 06:41	WG1571846
Styrene	U		0.109	0.500	1	11/06/2020 06:41	WG1571846
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	11/06/2020 06:41	WG1571846
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	11/06/2020 06:41	WG1571846
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	11/06/2020 06:41	WG1571846
Tetrachloroethene	0.172		0.0280	0.100	1	11/06/2020 06:41	WG1571846
Toluene	0.301		0.0500	0.200	1	11/06/2020 06:41	WG1571846
1,2,3-Trichlorobenzene	U UJ	C4	0.0250	0.500	1	11/06/2020 06:41	WG1571846
1,2,4-Trichlorobenzene	U		0.193	0.500	1	11/06/2020 06:41	WG1571846
1,1,1-Trichloroethane	U		0.0110	0.100	1	11/06/2020 06:41	WG1571846

JC 12/7/2020

MW-336-110220
Collected date/time: 11/02/20 16:40

SAMPLE RESULTS - 10
L1281756

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,1,2-Trichloroethane	U		0.0353	0.100	1	11/06/2020 06:41	WG1571846
Trichloroethene	3.52		0.0160	0.0400	1	11/06/2020 06:41	WG1571846
Trichlorofluoromethane	U		0.0200	0.100	1	11/06/2020 06:41	WG1571846
1,2,3-Trichloropropane	U		0.204	0.500	1	11/06/2020 06:41	WG1571846
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	11/06/2020 06:41	WG1571846
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	11/06/2020 06:41	WG1571846
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	11/06/2020 06:41	WG1571846
Vinyl chloride	5.80		0.0273	0.100	1	11/06/2020 06:41	WG1571846
Xylenes, Total	U		0.191	0.260	1	11/06/2020 06:41	WG1571846
Ethyl Ether	0.0730	J	0.0170	0.100	1	11/06/2020 06:41	WG1571846
Tetrahydrofuran	0.170	J J3	0.0900	0.500	1	11/06/2020 06:41	WG1571846
Iodomethane	U		0.242	0.500	1	11/06/2020 06:41	WG1571846
Allyl chloride	U		0.580	1.00	1	11/06/2020 06:41	WG1571846
Trans-1,4-Dichloro-2-butene	U		0.0560	0.200	1	11/06/2020 06:41	WG1571846
(S) Toluene-d8	*108*			*75.0-131*		*11/06/2020 06:41*	WG1571846
(S) Toluene-d8	*103*			*75.0-131*		*11/12/2020 12:25*	WG1574660
(S) 4-Bromofluorobenzene	*98.3*			*67.0-138*		*11/06/2020 06:41*	WG1571846
(S) 4-Bromofluorobenzene	*107*			*67.0-138*		*11/12/2020 12:25*	WG1574660
(S) 1,2-Dichloroethane-d4	*109*			*70.0-130*		*11/06/2020 06:41*	WG1571846
(S) 1,2-Dichloroethane-d4	*101*			*70.0-130*		*11/12/2020 12:25*	WG1574660

JC 12/7/2020

MW-180-110320

Collected date/time: 11/03/20 10:10

SAMPLE RESULTS - 01

L1281775

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Sulfate	55500		594	5000	1	11/10/2020 18:06	WG1572755

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	25300		102	1000	1	11/11/2020 20:19	WG1574696

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	14100		562	2000	20	11/11/2020 12:23	WG1573382
Manganese	3530		14.1	100	20	11/11/2020 12:23	WG1573382

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	21700		2.87	6.78	10	11/10/2020 17:27	WG1574257
Ethane	6.99		0.296	1.29	1	11/10/2020 11:50	WG1573473
Ethene	33.2		0.422	1.27	1	11/10/2020 11:50	WG1573473

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U		0.548	1.00	1	11/06/2020 07:00	WG1571846
Acrylonitrile	U		0.0760	0.500	1	11/06/2020 07:00	WG1571846
Benzene	U		0.0160	0.0400	1	11/06/2020 07:00	WG1571846
Bromobenzene	U		0.0420	0.500	1	11/06/2020 07:00	WG1571846
Bromodichloromethane	U		0.0315	0.100	1	11/06/2020 07:00	WG1571846
Bromoform	U		0.239	1.00	1	11/06/2020 07:00	WG1571846
Bromomethane	U		0.148	0.500	1	11/06/2020 07:00	WG1571846
n-Butylbenzene	U		0.153	0.500	1	11/06/2020 07:00	WG1571846
sec-Butylbenzene	U		0.101	0.500	1	11/06/2020 07:00	WG1571846
tert-Butylbenzene	U		0.0620	0.200	1	11/06/2020 07:00	WG1571846
Carbon tetrachloride	U		0.0432	0.200	1	11/06/2020 07:00	WG1571846
Chlorobenzene	U		0.0229	0.100	1	11/06/2020 07:00	WG1571846
Chlorodibromomethane	U		0.0180	0.100	1	11/06/2020 07:00	WG1571846
Chloroethane	2.66		0.0432	0.200	1	11/06/2020 07:00	WG1571846
Chloroform	U		0.0166	0.100	1	11/06/2020 07:00	WG1571846
Chloromethane	U		0.0556	0.500	1	11/06/2020 07:00	WG1571846
2-Chlorotoluene	U		0.0368	0.100	1	11/06/2020 07:00	WG1571846
4-Chlorotoluene	U		0.0452	0.200	1	11/06/2020 07:00	WG1571846
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	11/06/2020 07:00	WG1571846
1,2-Dibromoethane	U		0.0210	0.100	1	11/06/2020 07:00	WG1571846
Dibromomethane	U		0.0400	0.200	1	11/06/2020 07:00	WG1571846
1,2-Dichlorobenzene	U		0.0580	0.200	1	11/06/2020 07:00	WG1571846
1,3-Dichlorobenzene	U		0.0680	0.200	1	11/06/2020 07:00	WG1571846
1,4-Dichlorobenzene	U		0.0788	0.200	1	11/06/2020 07:00	WG1571846
Dichlorodifluoromethane	U	~~J3~~	0.0327	0.100	1	11/06/2020 07:00	WG1571846
1,1-Dichloroethane	U		0.0230	0.100	1	11/06/2020 07:00	WG1571846
1,2-Dichloroethane	U		0.0190	0.100	1	11/06/2020 07:00	WG1571846
1,1-Dichloroethene	0.468		0.0200	0.100	1	11/06/2020 07:00	WG1571846
cis-1,2-Dichloroethene	156		0.138	0.500	5	11/12/2020 12:45	WG1574660
trans-1,2-Dichloroethene	1.31		0.0572	0.200	1	11/06/2020 07:00	WG1571846
1,2-Dichloropropane	U		0.0508	0.200	1	11/06/2020 07:00	WG1571846

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Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,1-Dichloropropene	U		0.0280	0.100	1	11/06/2020 07:00	WG1571846
1,3-Dichloropropane	U		0.0700	0.200	1	11/06/2020 07:00	WG1571846
cis-1,3-Dichloropropene	U		0.0271	0.100	1	11/06/2020 07:00	WG1571846
trans-1,3-Dichloropropene	U		0.0612	0.200	1	11/06/2020 07:00	WG1571846
2,2-Dichloropropane	U		0.0317	0.100	1	11/06/2020 07:00	WG1571846
Di-isopropyl ether	U		0.0140	0.0400	1	11/06/2020 07:00	WG1571846
Ethylbenzene	U		0.0212	0.100	1	11/06/2020 07:00	WG1571846
Hexachloro-1,3-butadiene	U		0.508	1.00	1	11/06/2020 07:00	WG1571846
Isopropylbenzene	U		0.0345	0.100	1	11/06/2020 07:00	WG1571846
p-Isopropyltoluene	U		0.0932	0.200	1	11/06/2020 07:00	WG1571846
2-Butanone (MEK)	U		0.500	1.00	1	11/06/2020 07:00	WG1571846
Methylene Chloride	U		0.265	1.00	1	11/06/2020 07:00	WG1571846
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	11/06/2020 07:00	WG1571846
Methyl tert-butyl ether	U		0.0118	0.0400	1	11/06/2020 07:00	WG1571846
Naphthalene	U		0.124	0.500	1	11/06/2020 07:00	WG1571846
n-Propylbenzene	U		0.0472	0.200	1	11/06/2020 07:00	WG1571846
Styrene	U		0.109	0.500	1	11/06/2020 07:00	WG1571846
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	11/06/2020 07:00	WG1571846
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	11/06/2020 07:00	WG1571846
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	11/06/2020 07:00	WG1571846
Tetrachloroethene	0.335		0.0280	0.100	1	11/06/2020 07:00	WG1571846
Toluene	0.0840	J	0.0500	0.200	1	11/06/2020 07:00	WG1571846
1,2,3-Trichlorobenzene	U UJ	C4	0.0250	0.500	1	11/06/2020 07:00	WG1571846
1,2,4-Trichlorobenzene	U		0.193	0.500	1	11/06/2020 07:00	WG1571846
1,1,1-Trichloroethane	U		0.0110	0.100	1	11/06/2020 07:00	WG1571846
1,1,2-Trichloroethane	U		0.0353	0.100	1	11/06/2020 07:00	WG1571846
Trichloroethene	1.08		0.0160	0.0400	1	11/06/2020 07:00	WG1571846
Trichlorofluoromethane	U		0.0200	0.100	1	11/06/2020 07:00	WG1571846
1,2,3-Trichloropropane	U		0.204	0.500	1	11/06/2020 07:00	WG1571846
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	11/06/2020 07:00	WG1571846
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	11/06/2020 07:00	WG1571846
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	11/06/2020 07:00	WG1571846
Vinyl chloride	59.0		0.0273	0.100	1	11/06/2020 07:00	WG1571846
Xylenes, Total	U		0.191	0.260	1	11/06/2020 07:00	WG1571846
Ethyl Ether	U		0.0170	0.100	1	11/06/2020 07:00	WG1571846
Tetrahydrofuran	U	~~J3~~	0.0900	0.500	1	11/06/2020 07:00	WG1571846
Iodomethane	U		0.242	0.500	1	11/06/2020 07:00	WG1571846
Allyl chloride	U		0.580	1.00	1	11/06/2020 07:00	WG1571846
Trans-1,4-Dichloro-2-butene	U		0.0560	0.200	1	11/06/2020 07:00	WG1571846
(S) Toluene-d8	*108*			*75.0-131*		*11/06/2020 07:00*	WG1571846
(S) Toluene-d8	*104*			*75.0-131*		*11/12/2020 12:45*	WG1574660
(S) 4-Bromofluorobenzene	*99.5*			*67.0-138*		*11/06/2020 07:00*	WG1571846
(S) 4-Bromofluorobenzene	*108*			*67.0-138*		*11/12/2020 12:45*	WG1574660
(S) 1,2-Dichloroethane-d4	*111*			*70.0-130*		*11/06/2020 07:00*	WG1571846
(S) 1,2-Dichloroethane-d4	*99.7*			*70.0-130*		*11/12/2020 12:45*	WG1574660

JC 12/7/2020

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Sulfate	13200		594	5000	1	11/10/2020 18:44	WG1572755

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	31200		102	1000	1	11/11/2020 20:35	WG1574696

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	10600		28.1	100	1	11/10/2020 23:36	WG1573382
Manganese	2640	~~V~~	0.704	5.00	1	11/10/2020 23:36	WG1573382

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	25600		2.87	6.78	10	11/10/2020 17:29	WG1574257
Ethane	4.77		0.296	1.29	1	11/10/2020 11:54	WG1573473
Ethene	121		0.422	1.27	1	11/10/2020 11:54	WG1573473

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U		11.0	20.0	20	11/06/2020 08:55	WG1571846
Acrylonitrile	U		1.52	10.0	20	11/06/2020 08:55	WG1571846
Benzene	U		0.320	0.800	20	11/06/2020 08:55	WG1571846
Bromobenzene	U		0.840	10.0	20	11/06/2020 08:55	WG1571846
Bromodichloromethane	U		0.630	2.00	20	11/06/2020 08:55	WG1571846
Bromoform	U		4.78	20.0	20	11/06/2020 08:55	WG1571846
Bromomethane	U		2.96	10.0	20	11/06/2020 08:55	WG1571846
n-Butylbenzene	U		3.06	10.0	20	11/06/2020 08:55	WG1571846
sec-Butylbenzene	U		2.02	10.0	20	11/06/2020 08:55	WG1571846
tert-Butylbenzene	U		1.24	4.00	20	11/06/2020 08:55	WG1571846
Carbon tetrachloride	U		0.864	4.00	20	11/06/2020 08:55	WG1571846
Chlorobenzene	U		0.458	2.00	20	11/06/2020 08:55	WG1571846
Chlorodibromomethane	U		0.360	2.00	20	11/06/2020 08:55	WG1571846
Chloroethane	U		0.864	4.00	20	11/06/2020 08:55	WG1571846
Chloroform	U		0.332	2.00	20	11/06/2020 08:55	WG1571846
Chloromethane	U		1.11	10.0	20	11/06/2020 08:55	WG1571846
2-Chlorotoluene	U		0.736	2.00	20	11/06/2020 08:55	WG1571846
4-Chlorotoluene	U		0.904	4.00	20	11/06/2020 08:55	WG1571846
1,2-Dibromo-3-Chloropropane	U		4.08	20.0	20	11/06/2020 08:55	WG1571846
1,2-Dibromoethane	U		0.420	2.00	20	11/06/2020 08:55	WG1571846
Dibromomethane	U		0.800	4.00	20	11/06/2020 08:55	WG1571846
1,2-Dichlorobenzene	U		1.16	4.00	20	11/06/2020 08:55	WG1571846
1,3-Dichlorobenzene	U		1.36	4.00	20	11/06/2020 08:55	WG1571846
1,4-Dichlorobenzene	U		1.58	4.00	20	11/06/2020 08:55	WG1571846
Dichlorodifluoromethane	U	~~J3~~	0.654	2.00	20	11/06/2020 08:55	WG1571846
1,1-Dichloroethane	U		0.460	2.00	20	11/06/2020 08:55	WG1571846
1,2-Dichloroethane	U		0.380	2.00	20	11/06/2020 08:55	WG1571846
1,1-Dichloroethene	24.3		0.400	2.00	20	11/06/2020 08:55	WG1571846
cis-1,2-Dichloroethene	17700		13.8	50.0	500	11/12/2020 13:06	WG1574660
trans-1,2-Dichloroethene	45.5		1.14	4.00	20	11/06/2020 08:55	WG1571846
1,2-Dichloropropane	U		1.02	4.00	20	11/06/2020 08:55	WG1571846

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Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l		Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,1-Dichloropropene	U			0.560	2.00	20	11/06/2020 08:55	WG1571846
1,3-Dichloropropane	U			1.40	4.00	20	11/06/2020 08:55	WG1571846
cis-1,3-Dichloropropene	U			0.542	2.00	20	11/06/2020 08:55	WG1571846
trans-1,3-Dichloropropene	U			1.22	4.00	20	11/06/2020 08:55	WG1571846
2,2-Dichloropropane	U			0.634	2.00	20	11/06/2020 08:55	WG1571846
Di-isopropyl ether	U			0.280	0.800	20	11/06/2020 08:55	WG1571846
Ethylbenzene	U			0.424	2.00	20	11/06/2020 08:55	WG1571846
Hexachloro-1,3-butadiene	U			10.2	20.0	20	11/06/2020 08:55	WG1571846
Isopropylbenzene	U			0.690	2.00	20	11/06/2020 08:55	WG1571846
p-Isopropyltoluene	U			1.86	4.00	20	11/06/2020 08:55	WG1571846
2-Butanone (MEK)	U			10.0	20.0	20	11/06/2020 08:55	WG1571846
Methylene Chloride	U			5.30	20.0	20	11/06/2020 08:55	WG1571846
4-Methyl-2-pentanone (MIBK)	U			8.00	20.0	20	11/06/2020 08:55	WG1571846
Methyl tert-butyl ether	U			0.236	0.800	20	11/06/2020 08:55	WG1571846
Naphthalene	U			2.48	10.0	20	11/06/2020 08:55	WG1571846
n-Propylbenzene	U			0.944	4.00	20	11/06/2020 08:55	WG1571846
Styrene	U			2.18	10.0	20	11/06/2020 08:55	WG1571846
1,1,1,2-Tetrachloroethane	U			0.400	2.00	20	11/06/2020 08:55	WG1571846
1,1,2,2-Tetrachloroethane	U			0.312	2.00	20	11/06/2020 08:55	WG1571846
1,1,2-Trichlorotrifluoroethane	U			0.540	2.00	20	11/06/2020 08:55	WG1571846
Tetrachloroethene	36.1	J	J0	0.560	2.00	20	11/06/2020 08:55	WG1571846
Toluene	U			1.00	4.00	20	11/06/2020 08:55	WG1571846
1,2,3-Trichlorobenzene	U	UJ	C4	0.500	10.0	20	11/06/2020 08:55	WG1571846
1,2,4-Trichlorobenzene	U			3.86	10.0	20	11/06/2020 08:55	WG1571846
1,1,1-Trichloroethane	U			0.220	2.00	20	11/06/2020 08:55	WG1571846
1,1,2-Trichloroethane	U			0.706	2.00	20	11/06/2020 08:55	WG1571846
Trichloroethene	19.6			0.320	0.800	20	11/06/2020 08:55	WG1571846
Trichlorofluoromethane	U			0.400	2.00	20	11/06/2020 08:55	WG1571846
1,2,3-Trichloropropane	U			4.08	10.0	20	11/06/2020 08:55	WG1571846
1,2,4-Trimethylbenzene	U			0.928	4.00	20	11/06/2020 08:55	WG1571846
1,2,3-Trimethylbenzene	U			0.920	4.00	20	11/06/2020 08:55	WG1571846
1,3,5-Trimethylbenzene	U			0.864	4.00	20	11/06/2020 08:55	WG1571846
Vinyl chloride	1670			0.546	2.00	20	11/06/2020 08:55	WG1571846
Xylenes, Total	U			3.82	5.20	20	11/06/2020 08:55	WG1571846
Ethyl Ether	U			0.340	2.00	20	11/06/2020 08:55	WG1571846
Tetrahydrofuran	U		~~J3~~	1.80	10.0	20	11/06/2020 08:55	WG1571846
Iodomethane	U			4.84	10.0	20	11/06/2020 08:55	WG1571846
Allyl chloride	U			11.6	20.0	20	11/06/2020 08:55	WG1571846
Trans-1,4-Dichloro-2-butene	U			1.12	4.00	20	11/06/2020 08:55	WG1571846
(S) Toluene-d8	*107*				*75.0-131*		*11/06/2020 08:55*	WG1571846
(S) Toluene-d8	*103*				*75.0-131*		*11/12/2020 13:06*	WG1574660
(S) 4-Bromofluorobenzene	*99.1*				*67.0-138*		*11/06/2020 08:55*	WG1571846
(S) 4-Bromofluorobenzene	*106*				*67.0-138*		*11/12/2020 13:06*	WG1574660
(S) 1,2-Dichloroethane-d4	*112*				*70.0-130*		*11/06/2020 08:55*	WG1571846
(S) 1,2-Dichloroethane-d4	*101*				*70.0-130*		*11/12/2020 13:06*	WG1574660

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Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Sulfate	55400		594	5000	1	11/10/2020 18:57	WG1572755

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
TOC (Total Organic Carbon)	17400		102	1000	1	11/11/2020 21:05	WG1574696

Metals (ICPMS) by Method 6020B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Iron	6260		28.1	100	1	11/10/2020 13:25	WG1573384
Manganese	1320		0.704	5.00	1	11/10/2020 13:25	WG1573384

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Methane	28400		2.87	6.78	10	11/10/2020 17:32	WG1574257
Ethane	472		0.296	1.29	1	11/10/2020 11:57	WG1573473
Ethene	2990		0.422	1.27	1	11/10/2020 11:57	WG1573473

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	U		548	1000	1000	11/12/2020 13:26	WG1574660
Acrylonitrile	U		76.0	500	1000	11/12/2020 13:26	WG1574660
Benzene	U		16.0	40.0	1000	11/12/2020 13:26	WG1574660
Bromobenzene	U		42.0	500	1000	11/12/2020 13:26	WG1574660
Bromodichloromethane	U		31.5	100	1000	11/12/2020 13:26	WG1574660
Bromoform	U		239	1000	1000	11/12/2020 13:26	WG1574660
Bromomethane	U		148	500	1000	11/12/2020 13:26	WG1574660
n-Butylbenzene	U		153	500	1000	11/12/2020 13:26	WG1574660
sec-Butylbenzene	U		101	500	1000	11/12/2020 13:26	WG1574660
tert-Butylbenzene	U		62.0	200	1000	11/12/2020 13:26	WG1574660
Carbon tetrachloride	U		43.2	200	1000	11/12/2020 13:26	WG1574660
Chlorobenzene	U		22.9	100	1000	11/12/2020 13:26	WG1574660
Chlorodibromomethane	U		18.0	100	1000	11/12/2020 13:26	WG1574660
Chloroethane	U		43.2	200	1000	11/12/2020 13:26	WG1574660
Chloroform	U		16.6	100	1000	11/12/2020 13:26	WG1574660
Chloromethane	U		55.6	500	1000	11/12/2020 13:26	WG1574660
2-Chlorotoluene	U		36.8	100	1000	11/12/2020 13:26	WG1574660
4-Chlorotoluene	U		45.2	200	1000	11/12/2020 13:26	WG1574660
1,2-Dibromo-3-Chloropropane	U		204	1000	1000	11/12/2020 13:26	WG1574660
1,2-Dibromoethane	U		21.0	100	1000	11/12/2020 13:26	WG1574660
Dibromomethane	U		40.0	200	1000	11/12/2020 13:26	WG1574660
1,2-Dichlorobenzene	U		58.0	200	1000	11/12/2020 13:26	WG1574660
1,3-Dichlorobenzene	U		68.0	200	1000	11/12/2020 13:26	WG1574660
1,4-Dichlorobenzene	U		78.8	200	1000	11/12/2020 13:26	WG1574660
Dichlorodifluoromethane	U		32.7	100	1000	11/12/2020 13:26	WG1574660
1,1-Dichloroethane	U		23.0	100	1000	11/12/2020 13:26	WG1574660
1,2-Dichloroethane	U		19.0	100	1000	11/12/2020 13:26	WG1574660
1,1-Dichloroethene	U		20.0	100	1000	11/12/2020 13:26	WG1574660
cis-1,2-Dichloroethene	16900		27.6	100	1000	11/12/2020 13:26	WG1574660
trans-1,2-Dichloroethene	U		57.2	200	1000	11/12/2020 13:26	WG1574660
1,2-Dichloropropane	U		50.8	200	1000	11/12/2020 13:26	WG1574660

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Volatile Organic Compounds (GC/MS) by Method 8260D

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
1,1-Dichloropropene	U		28.0	100	1000	11/12/2020 13:26	WG1574660
1,3-Dichloropropane	U		70.0	200	1000	11/12/2020 13:26	WG1574660
cis-1,3-Dichloropropene	U		27.1	100	1000	11/12/2020 13:26	WG1574660
trans-1,3-Dichloropropene	U		61.2	200	1000	11/12/2020 13:26	WG1574660
2,2-Dichloropropane	U		31.7	100	1000	11/12/2020 13:26	WG1574660
Di-isopropyl ether	U		14.0	40.0	1000	11/12/2020 13:26	WG1574660
Ethylbenzene	U		21.2	100	1000	11/12/2020 13:26	WG1574660
Hexachloro-1,3-butadiene	U		508	1000	1000	11/12/2020 13:26	WG1574660
Isopropylbenzene	U		34.5	100	1000	11/12/2020 13:26	WG1574660
p-Isopropyltoluene	U		93.2	200	1000	11/12/2020 13:26	WG1574660
2-Butanone (MEK)	U		500	1000	1000	11/12/2020 13:26	WG1574660
Methylene Chloride	U		265	1000	1000	11/12/2020 13:26	WG1574660
4-Methyl-2-pentanone (MIBK)	U		400	1000	1000	11/12/2020 13:26	WG1574660
Methyl tert-butyl ether	U		11.8	40.0	1000	11/12/2020 13:26	WG1574660
Naphthalene	U		124	500	1000	11/12/2020 13:26	WG1574660
n-Propylbenzene	U		47.2	200	1000	11/12/2020 13:26	WG1574660
Styrene	U		109	500	1000	11/12/2020 13:26	WG1574660
1,1,1,2-Tetrachloroethane	U		20.0	100	1000	11/12/2020 13:26	WG1574660
1,1,2,2-Tetrachloroethane	U		15.6	100	1000	11/12/2020 13:26	WG1574660
1,1,2-Trichlorotrifluoroethane	U		27.0	100	1000	11/12/2020 13:26	WG1574660
Tetrachloroethene	7170		28.0	100	1000	11/12/2020 13:26	WG1574660
Toluene	U		50.0	200	1000	11/12/2020 13:26	WG1574660
1,2,3-Trichlorobenzene	U		25.0	500	1000	11/12/2020 13:26	WG1574660
1,2,4-Trichlorobenzene	U		193	500	1000	11/12/2020 13:26	WG1574660
1,1,1-Trichloroethane	U		11.0	100	1000	11/12/2020 13:26	WG1574660
1,1,2-Trichloroethane	U		35.3	100	1000	11/12/2020 13:26	WG1574660
Trichloroethene	861		16.0	40.0	1000	11/12/2020 13:26	WG1574660
Trichlorofluoromethane	U		20.0	100	1000	11/12/2020 13:26	WG1574660
1,2,3-Trichloropropane	U		204	500	1000	11/12/2020 13:26	WG1574660
1,2,4-Trimethylbenzene	U		46.4	200	1000	11/12/2020 13:26	WG1574660
1,2,3-Trimethylbenzene	U		46.0	200	1000	11/12/2020 13:26	WG1574660
1,3,5-Trimethylbenzene	U		43.2	200	1000	11/12/2020 13:26	WG1574660
Vinyl chloride	6740		27.3	100	1000	11/12/2020 13:26	WG1574660
Xylenes, Total	U		191	260	1000	11/12/2020 13:26	WG1574660
Ethyl Ether	U		17.0	100	1000	11/12/2020 13:26	WG1574660
Tetrahydrofuran	U		90.0	500	1000	11/12/2020 13:26	WG1574660
Iodomethane	U		242	500	1000	11/12/2020 13:26	WG1574660
Allyl chloride	U		580	1000	1000	11/12/2020 13:26	WG1574660
Trans-1,4-Dichloro-2-butene	U	UJ C4	56.0	200	1000	11/12/2020 13:26	WG1574660
(S) Toluene-d8	*106*			*75.0-131*		*11/12/2020 13:26*	WG1574660
(S) 4-Bromofluorobenzene	*107*			*67.0-138*		*11/12/2020 13:26*	WG1574660
(S) 1,2-Dichloroethane-d4	*103*			*70.0-130*		*11/12/2020 13:26*	WG1574660

JC 12/7/2020

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Sulfate	12900		594	5000	1	11/10/2020 19:09	WG1572755

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	8640		102	1000	1	11/12/2020 07:27	WG1574999

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	2400		28.1	100	1	11/10/2020 13:37	WG1573384
Manganese	203		0.704	5.00	1	11/10/2020 13:37	WG1573384

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	1560		0.287	0.678	1	11/10/2020 12:59	WG1573473
Ethane	60.8		0.296	1.29	1	11/10/2020 12:59	WG1573473
Ethene	177		0.422	1.27	1	11/10/2020 12:59	WG1573473

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U		0.548	1.00	1	11/06/2020 07:19	WG1571846
Acrylonitrile	U		0.0760	0.500	1	11/06/2020 07:19	WG1571846
Benzene	0.0440		0.0160	0.0400	1	11/06/2020 07:19	WG1571846
Bromobenzene	U		0.0420	0.500	1	11/06/2020 07:19	WG1571846
Bromodichloromethane	U		0.0315	0.100	1	11/06/2020 07:19	WG1571846
Bromoform	U		0.239	1.00	1	11/06/2020 07:19	WG1571846
Bromomethane	U		0.148	0.500	1	11/06/2020 07:19	WG1571846
n-Butylbenzene	U		0.153	0.500	1	11/06/2020 07:19	WG1571846
sec-Butylbenzene	U		0.101	0.500	1	11/06/2020 07:19	WG1571846
tert-Butylbenzene	U		0.0620	0.200	1	11/06/2020 07:19	WG1571846
Carbon tetrachloride	U		0.0432	0.200	1	11/06/2020 07:19	WG1571846
Chlorobenzene	U		0.0229	0.100	1	11/06/2020 07:19	WG1571846
Chlorodibromomethane	U		0.0180	0.100	1	11/06/2020 07:19	WG1571846
Chloroethane	U		0.0432	0.200	1	11/06/2020 07:19	WG1571846
Chloroform	U		0.0166	0.100	1	11/06/2020 07:19	WG1571846
Chloromethane	U		0.0556	0.500	1	11/06/2020 07:19	WG1571846
2-Chlorotoluene	U		0.0368	0.100	1	11/06/2020 07:19	WG1571846
4-Chlorotoluene	U		0.0452	0.200	1	11/06/2020 07:19	WG1571846
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	11/06/2020 07:19	WG1571846
1,2-Dibromoethane	U		0.0210	0.100	1	11/06/2020 07:19	WG1571846
Dibromomethane	U		0.0400	0.200	1	11/06/2020 07:19	WG1571846
1,2-Dichlorobenzene	U		0.0580	0.200	1	11/06/2020 07:19	WG1571846
1,3-Dichlorobenzene	U		0.0680	0.200	1	11/06/2020 07:19	WG1571846
1,4-Dichlorobenzene	U		0.0788	0.200	1	11/06/2020 07:19	WG1571846
Dichlorodifluoromethane	U	~~J3~~	0.0327	0.100	1	11/06/2020 07:19	WG1571846
1,1-Dichloroethane	0.0330	J	0.0230	0.100	1	11/06/2020 07:19	WG1571846
1,2-Dichloroethane	U		0.0190	0.100	1	11/06/2020 07:19	WG1571846
1,1-Dichloroethene	0.180		0.0200	0.100	1	11/06/2020 07:19	WG1571846
cis-1,2-Dichloroethene	32.6		0.0276	0.100	1	11/06/2020 07:19	WG1571846
trans-1,2-Dichloroethene	0.289		0.0572	0.200	1	11/06/2020 07:19	WG1571846
1,2-Dichloropropane	U		0.0508	0.200	1	11/06/2020 07:19	WG1571846

JC 12/7/2020

MW-171-110320

Collected date/time: 11/03/20 12:20

SAMPLE RESULTS - 04

L1281775

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l		Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,1-Dichloropropene	U			0.0280	0.100	1	11/06/2020 07:19	WG1571846
1,3-Dichloropropane	U			0.0700	0.200	1	11/06/2020 07:19	WG1571846
cis-1,3-Dichloropropene	U			0.0271	0.100	1	11/06/2020 07:19	WG1571846
trans-1,3-Dichloropropene	U			0.0612	0.200	1	11/06/2020 07:19	WG1571846
2,2-Dichloropropane	U			0.0317	0.100	1	11/06/2020 07:19	WG1571846
Di-isopropyl ether	U			0.0140	0.0400	1	11/06/2020 07:19	WG1571846
Ethylbenzene	U			0.0212	0.100	1	11/06/2020 07:19	WG1571846
Hexachloro-1,3-butadiene	U			0.508	1.00	1	11/06/2020 07:19	WG1571846
Isopropylbenzene	U			0.0345	0.100	1	11/06/2020 07:19	WG1571846
p-Isopropyltoluene	U			0.0932	0.200	1	11/06/2020 07:19	WG1571846
2-Butanone (MEK)	U			0.500	1.00	1	11/06/2020 07:19	WG1571846
Methylene Chloride	U			0.265	1.00	1	11/06/2020 07:19	WG1571846
4-Methyl-2-pentanone (MIBK)	U			0.400	1.00	1	11/06/2020 07:19	WG1571846
Methyl tert-butyl ether	U			0.0118	0.0400	1	11/06/2020 07:19	WG1571846
Naphthalene	U			0.124	0.500	1	11/06/2020 07:19	WG1571846
n-Propylbenzene	U			0.0472	0.200	1	11/06/2020 07:19	WG1571846
Styrene	U			0.109	0.500	1	11/06/2020 07:19	WG1571846
1,1,1,2-Tetrachloroethane	U			0.0200	0.100	1	11/06/2020 07:19	WG1571846
1,1,2,2-Tetrachloroethane	U			0.0156	0.100	1	11/06/2020 07:19	WG1571846
1,1,2-Trichlorotrifluoroethane	U			0.0270	0.100	1	11/06/2020 07:19	WG1571846
Tetrachloroethene	0.0460	J	J J0	0.0280	0.100	1	11/06/2020 07:19	WG1571846
Toluene	0.175		J	0.0500	0.200	1	11/06/2020 07:19	WG1571846
1,2,3-Trichlorobenzene	U	UJ	C4	0.0250	0.500	1	11/06/2020 07:19	WG1571846
1,2,4-Trichlorobenzene	U			0.193	0.500	1	11/06/2020 07:19	WG1571846
1,1,1-Trichloroethane	U			0.0110	0.100	1	11/06/2020 07:19	WG1571846
1,1,2-Trichloroethane	U			0.0353	0.100	1	11/06/2020 07:19	WG1571846
Trichloroethene	0.277			0.0160	0.0400	1	11/06/2020 07:19	WG1571846
Trichlorofluoromethane	U			0.0200	0.100	1	11/06/2020 07:19	WG1571846
1,2,3-Trichloropropane	U			0.204	0.500	1	11/06/2020 07:19	WG1571846
1,2,4-Trimethylbenzene	0.0900		J	0.0464	0.200	1	11/06/2020 07:19	WG1571846
1,2,3-Trimethylbenzene	U			0.0460	0.200	1	11/06/2020 07:19	WG1571846
1,3,5-Trimethylbenzene	U			0.0432	0.200	1	11/06/2020 07:19	WG1571846
Vinyl chloride	56.1			0.0273	0.100	1	11/06/2020 07:19	WG1571846
Xylenes, Total	0.234		J	0.191	0.260	1	11/06/2020 07:19	WG1571846
Ethyl Ether	U			0.0170	0.100	1	11/06/2020 07:19	WG1571846
Tetrahydrofuran	U		~~J3~~	0.0900	0.500	1	11/06/2020 07:19	WG1571846
Iodomethane	U			0.242	0.500	1	11/06/2020 07:19	WG1571846
Allyl chloride	U			0.580	1.00	1	11/06/2020 07:19	WG1571846
Trans-1,4-Dichloro-2-butene	U			0.0560	0.200	1	11/06/2020 07:19	WG1571846
(S) Toluene-d8	*109*				*75.0-131*		*11/06/2020 07:19*	WG1571846
(S) 4-Bromofluorobenzene	*98.0*				*67.0-138*		*11/06/2020 07:19*	WG1571846
(S) 1,2-Dichloroethane-d4	*105*				*70.0-130*		*11/06/2020 07:19*	WG1571846

JC 12/7/2020

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Wet Chemistry by Method 9056A

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Sulfate	33900		594	5000	1	11/10/2020 19:22	WG1572755

Wet Chemistry by Method 9060A

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
TOC (Total Organic Carbon)	8820		102	1000	1	11/12/2020 07:44	WG1574999

Metals (ICPMS) by Method 6020B

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Iron	1820		28.1	100	1	11/10/2020 13:41	WG1573384
Manganese	1900		0.704	5.00	1	11/10/2020 13:41	WG1573384

Volatile Organic Compounds (GC) by Method RSK175

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Methane	893		0.287	0.678	1	11/10/2020 13:05	WG1573473
Ethane	16.5		0.296	1.29	1	11/10/2020 13:05	WG1573473
Ethene	21.3		0.422	1.27	1	11/10/2020 13:05	WG1573473

Volatile Organic Compounds (GC/MS) by Method 8260D

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Acetone	U		0.548	1.00	1	11/06/2020 07:38	WG1571846
Acrylonitrile	U		0.0760	0.500	1	11/06/2020 07:38	WG1571846
Benzene	0.0830		0.0160	0.0400	1	11/06/2020 07:38	WG1571846
Bromobenzene	U		0.0420	0.500	1	11/06/2020 07:38	WG1571846
Bromodichloromethane	U		0.0315	0.100	1	11/06/2020 07:38	WG1571846
Bromoform	U		0.239	1.00	1	11/06/2020 07:38	WG1571846
Bromomethane	U		0.148	0.500	1	11/06/2020 07:38	WG1571846
n-Butylbenzene	U		0.153	0.500	1	11/06/2020 07:38	WG1571846
sec-Butylbenzene	U		0.101	0.500	1	11/06/2020 07:38	WG1571846
tert-Butylbenzene	U		0.0620	0.200	1	11/06/2020 07:38	WG1571846
Carbon tetrachloride	U		0.0432	0.200	1	11/06/2020 07:38	WG1571846
Chlorobenzene	U		0.0229	0.100	1	11/06/2020 07:38	WG1571846
Chlorodibromomethane	U		0.0180	0.100	1	11/06/2020 07:38	WG1571846
Chloroethane	U		0.0432	0.200	1	11/06/2020 07:38	WG1571846
Chloroform	0.133		0.0166	0.100	1	11/06/2020 07:38	WG1571846
Chloromethane	U		0.0556	0.500	1	11/06/2020 07:38	WG1571846
2-Chlorotoluene	U		0.0368	0.100	1	11/06/2020 07:38	WG1571846
4-Chlorotoluene	U		0.0452	0.200	1	11/06/2020 07:38	WG1571846
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	11/06/2020 07:38	WG1571846
1,2-Dibromoethane	U		0.0210	0.100	1	11/06/2020 07:38	WG1571846
Dibromomethane	U		0.0400	0.200	1	11/06/2020 07:38	WG1571846
1,2-Dichlorobenzene	U		0.0580	0.200	1	11/06/2020 07:38	WG1571846
1,3-Dichlorobenzene	U		0.0680	0.200	1	11/06/2020 07:38	WG1571846
1,4-Dichlorobenzene	U		0.0788	0.200	1	11/06/2020 07:38	WG1571846
Dichlorodifluoromethane	U	~~J3~~	0.0327	0.100	1	11/06/2020 07:38	WG1571846
1,1-Dichloroethane	0.309		0.0230	0.100	1	11/06/2020 07:38	WG1571846
1,2-Dichloroethane	U		0.0190	0.100	1	11/06/2020 07:38	WG1571846
1,1-Dichloroethene	85.5		0.0200	0.100	1	11/06/2020 07:38	WG1571846
cis-1,2-Dichloroethene	582		2.76	10.0	100	11/12/2020 13:46	WG1574660
trans-1,2-Dichloroethene	44.1		0.0572	0.200	1	11/06/2020 07:38	WG1571846
1,2-Dichloropropane	U		0.0508	0.200	1	11/06/2020 07:38	WG1571846

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MW-172-110320

Collected date/time: 11/03/20 13:10

SAMPLE RESULTS - 05

L1281775

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,1-Dichloropropene	U		0.0280	0.100	1	11/06/2020 07:38	WG1571846
1,3-Dichloropropane	U		0.0700	0.200	1	11/06/2020 07:38	WG1571846
cis-1,3-Dichloropropene	U		0.0271	0.100	1	11/06/2020 07:38	WG1571846
trans-1,3-Dichloropropene	U		0.0612	0.200	1	11/06/2020 07:38	WG1571846
2,2-Dichloropropane	U		0.0317	0.100	1	11/06/2020 07:38	WG1571846
Di-isopropyl ether	U		0.0140	0.0400	1	11/06/2020 07:38	WG1571846
Ethylbenzene	0.177		0.0212	0.100	1	11/06/2020 07:38	WG1571846
Hexachloro-1,3-butadiene	U		0.508	1.00	1	11/06/2020 07:38	WG1571846
Isopropylbenzene	U		0.0345	0.100	1	11/06/2020 07:38	WG1571846
p-Isopropyltoluene	U		0.0932	0.200	1	11/06/2020 07:38	WG1571846
2-Butanone (MEK)	U		0.500	1.00	1	11/06/2020 07:38	WG1571846
Methylene Chloride	U		0.265	1.00	1	11/06/2020 07:38	WG1571846
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	11/06/2020 07:38	WG1571846
Methyl tert-butyl ether	U		0.0118	0.0400	1	11/06/2020 07:38	WG1571846
Naphthalene	U		0.124	0.500	1	11/06/2020 07:38	WG1571846
n-Propylbenzene	U		0.0472	0.200	1	11/06/2020 07:38	WG1571846
Styrene	U		0.109	0.500	1	11/06/2020 07:38	WG1571846
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	11/06/2020 07:38	WG1571846
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	11/06/2020 07:38	WG1571846
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	11/06/2020 07:38	WG1571846
Tetrachloroethene	5780		2.80	10.0	100	11/12/2020 13:46	WG1574660
Toluene	0.750		0.0500	0.200	1	11/06/2020 07:38	WG1571846
1,2,3-Trichlorobenzene	U UJ	C4	0.0250	0.500	1	11/06/2020 07:38	WG1571846
1,2,4-Trichlorobenzene	U		0.193	0.500	1	11/06/2020 07:38	WG1571846
1,1,1-Trichloroethane	U		0.0110	0.100	1	11/06/2020 07:38	WG1571846
1,1,2-Trichloroethane	U		0.0353	0.100	1	11/06/2020 07:38	WG1571846
Trichloroethene	4130		1.60	4.00	100	11/12/2020 13:46	WG1574660
Trichlorofluoromethane	U		0.0200	0.100	1	11/06/2020 07:38	WG1571846
1,2,3-Trichloropropane	U		0.204	0.500	1	11/06/2020 07:38	WG1571846
1,2,4-Trimethylbenzene	0.0640	J	0.0464	0.200	1	11/06/2020 07:38	WG1571846
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	11/06/2020 07:38	WG1571846
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	11/06/2020 07:38	WG1571846
Vinyl chloride	12.9		0.0273	0.100	1	11/06/2020 07:38	WG1571846
Xylenes, Total	0.565		0.191	0.260	1	11/06/2020 07:38	WG1571846
Ethyl Ether	U		0.0170	0.100	1	11/06/2020 07:38	WG1571846
Tetrahydrofuran	U	~~J3~~	0.0900	0.500	1	11/06/2020 07:38	WG1571846
Iodomethane	U		0.242	0.500	1	11/06/2020 07:38	WG1571846
Allyl chloride	U		0.580	1.00	1	11/06/2020 07:38	WG1571846
Trans-1,4-Dichloro-2-butene	U		0.0560	0.200	1	11/06/2020 07:38	WG1571846
(S) Toluene-d8	*109*			*75.0-131*		*11/06/2020 07:38*	WG1571846
(S) Toluene-d8	*105*			*75.0-131*		*11/12/2020 13:46*	WG1574660
(S) 4-Bromofluorobenzene	*100*			*67.0-138*		*11/06/2020 07:38*	WG1571846
(S) 4-Bromofluorobenzene	*107*			*67.0-138*		*11/12/2020 13:46*	WG1574660
(S) 1,2-Dichloroethane-d4	*111*			*70.0-130*		*11/06/2020 07:38*	WG1571846
(S) 1,2-Dichloroethane-d4	*102*			*70.0-130*		*11/12/2020 13:46*	WG1574660

JC 12/7/2020

Wet Chemistry by Method 9056A

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Sulfate	31500		594	5000	1	11/10/2020 19:35	WG1572755

Wet Chemistry by Method 9060A

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
TOC (Total Organic Carbon)	32500		102	1000	1	11/12/2020 09:03	WG1574999

Metals (ICPMS) by Method 6020B

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Iron	5750		28.1	100	1	11/10/2020 13:44	WG1573384
Manganese	1050		0.704	5.00	1	11/10/2020 13:44	WG1573384

Volatile Organic Compounds (GC) by Method RSK175

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Methane	21100		2.87	6.78	10	11/10/2020 17:37	WG1574257
Ethane	352		0.296	1.29	1	11/10/2020 13:07	WG1573473
Ethene	139		0.422	1.27	1	11/10/2020 13:07	WG1573473

Volatile Organic Compounds (GC/MS) by Method 8260D

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Acetone	U		0.548	1.00	1	11/06/2020 07:58	WG1571846
Acrylonitrile	U		0.0760	0.500	1	11/06/2020 07:58	WG1571846
Benzene	0.113		0.0160	0.0400	1	11/06/2020 07:58	WG1571846
Bromobenzene	U		0.0420	0.500	1	11/06/2020 07:58	WG1571846
Bromodichloromethane	U		0.0315	0.100	1	11/06/2020 07:58	WG1571846
Bromoform	U		0.239	1.00	1	11/06/2020 07:58	WG1571846
Bromomethane	U		0.148	0.500	1	11/06/2020 07:58	WG1571846
n-Butylbenzene	U		0.153	0.500	1	11/06/2020 07:58	WG1571846
sec-Butylbenzene	U		0.101	0.500	1	11/06/2020 07:58	WG1571846
tert-Butylbenzene	U		0.0620	0.200	1	11/06/2020 07:58	WG1571846
Carbon tetrachloride	U		0.0432	0.200	1	11/06/2020 07:58	WG1571846
Chlorobenzene	U		0.0229	0.100	1	11/06/2020 07:58	WG1571846
Chlorodibromomethane	U		0.0180	0.100	1	11/06/2020 07:58	WG1571846
Chloroethane	U		0.0432	0.200	1	11/06/2020 07:58	WG1571846
Chloroform	U		0.0166	0.100	1	11/06/2020 07:58	WG1571846
Chloromethane	U		0.0556	0.500	1	11/06/2020 07:58	WG1571846
2-Chlorotoluene	U		0.0368	0.100	1	11/06/2020 07:58	WG1571846
4-Chlorotoluene	U		0.0452	0.200	1	11/06/2020 07:58	WG1571846
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	11/06/2020 07:58	WG1571846
1,2-Dibromoethane	U		0.0210	0.100	1	11/06/2020 07:58	WG1571846
Dibromomethane	U		0.0400	0.200	1	11/06/2020 07:58	WG1571846
1,2-Dichlorobenzene	U		0.0580	0.200	1	11/06/2020 07:58	WG1571846
1,3-Dichlorobenzene	U		0.0680	0.200	1	11/06/2020 07:58	WG1571846
1,4-Dichlorobenzene	U		0.0788	0.200	1	11/06/2020 07:58	WG1571846
Dichlorodifluoromethane	U	~~J3~~	0.0327	0.100	1	11/06/2020 07:58	WG1571846
1,1-Dichloroethane	U		0.0230	0.100	1	11/06/2020 07:58	WG1571846
1,2-Dichloroethane	U		0.0190	0.100	1	11/06/2020 07:58	WG1571846
1,1-Dichloroethene	U		0.0200	0.100	1	11/06/2020 07:58	WG1571846
cis-1,2-Dichloroethene	0.853		0.0276	0.100	1	11/06/2020 07:58	WG1571846
trans-1,2-Dichloroethene	1.00		0.0572	0.200	1	11/06/2020 07:58	WG1571846
1,2-Dichloropropane	U		0.0508	0.200	1	11/06/2020 07:58	WG1571846

JC 12/7/2020

MW-169-110320

Collected date/time: 11/03/20 14:00

SAMPLE RESULTS - 06

L1281775

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,1-Dichloropropene	U		0.0280	0.100	1	11/06/2020 07:58	WG1571846
1,3-Dichloropropane	U		0.0700	0.200	1	11/06/2020 07:58	WG1571846
cis-1,3-Dichloropropene	U		0.0271	0.100	1	11/06/2020 07:58	WG1571846
trans-1,3-Dichloropropene	U		0.0612	0.200	1	11/06/2020 07:58	WG1571846
2,2-Dichloropropane	U		0.0317	0.100	1	11/06/2020 07:58	WG1571846
Di-isopropyl ether	U		0.0140	0.0400	1	11/06/2020 07:58	WG1571846
Ethylbenzene	U		0.0212	0.100	1	11/06/2020 07:58	WG1571846
Hexachloro-1,3-butadiene	U		0.508	1.00	1	11/06/2020 07:58	WG1571846
Isopropylbenzene	U		0.0345	0.100	1	11/06/2020 07:58	WG1571846
p-Isopropyltoluene	U		0.0932	0.200	1	11/06/2020 07:58	WG1571846
2-Butanone (MEK)	U		0.500	1.00	1	11/06/2020 07:58	WG1571846
Methylene Chloride	U		0.265	1.00	1	11/06/2020 07:58	WG1571846
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	11/06/2020 07:58	WG1571846
Methyl tert-butyl ether	U		0.0118	0.0400	1	11/06/2020 07:58	WG1571846
Naphthalene	U		0.124	0.500	1	11/06/2020 07:58	WG1571846
n-Propylbenzene	U		0.0472	0.200	1	11/06/2020 07:58	WG1571846
Styrene	U		0.109	0.500	1	11/06/2020 07:58	WG1571846
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	11/06/2020 07:58	WG1571846
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	11/06/2020 07:58	WG1571846
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	11/06/2020 07:58	WG1571846
Tetrachloroethene	6.26		0.0280	0.100	1	11/06/2020 07:58	WG1571846
Toluene	0.123	J	0.0500	0.200	1	11/06/2020 07:58	WG1571846
1,2,3-Trichlorobenzene	U UJ	C4	0.0250	0.500	1	11/06/2020 07:58	WG1571846
1,2,4-Trichlorobenzene	U		0.193	0.500	1	11/06/2020 07:58	WG1571846
1,1,1-Trichloroethane	U		0.0110	0.100	1	11/06/2020 07:58	WG1571846
1,1,2-Trichloroethane	U		0.0353	0.100	1	11/06/2020 07:58	WG1571846
Trichloroethene	1.78		0.0160	0.0400	1	11/06/2020 07:58	WG1571846
Trichlorofluoromethane	U		0.0200	0.100	1	11/06/2020 07:58	WG1571846
1,2,3-Trichloropropane	U		0.204	0.500	1	11/06/2020 07:58	WG1571846
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	11/06/2020 07:58	WG1571846
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	11/06/2020 07:58	WG1571846
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	11/06/2020 07:58	WG1571846
Vinyl chloride	5.57		0.0273	0.100	1	11/06/2020 07:58	WG1571846
Xylenes, Total	U		0.191	0.260	1	11/06/2020 07:58	WG1571846
Ethyl Ether	U		0.0170	0.100	1	11/06/2020 07:58	WG1571846
Tetrahydrofuran	U	~~J3~~	0.0900	0.500	1	11/06/2020 07:58	WG1571846
Iodomethane	U		0.242	0.500	1	11/06/2020 07:58	WG1571846
Allyl chloride	U		0.580	1.00	1	11/06/2020 07:58	WG1571846
Trans-1,4-Dichloro-2-butene	U		0.0560	0.200	1	11/06/2020 07:58	WG1571846
(S) Toluene-d8	*107*			*75.0-131*		*11/06/2020 07:58*	WG1571846
(S) 4-Bromofluorobenzene	*98.6*			*67.0-138*		*11/06/2020 07:58*	WG1571846
(S) 1,2-Dichloroethane-d4	*111*			*70.0-130*		*11/06/2020 07:58*	WG1571846

JC 12/7/2020

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Sulfate	737	J	594	5000	1	11/10/2020 19:48	WG1572755

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	59500		102	1000	1	11/12/2020 09:30	WG1574999

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	26200		28.1	100	1	11/10/2020 13:47	WG1573384
Manganese	3780		0.704	5.00	1	11/10/2020 13:47	WG1573384

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	26500		2.87	6.78	10	11/10/2020 17:42	WG1574257
Ethane	382		0.296	1.29	1	11/10/2020 13:10	WG1573473
Ethene	495		0.422	1.27	1	11/10/2020 13:10	WG1573473

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	12.8 J	J0	0.548	1.00	1	11/06/2020 08:17	WG1571846
Acrylonitrile	U		0.0760	0.500	1	11/06/2020 08:17	WG1571846
Benzene	0.282		0.0160	0.0400	1	11/06/2020 08:17	WG1571846
Bromobenzene	U		0.0420	0.500	1	11/06/2020 08:17	WG1571846
Bromodichloromethane	U		0.0315	0.100	1	11/06/2020 08:17	WG1571846
Bromoform	U		0.239	1.00	1	11/06/2020 08:17	WG1571846
Bromomethane	U		0.148	0.500	1	11/06/2020 08:17	WG1571846
n-Butylbenzene	U		0.153	0.500	1	11/06/2020 08:17	WG1571846
sec-Butylbenzene	U		0.101	0.500	1	11/06/2020 08:17	WG1571846
tert-Butylbenzene	U		0.0620	0.200	1	11/06/2020 08:17	WG1571846
Carbon tetrachloride	U		0.0432	0.200	1	11/06/2020 08:17	WG1571846
Chlorobenzene	U		0.0229	0.100	1	11/06/2020 08:17	WG1571846
Chlorodibromomethane	U		0.0180	0.100	1	11/06/2020 08:17	WG1571846
Chloroethane	U		0.0432	0.200	1	11/06/2020 08:17	WG1571846
Chloroform	U		0.0166	0.100	1	11/06/2020 08:17	WG1571846
Chloromethane	7.95		0.0556	0.500	1	11/06/2020 08:17	WG1571846
2-Chlorotoluene	U		0.0368	0.100	1	11/06/2020 08:17	WG1571846
4-Chlorotoluene	U		0.0452	0.200	1	11/06/2020 08:17	WG1571846
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	11/06/2020 08:17	WG1571846
1,2-Dibromoethane	U		0.0210	0.100	1	11/06/2020 08:17	WG1571846
Dibromomethane	U		0.0400	0.200	1	11/06/2020 08:17	WG1571846
1,2-Dichlorobenzene	U		0.0580	0.200	1	11/06/2020 08:17	WG1571846
1,3-Dichlorobenzene	U		0.0680	0.200	1	11/06/2020 08:17	WG1571846
1,4-Dichlorobenzene	U		0.0788	0.200	1	11/06/2020 08:17	WG1571846
Dichlorodifluoromethane	U	J3	0.0327	0.100	1	11/06/2020 08:17	WG1571846
1,1-Dichloroethane	U		0.0230	0.100	1	11/06/2020 08:17	WG1571846
1,2-Dichloroethane	U		0.0190	0.100	1	11/06/2020 08:17	WG1571846
1,1-Dichloroethene	4.54		0.0200	0.100	1	11/06/2020 08:17	WG1571846
cis-1,2-Dichloroethene	54.3		2.76	10.0	100	11/12/2020 14:06	WG1574660
trans-1,2-Dichloroethene	44.0		0.0572	0.200	1	11/06/2020 08:17	WG1571846
1,2-Dichloropropane	U		0.0508	0.200	1	11/06/2020 08:17	WG1571846

JC 12/7/2020

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,1-Dichloropropene	U		0.0280	0.100	1	11/06/2020 08:17	WG1571846
1,3-Dichloropropane	U		0.0700	0.200	1	11/06/2020 08:17	WG1571846
cis-1,3-Dichloropropene	U		0.0271	0.100	1	11/06/2020 08:17	WG1571846
trans-1,3-Dichloropropene	U		0.0612	0.200	1	11/06/2020 08:17	WG1571846
2,2-Dichloropropane	U		0.0317	0.100	1	11/06/2020 08:17	WG1571846
Di-isopropyl ether	U		0.0140	0.0400	1	11/06/2020 08:17	WG1571846
Ethylbenzene	0.0700	J	0.0212	0.100	1	11/06/2020 08:17	WG1571846
Hexachloro-1,3-butadiene	U		0.508	1.00	1	11/06/2020 08:17	WG1571846
Isopropylbenzene	U		0.0345	0.100	1	11/06/2020 08:17	WG1571846
p-Isopropyltoluene	U		0.0932	0.200	1	11/06/2020 08:17	WG1571846
2-Butanone (MEK)	3.29 J	J0	0.500	1.00	1	11/06/2020 08:17	WG1571846
Methylene Chloride	U		0.265	1.00	1	11/06/2020 08:17	WG1571846
4-Methyl-2-pentanone (MIBK)	0.672	J	0.400	1.00	1	11/06/2020 08:17	WG1571846
Methyl tert-butyl ether	U		0.0118	0.0400	1	11/06/2020 08:17	WG1571846
Naphthalene	U		0.124	0.500	1	11/06/2020 08:17	WG1571846
n-Propylbenzene	U		0.0472	0.200	1	11/06/2020 08:17	WG1571846
Styrene	U		0.109	0.500	1	11/06/2020 08:17	WG1571846
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	11/06/2020 08:17	WG1571846
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	11/06/2020 08:17	WG1571846
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	11/06/2020 08:17	WG1571846
Tetrachloroethene	1.41 J	J0	0.0280	0.100	1	11/06/2020 08:17	WG1571846
Toluene	0.524		0.0500	0.200	1	11/06/2020 08:17	WG1571846
1,2,3-Trichlorobenzene	U UJ	C4	0.0250	0.500	1	11/06/2020 08:17	WG1571846
1,2,4-Trichlorobenzene	U		0.193	0.500	1	11/06/2020 08:17	WG1571846
1,1,1-Trichloroethane	U		0.0110	0.100	1	11/06/2020 08:17	WG1571846
1,1,2-Trichloroethane	U		0.0353	0.100	1	11/06/2020 08:17	WG1571846
Trichloroethene	0.895		0.0160	0.0400	1	11/06/2020 08:17	WG1571846
Trichlorofluoromethane	U		0.0200	0.100	1	11/06/2020 08:17	WG1571846
1,2,3-Trichloropropane	U		0.204	0.500	1	11/06/2020 08:17	WG1571846
1,2,4-Trimethylbenzene	0.114	J	0.0464	0.200	1	11/06/2020 08:17	WG1571846
1,2,3-Trimethylbenzene	0.0670	J	0.0460	0.200	1	11/06/2020 08:17	WG1571846
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	11/06/2020 08:17	WG1571846
Vinyl chloride	15.3		2.73	10.0	100	11/12/2020 14:06	WG1574660
Xylenes, Total	0.414		0.191	0.260	1	11/06/2020 08:17	WG1571846
Ethyl Ether	U		0.0170	0.100	1	11/06/2020 08:17	WG1571846
Tetrahydrofuran	U	~~J3~~	0.0900	0.500	1	11/06/2020 08:17	WG1571846
Iodomethane	U		0.242	0.500	1	11/06/2020 08:17	WG1571846
Allyl chloride	U		0.580	1.00	1	11/06/2020 08:17	WG1571846
Trans-1,4-Dichloro-2-butene	U		0.0560	0.200	1	11/06/2020 08:17	WG1571846
(S) Toluene-d8	*106*			*75.0-131*		*11/06/2020 08:17*	WG1571846
(S) Toluene-d8	*105*			*75.0-131*		*11/12/2020 14:06*	WG1574660
(S) 4-Bromofluorobenzene	*98.9*			*67.0-138*		*11/06/2020 08:17*	WG1571846
(S) 4-Bromofluorobenzene	*106*			*67.0-138*		*11/12/2020 14:06*	WG1574660
(S) 1,2-Dichloroethane-d4	*113*			*70.0-130*		*11/06/2020 08:17*	WG1571846
(S) 1,2-Dichloroethane-d4	*102*			*70.0-130*		*11/12/2020 14:06*	WG1574660

JC 12/7/2020

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Wet Chemistry by Method 9056A

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Sulfate	49700		2970	25000	5	11/10/2020 20:00	WG1572755

Wet Chemistry by Method 9060A

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
TOC (Total Organic Carbon)	19300		102	1000	1	11/12/2020 09:50	WG1574999

Metals (ICPMS) by Method 6020B

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Iron	4320		28.1	100	1	11/10/2020 13:50	WG1573384
Manganese	1040		0.704	5.00	1	11/10/2020 13:50	WG1573384

Volatile Organic Compounds (GC) by Method RSK175

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Methane	14800		2.87	6.78	10	11/10/2020 17:45	WG1574257
Ethane	44.0		0.296	1.29	1	11/10/2020 13:14	WG1573473
Ethene	2390		0.422	1.27	1	11/10/2020 13:14	WG1573473

Volatile Organic Compounds (GC/MS) by Method 8260D

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Acetone	U		5.48	10.0	10	11/06/2020 09:33	WG1571846
Acrylonitrile	U		0.760	5.00	10	11/06/2020 09:33	WG1571846
Benzene	0.290	J	0.160	0.400	10	11/06/2020 09:33	WG1571846
Bromobenzene	U		0.420	5.00	10	11/06/2020 09:33	WG1571846
Bromodichloromethane	U		0.315	1.00	10	11/06/2020 09:33	WG1571846
Bromoform	U		2.39	10.0	10	11/06/2020 09:33	WG1571846
Bromomethane	U		1.48	5.00	10	11/06/2020 09:33	WG1571846
n-Butylbenzene	U		1.53	5.00	10	11/06/2020 09:33	WG1571846
sec-Butylbenzene	U		1.01	5.00	10	11/06/2020 09:33	WG1571846
tert-Butylbenzene	U		0.620	2.00	10	11/06/2020 09:33	WG1571846
Carbon tetrachloride	U		0.432	2.00	10	11/06/2020 09:33	WG1571846
Chlorobenzene	U		0.229	1.00	10	11/06/2020 09:33	WG1571846
Chlorodibromomethane	U		0.180	1.00	10	11/06/2020 09:33	WG1571846
Chloroethane	U		0.432	2.00	10	11/06/2020 09:33	WG1571846
Chloroform	U		0.166	1.00	10	11/06/2020 09:33	WG1571846
Chloromethane	U		0.556	5.00	10	11/06/2020 09:33	WG1571846
2-Chlorotoluene	U		0.368	1.00	10	11/06/2020 09:33	WG1571846
4-Chlorotoluene	U		0.452	2.00	10	11/06/2020 09:33	WG1571846
1,2-Dibromo-3-Chloropropane	U		2.04	10.0	10	11/06/2020 09:33	WG1571846
1,2-Dibromoethane	U		0.210	1.00	10	11/06/2020 09:33	WG1571846
Dibromomethane	U		0.400	2.00	10	11/06/2020 09:33	WG1571846
1,2-Dichlorobenzene	U		0.580	2.00	10	11/06/2020 09:33	WG1571846
1,3-Dichlorobenzene	U		0.680	2.00	10	11/06/2020 09:33	WG1571846
1,4-Dichlorobenzene	U		0.788	2.00	10	11/06/2020 09:33	WG1571846
Dichlorodifluoromethane	U	~~J3~~	0.327	1.00	10	11/06/2020 09:33	WG1571846
1,1-Dichloroethane	U		0.230	1.00	10	11/06/2020 09:33	WG1571846
1,2-Dichloroethane	U		0.190	1.00	10	11/06/2020 09:33	WG1571846
1,1-Dichloroethene	30.7		0.200	1.00	10	11/06/2020 09:33	WG1571846
cis-1,2-Dichloroethene	9090		6.90	25.0	250	11/12/2020 14:27	WG1574660
trans-1,2-Dichloroethene	160		0.572	2.00	10	11/06/2020 09:33	WG1571846
1,2-Dichloropropane	U		0.508	2.00	10	11/06/2020 09:33	WG1571846

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Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,1-Dichloropropene	U		0.280	1.00	10	11/06/2020 09:33	WG1571846
1,3-Dichloropropane	U		0.700	2.00	10	11/06/2020 09:33	WG1571846
cis-1,3-Dichloropropene	U		0.271	1.00	10	11/06/2020 09:33	WG1571846
trans-1,3-Dichloropropene	U		0.612	2.00	10	11/06/2020 09:33	WG1571846
2,2-Dichloropropane	U		0.317	1.00	10	11/06/2020 09:33	WG1571846
Di-isopropyl ether	U		0.140	0.400	10	11/06/2020 09:33	WG1571846
Ethylbenzene	U		0.212	1.00	10	11/06/2020 09:33	WG1571846
Hexachloro-1,3-butadiene	U		5.08	10.0	10	11/06/2020 09:33	WG1571846
Isopropylbenzene	U		0.345	1.00	10	11/06/2020 09:33	WG1571846
p-Isopropyltoluene	U		0.932	2.00	10	11/06/2020 09:33	WG1571846
2-Butanone (MEK)	U		5.00	10.0	10	11/06/2020 09:33	WG1571846
Methylene Chloride	U		2.65	10.0	10	11/06/2020 09:33	WG1571846
4-Methyl-2-pentanone (MIBK)	U		4.00	10.0	10	11/06/2020 09:33	WG1571846
Methyl tert-butyl ether	U		0.118	0.400	10	11/06/2020 09:33	WG1571846
Naphthalene	U		1.24	5.00	10	11/06/2020 09:33	WG1571846
n-Propylbenzene	U		0.472	2.00	10	11/06/2020 09:33	WG1571846
Styrene	U		1.09	5.00	10	11/06/2020 09:33	WG1571846
1,1,1,2-Tetrachloroethane	U		0.200	1.00	10	11/06/2020 09:33	WG1571846
1,1,2,2-Tetrachloroethane	U		0.156	1.00	10	11/06/2020 09:33	WG1571846
1,1,2-Trichlorotrifluoroethane	U		0.270	1.00	10	11/06/2020 09:33	WG1571846
Tetrachloroethene	17.6 J	J0	0.280	1.00	10	11/06/2020 09:33	WG1571846
Toluene	U		0.500	2.00	10	11/06/2020 09:33	WG1571846
1,2,3-Trichlorobenzene	U UJ	C4	0.250	5.00	10	11/06/2020 09:33	WG1571846
1,2,4-Trichlorobenzene	U		1.93	5.00	10	11/06/2020 09:33	WG1571846
1,1,1-Trichloroethane	U		0.110	1.00	10	11/06/2020 09:33	WG1571846
1,1,2-Trichloroethane	U		0.353	1.00	10	11/06/2020 09:33	WG1571846
Trichloroethene	18.3		0.160	0.400	10	11/06/2020 09:33	WG1571846
Trichlorofluoromethane	U		0.200	1.00	10	11/06/2020 09:33	WG1571846
1,2,3-Trichloropropane	U		2.04	5.00	10	11/06/2020 09:33	WG1571846
1,2,4-Trimethylbenzene	U		0.464	2.00	10	11/06/2020 09:33	WG1571846
1,2,3-Trimethylbenzene	U		0.460	2.00	10	11/06/2020 09:33	WG1571846
1,3,5-Trimethylbenzene	U		0.432	2.00	10	11/06/2020 09:33	WG1571846
Vinyl chloride	11500		6.82	25.0	250	11/12/2020 14:27	WG1574660
Xylenes, Total	U		1.91	2.60	10	11/06/2020 09:33	WG1571846
Ethyl Ether	U		0.170	1.00	10	11/06/2020 09:33	WG1571846
Tetrahydrofuran	U	~~J3~~	0.900	5.00	10	11/06/2020 09:33	WG1571846
Iodomethane	U		2.42	5.00	10	11/06/2020 09:33	WG1571846
Allyl chloride	U		5.80	10.0	10	11/06/2020 09:33	WG1571846
Trans-1,4-Dichloro-2-butene	U		0.560	2.00	10	11/06/2020 09:33	WG1571846
(S) Toluene-d8	*107*			*75.0-131*		*11/06/2020 09:33*	WG1571846
(S) Toluene-d8	*105*			*75.0-131*		*11/12/2020 14:27*	WG1574660
(S) 4-Bromofluorobenzene	*98.2*			*67.0-138*		*11/06/2020 09:33*	WG1571846
(S) 4-Bromofluorobenzene	*105*			*67.0-138*		*11/12/2020 14:27*	WG1574660
(S) 1,2-Dichloroethane-d4	*112*			*70.0-130*		*11/06/2020 09:33*	WG1571846
(S) 1,2-Dichloroethane-d4	*103*			*70.0-130*		*11/12/2020 14:27*	WG1574660

JC 12/7/2020

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	1.02		0.548	1.00	1	11/10/2020 10:38	WG1573882
Acrylonitrile	U		0.0760	0.500	1	11/10/2020 10:38	WG1573882
Benzene	U		0.0160	0.0400	1	11/10/2020 10:38	WG1573882
Bromobenzene	U		0.0420	0.500	1	11/10/2020 10:38	WG1573882
Bromodichloromethane	U		0.0315	0.100	1	11/10/2020 10:38	WG1573882
Bromoform	U		0.239	1.00	1	11/10/2020 10:38	WG1573882
Bromomethane	U		0.148	0.500	1	11/10/2020 10:38	WG1573882
n-Butylbenzene	U		0.153	0.500	1	11/10/2020 10:38	WG1573882
sec-Butylbenzene	U		0.101	0.500	1	11/10/2020 10:38	WG1573882
tert-Butylbenzene	U		0.0620	0.200	1	11/10/2020 10:38	WG1573882
Carbon tetrachloride	U		0.0432	0.200	1	11/10/2020 10:38	WG1573882
Chlorobenzene	U		0.0229	0.100	1	11/10/2020 10:38	WG1573882
Chlorodibromomethane	U		0.0180	0.100	1	11/10/2020 10:38	WG1573882
Chloroethane	U		0.0432	0.200	1	11/10/2020 10:38	WG1573882
Chloroform	U		0.0166	0.100	1	11/10/2020 10:38	WG1573882
Chloromethane	U		0.0556	0.500	1	11/10/2020 10:38	WG1573882
2-Chlorotoluene	U		0.0368	0.100	1	11/10/2020 10:38	WG1573882
4-Chlorotoluene	U		0.0452	0.200	1	11/10/2020 10:38	WG1573882
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	11/10/2020 10:38	WG1573882
1,2-Dibromoethane	U		0.0210	0.100	1	11/10/2020 10:38	WG1573882
Dibromomethane	U		0.0400	0.200	1	11/10/2020 10:38	WG1573882
1,2-Dichlorobenzene	U		0.0580	0.200	1	11/10/2020 10:38	WG1573882
1,3-Dichlorobenzene	U		0.0680	0.200	1	11/10/2020 10:38	WG1573882
1,4-Dichlorobenzene	U		0.0788	0.200	1	11/10/2020 10:38	WG1573882
Dichlorodifluoromethane	U		0.0327	0.100	1	11/10/2020 10:38	WG1573882
1,1-Dichloroethane	U		0.0230	0.100	1	11/10/2020 10:38	WG1573882
1,2-Dichloroethane	U		0.0190	0.100	1	11/10/2020 10:38	WG1573882
1,1-Dichloroethene	U		0.0200	0.100	1	11/10/2020 10:38	WG1573882
cis-1,2-Dichloroethene	U		0.0276	0.100	1	11/10/2020 10:38	WG1573882
trans-1,2-Dichloroethene	U		0.0572	0.200	1	11/10/2020 10:38	WG1573882
1,2-Dichloropropane	U		0.0508	0.200	1	11/10/2020 10:38	WG1573882
1,1-Dichloropropene	U		0.0280	0.100	1	11/10/2020 10:38	WG1573882
1,3-Dichloropropane	U		0.0700	0.200	1	11/10/2020 10:38	WG1573882
cis-1,3-Dichloropropene	U		0.0271	0.100	1	11/10/2020 10:38	WG1573882
trans-1,3-Dichloropropene	U		0.0612	0.200	1	11/10/2020 10:38	WG1573882
2,2-Dichloropropane	U		0.0317	0.100	1	11/10/2020 10:38	WG1573882
Di-isopropyl ether	U		0.0140	0.0400	1	11/10/2020 10:38	WG1573882
Ethylbenzene	U		0.0212	0.100	1	11/10/2020 10:38	WG1573882
Hexachloro-1,3-butadiene	U		0.508	1.00	1	11/10/2020 10:38	WG1573882
Isopropylbenzene	U		0.0345	0.100	1	11/10/2020 10:38	WG1573882
p-Isopropyltoluene	U		0.0932	0.200	1	11/10/2020 10:38	WG1573882
2-Butanone (MEK)	U		0.500	1.00	1	11/10/2020 10:38	WG1573882
Methylene Chloride	U		0.265	1.00	1	11/10/2020 10:38	WG1573882
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	11/10/2020 10:38	WG1573882
Methyl tert-butyl ether	U		0.0118	0.0400	1	11/10/2020 10:38	WG1573882
Naphthalene	U		0.124	0.500	1	11/10/2020 10:38	WG1573882
n-Propylbenzene	U		0.0472	0.200	1	11/10/2020 10:38	WG1573882
Styrene	U		0.109	0.500	1	11/10/2020 10:38	WG1573882
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	11/10/2020 10:38	WG1573882
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	11/10/2020 10:38	WG1573882
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	11/10/2020 10:38	WG1573882
Tetrachloroethene	U		0.0280	0.100	1	11/10/2020 10:38	WG1573882
Toluene	U		0.0500	0.200	1	11/10/2020 10:38	WG1573882
1,2,3-Trichlorobenzene	U	UJ C4	0.0250	0.500	1	11/10/2020 10:38	WG1573882
1,2,4-Trichlorobenzene	U	UJ C4	0.193	0.500	1	11/10/2020 10:38	WG1573882
1,1,1-Trichloroethane	U		0.0110	0.100	1	11/10/2020 10:38	WG1573882

JC 12/7/2020

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,1,2-Trichloroethane	U		0.0353	0.100	1	11/10/2020 10:38	WG1573882
Trichloroethene	U		0.0160	0.0400	1	11/10/2020 10:38	WG1573882
Trichlorofluoromethane	U		0.0200	0.100	1	11/10/2020 10:38	WG1573882
1,2,3-Trichloropropane	U		0.204	0.500	1	11/10/2020 10:38	WG1573882
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	11/10/2020 10:38	WG1573882
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	11/10/2020 10:38	WG1573882
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	11/10/2020 10:38	WG1573882
Vinyl chloride	U		0.0273	0.100	1	11/10/2020 10:38	WG1573882
Xylenes, Total	U		0.191	0.260	1	11/10/2020 10:38	WG1573882
Ethyl Ether	U		0.0170	0.100	1	11/10/2020 10:38	WG1573882
Tetrahydrofuran	U UJ	C4	0.0900	0.500	1	11/10/2020 10:38	WG1573882
Iodomethane	U		0.242	0.500	1	11/10/2020 10:38	WG1573882
Allyl chloride	U		0.580	1.00	1	11/10/2020 10:38	WG1573882
Trans-1,4-Dichloro-2-butene	U UJ	C4	0.0560	0.200	1	11/10/2020 10:38	WG1573882
(S) Toluene-d8	*105*			*75.0-131*		*11/10/2020 10:38*	WG1573882
(S) 4-Bromofluorobenzene	*106*			*67.0-138*		*11/10/2020 10:38*	WG1573882
(S) 1,2-Dichloroethane-d4	*97.2*			*70.0-130*		*11/10/2020 10:38*	WG1573882

JC 12/7/2020

MW-176-110520

SAMPLE RESULTS - 01

Collected date/time: 11/05/20 08:50

L1283261

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	1.36		0.548	1.00	1	11/12/2020 16:09	WG1575337
Acrylonitrile	U		0.0760	0.500	1	11/12/2020 16:09	WG1575337
Benzene	U		0.0160	0.0400	1	11/12/2020 16:09	WG1575337
Bromobenzene	U		0.0420	0.500	1	11/12/2020 16:09	WG1575337
Bromodichloromethane	U		0.0315	0.100	1	11/12/2020 16:09	WG1575337
Bromoform	U		0.239	1.00	1	11/12/2020 16:09	WG1575337
Bromomethane	U		0.148	0.500	1	11/12/2020 16:09	WG1575337
n-Butylbenzene	U		0.153	0.500	1	11/12/2020 16:09	WG1575337
sec-Butylbenzene	U		0.101	0.500	1	11/12/2020 16:09	WG1575337
tert-Butylbenzene	U		0.0620	0.200	1	11/12/2020 16:09	WG1575337
Carbon tetrachloride	U		0.0432	0.200	1	11/12/2020 16:09	WG1575337
Chlorobenzene	U		0.0229	0.100	1	11/12/2020 16:09	WG1575337
Chlorodibromomethane	U		0.0180	0.100	1	11/12/2020 16:09	WG1575337
Chloroethane	U		0.0432	0.200	1	11/12/2020 16:09	WG1575337
Chloroform	U		0.0166	0.100	1	11/12/2020 16:09	WG1575337
Chloromethane	U		0.0556	0.500	1	11/12/2020 16:09	WG1575337
2-Chlorotoluene	U		0.0368	0.100	1	11/12/2020 16:09	WG1575337
4-Chlorotoluene	U		0.0452	0.200	1	11/12/2020 16:09	WG1575337
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	11/12/2020 16:09	WG1575337
1,2-Dibromoethane	U		0.0210	0.100	1	11/12/2020 16:09	WG1575337
Dibromomethane	U		0.0400	0.200	1	11/12/2020 16:09	WG1575337
1,2-Dichlorobenzene	U		0.0580	0.200	1	11/12/2020 16:09	WG1575337
1,3-Dichlorobenzene	U		0.0680	0.200	1	11/12/2020 16:09	WG1575337
1,4-Dichlorobenzene	U		0.0788	0.200	1	11/12/2020 16:09	WG1575337
Dichlorodifluoromethane	U		0.0327	0.100	1	11/12/2020 16:09	WG1575337
1,1-Dichloroethane	U		0.0230	0.100	1	11/12/2020 16:09	WG1575337
1,2-Dichloroethane	U		0.0190	0.100	1	11/12/2020 16:09	WG1575337
1,1-Dichloroethene	U		0.0200	0.100	1	11/12/2020 16:09	WG1575337
cis-1,2-Dichloroethene	1.22		0.0276	0.100	1	11/12/2020 16:09	WG1575337
trans-1,2-Dichloroethene	1.64		0.0572	0.200	1	11/12/2020 16:09	WG1575337
1,2-Dichloropropane	U		0.0508	0.200	1	11/12/2020 16:09	WG1575337
1,1-Dichloropropene	U		0.0280	0.100	1	11/12/2020 16:09	WG1575337
1,3-Dichloropropane	U		0.0700	0.200	1	11/12/2020 16:09	WG1575337
cis-1,3-Dichloropropene	U		0.0271	0.100	1	11/12/2020 16:09	WG1575337
trans-1,3-Dichloropropene	U		0.0612	0.200	1	11/12/2020 16:09	WG1575337
2,2-Dichloropropane	U		0.0317	0.100	1	11/12/2020 16:09	WG1575337
Di-isopropyl ether	U		0.0140	0.0400	1	11/12/2020 16:09	WG1575337
Ethylbenzene	U		0.0212	0.100	1	11/12/2020 16:09	WG1575337
Hexachloro-1,3-butadiene	U		0.508	1.00	1	11/12/2020 16:09	WG1575337
Isopropylbenzene	U		0.0345	0.100	1	11/12/2020 16:09	WG1575337
p-Isopropyltoluene	U		0.0932	0.200	1	11/12/2020 16:09	WG1575337
2-Butanone (MEK)	U		0.500	1.00	1	11/12/2020 16:09	WG1575337
Methylene Chloride	U		0.265	1.00	1	11/12/2020 16:09	WG1575337
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	11/12/2020 16:09	WG1575337
Methyl tert-butyl ether	U		0.0118	0.0400	1	11/12/2020 16:09	WG1575337
Naphthalene	U		0.124	0.500	1	11/12/2020 16:09	WG1575337
n-Propylbenzene	U		0.0472	0.200	1	11/12/2020 16:09	WG1575337
Styrene	U		0.109	0.500	1	11/12/2020 16:09	WG1575337
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	11/12/2020 16:09	WG1575337
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	11/12/2020 16:09	WG1575337
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	11/12/2020 16:09	WG1575337
Tetrachloroethene	U		0.0280	0.100	1	11/12/2020 16:09	WG1575337
Toluene	0.204		0.0500	0.200	1	11/12/2020 16:09	WG1575337
1,2,3-Trichlorobenzene	U		0.0250	0.500	1	11/12/2020 16:09	WG1575337
1,2,4-Trichlorobenzene	U		0.193	0.500	1	11/12/2020 16:09	WG1575337
1,1,1-Trichloroethane	U		0.0110	0.100	1	11/12/2020 16:09	WG1575337

JC 12/7/2020

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,1,2-Trichloroethane	U		0.0353	0.100	1	11/12/2020 16:09	WG1575337
Trichloroethene	U		0.0160	0.0400	1	11/12/2020 16:09	WG1575337
Trichlorofluoromethane	U		0.0200	0.100	1	11/12/2020 16:09	WG1575337
1,2,3-Trichloropropane	U		0.204	0.500	1	11/12/2020 16:09	WG1575337
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	11/12/2020 16:09	WG1575337
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	11/12/2020 16:09	WG1575337
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	11/12/2020 16:09	WG1575337
Vinyl chloride	2.92		0.0273	0.100	1	11/12/2020 16:09	WG1575337
Xylenes, Total	U		0.191	0.260	1	11/12/2020 16:09	WG1575337
Ethyl Ether	U		0.0170	0.100	1	11/12/2020 16:09	WG1575337
Tetrahydrofuran	0.157 U	~~B J~~	0.0900	0.500	1	11/12/2020 16:09	WG1575337
Iodomethane	U		0.242	0.500	1	11/12/2020 16:09	WG1575337
Allyl chloride	U		0.580	1.00	1	11/12/2020 16:09	WG1575337
Trans-1,4-Dichloro-2-butene	U UJ	C4	0.0560	0.200	1	11/12/2020 16:09	WG1575337
(S) Toluene-d8	*104*			*75.0-131*		*11/12/2020 16:09*	WG1575337
(S) 4-Bromofluorobenzene	*105*			*67.0-138*		*11/12/2020 16:09*	WG1575337
(S) 1,2-Dichloroethane-d4	*102*			*70.0-130*		*11/12/2020 16:09*	WG1575337

JC 12/7/2020

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	0.873	J	0.548	1.00	1	11/12/2020 16:29	WG1575337
Acrylonitrile	U		0.0760	0.500	1	11/12/2020 16:29	WG1575337
Benzene	0.179		0.0160	0.0400	1	11/12/2020 16:29	WG1575337
Bromobenzene	U		0.0420	0.500	1	11/12/2020 16:29	WG1575337
Bromodichloromethane	U		0.0315	0.100	1	11/12/2020 16:29	WG1575337
Bromoform	U		0.239	1.00	1	11/12/2020 16:29	WG1575337
Bromomethane	U		0.148	0.500	1	11/12/2020 16:29	WG1575337
n-Butylbenzene	U		0.153	0.500	1	11/12/2020 16:29	WG1575337
sec-Butylbenzene	U		0.101	0.500	1	11/12/2020 16:29	WG1575337
tert-Butylbenzene	U		0.0620	0.200	1	11/12/2020 16:29	WG1575337
Carbon tetrachloride	U		0.0432	0.200	1	11/12/2020 16:29	WG1575337
Chlorobenzene	U		0.0229	0.100	1	11/12/2020 16:29	WG1575337
Chlorodibromomethane	U		0.0180	0.100	1	11/12/2020 16:29	WG1575337
Chloroethane	U		0.0432	0.200	1	11/12/2020 16:29	WG1575337
Chloroform	U		0.0166	0.100	1	11/12/2020 16:29	WG1575337
Chloromethane	U		0.0556	0.500	1	11/12/2020 16:29	WG1575337
2-Chlorotoluene	U		0.0368	0.100	1	11/12/2020 16:29	WG1575337
4-Chlorotoluene	U		0.0452	0.200	1	11/12/2020 16:29	WG1575337
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	11/12/2020 16:29	WG1575337
1,2-Dibromoethane	U		0.0210	0.100	1	11/12/2020 16:29	WG1575337
Dibromomethane	U		0.0400	0.200	1	11/12/2020 16:29	WG1575337
1,2-Dichlorobenzene	U		0.0580	0.200	1	11/12/2020 16:29	WG1575337
1,3-Dichlorobenzene	U		0.0680	0.200	1	11/12/2020 16:29	WG1575337
1,4-Dichlorobenzene	U		0.0788	0.200	1	11/12/2020 16:29	WG1575337
Dichlorodifluoromethane	U		0.0327	0.100	1	11/12/2020 16:29	WG1575337
1,1-Dichloroethane	U		0.0230	0.100	1	11/12/2020 16:29	WG1575337
1,2-Dichloroethane	U		0.0190	0.100	1	11/12/2020 16:29	WG1575337
1,1-Dichloroethene	U		0.0200	0.100	1	11/12/2020 16:29	WG1575337
cis-1,2-Dichloroethene	0.616		0.0276	0.100	1	11/12/2020 16:29	WG1575337
trans-1,2-Dichloroethene	3.30		0.0572	0.200	1	11/12/2020 16:29	WG1575337
1,2-Dichloropropane	U		0.0508	0.200	1	11/12/2020 16:29	WG1575337
1,1-Dichloropropene	U		0.0280	0.100	1	11/12/2020 16:29	WG1575337
1,3-Dichloropropane	U		0.0700	0.200	1	11/12/2020 16:29	WG1575337
cis-1,3-Dichloropropene	U		0.0271	0.100	1	11/12/2020 16:29	WG1575337
trans-1,3-Dichloropropene	U		0.0612	0.200	1	11/12/2020 16:29	WG1575337
2,2-Dichloropropane	U		0.0317	0.100	1	11/12/2020 16:29	WG1575337
Di-isopropyl ether	U		0.0140	0.0400	1	11/12/2020 16:29	WG1575337
Ethylbenzene	U		0.0212	0.100	1	11/12/2020 16:29	WG1575337
Hexachloro-1,3-butadiene	U		0.508	1.00	1	11/12/2020 16:29	WG1575337
Isopropylbenzene	U		0.0345	0.100	1	11/12/2020 16:29	WG1575337
p-Isopropyltoluene	U		0.0932	0.200	1	11/12/2020 16:29	WG1575337
2-Butanone (MEK)	U		0.500	1.00	1	11/12/2020 16:29	WG1575337
Methylene Chloride	U		0.265	1.00	1	11/12/2020 16:29	WG1575337
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	11/12/2020 16:29	WG1575337
Methyl tert-butyl ether	U		0.0118	0.0400	1	11/12/2020 16:29	WG1575337
Naphthalene	U		0.124	0.500	1	11/12/2020 16:29	WG1575337
n-Propylbenzene	U		0.0472	0.200	1	11/12/2020 16:29	WG1575337
Styrene	U		0.109	0.500	1	11/12/2020 16:29	WG1575337
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	11/12/2020 16:29	WG1575337
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	11/12/2020 16:29	WG1575337
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	11/12/2020 16:29	WG1575337
Tetrachloroethene	U		0.0280	0.100	1	11/12/2020 16:29	WG1575337
Toluene	U		0.0500	0.200	1	11/12/2020 16:29	WG1575337
1,2,3-Trichlorobenzene	U		0.0250	0.500	1	11/12/2020 16:29	WG1575337
1,2,4-Trichlorobenzene	U		0.193	0.500	1	11/12/2020 16:29	WG1575337
1,1,1-Trichloroethane	U		0.0110	0.100	1	11/12/2020 16:29	WG1575337

JC 12/7/2020

MW-173-110520

Collected date/time: 11/05/20 09:05

SAMPLE RESULTS - 02

L1283261

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l		Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,1,2-Trichloroethane	U			0.0353	0.100	1	11/12/2020 16:29	WG1575337
Trichloroethene	0.0865			0.0160	0.0400	1	11/12/2020 16:29	WG1575337
Trichlorofluoromethane	U			0.0200	0.100	1	11/12/2020 16:29	WG1575337
1,2,3-Trichloropropane	U			0.204	0.500	1	11/12/2020 16:29	WG1575337
1,2,4-Trimethylbenzene	U			0.0464	0.200	1	11/12/2020 16:29	WG1575337
1,2,3-Trimethylbenzene	U			0.0460	0.200	1	11/12/2020 16:29	WG1575337
1,3,5-Trimethylbenzene	U			0.0432	0.200	1	11/12/2020 16:29	WG1575337
Vinyl chloride	105			0.0273	0.100	1	11/12/2020 16:29	WG1575337
Xylenes, Total	U			0.191	0.260	1	11/12/2020 16:29	WG1575337
Ethyl Ether	U			0.0170	0.100	1	11/12/2020 16:29	WG1575337
Tetrahydrofuran	0.844		~~B~~	0.0900	0.500	1	11/12/2020 16:29	WG1575337
Iodomethane	U			0.242	0.500	1	11/12/2020 16:29	WG1575337
Allyl chloride	U			0.580	1.00	1	11/12/2020 16:29	WG1575337
Trans-1,4-Dichloro-2-butene	U	UJ	C4	0.0560	0.200	1	11/12/2020 16:29	WG1575337
(S) Toluene-d8	*105*				*75.0-131*		*11/12/2020 16:29*	WG1575337
(S) 4-Bromofluorobenzene	*106*				*67.0-138*		*11/12/2020 16:29*	WG1575337
(S) 1,2-Dichloroethane-d4	*103*				*70.0-130*		*11/12/2020 16:29*	WG1575337

JC 12/7/2020

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	0.562	J	0.548	1.00	1	11/12/2020 16:50	WG1575337
Acrylonitrile	U		0.0760	0.500	1	11/12/2020 16:50	WG1575337
Benzene	U		0.0160	0.0400	1	11/12/2020 16:50	WG1575337
Bromobenzene	U		0.0420	0.500	1	11/12/2020 16:50	WG1575337
Bromodichloromethane	U		0.0315	0.100	1	11/12/2020 16:50	WG1575337
Bromoform	U		0.239	1.00	1	11/12/2020 16:50	WG1575337
Bromomethane	U		0.148	0.500	1	11/12/2020 16:50	WG1575337
n-Butylbenzene	U		0.153	0.500	1	11/12/2020 16:50	WG1575337
sec-Butylbenzene	U		0.101	0.500	1	11/12/2020 16:50	WG1575337
tert-Butylbenzene	U		0.0620	0.200	1	11/12/2020 16:50	WG1575337
Carbon tetrachloride	U		0.0432	0.200	1	11/12/2020 16:50	WG1575337
Chlorobenzene	U		0.0229	0.100	1	11/12/2020 16:50	WG1575337
Chlorodibromomethane	U		0.0180	0.100	1	11/12/2020 16:50	WG1575337
Chloroethane	U		0.0432	0.200	1	11/12/2020 16:50	WG1575337
Chloroform	U		0.0166	0.100	1	11/12/2020 16:50	WG1575337
Chloromethane	U		0.0556	0.500	1	11/12/2020 16:50	WG1575337
2-Chlorotoluene	U		0.0368	0.100	1	11/12/2020 16:50	WG1575337
4-Chlorotoluene	U		0.0452	0.200	1	11/12/2020 16:50	WG1575337
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	11/12/2020 16:50	WG1575337
1,2-Dibromoethane	U		0.0210	0.100	1	11/12/2020 16:50	WG1575337
Dibromomethane	U		0.0400	0.200	1	11/12/2020 16:50	WG1575337
1,2-Dichlorobenzene	U		0.0580	0.200	1	11/12/2020 16:50	WG1575337
1,3-Dichlorobenzene	U		0.0680	0.200	1	11/12/2020 16:50	WG1575337
1,4-Dichlorobenzene	U		0.0788	0.200	1	11/12/2020 16:50	WG1575337
Dichlorodifluoromethane	U		0.0327	0.100	1	11/12/2020 16:50	WG1575337
1,1-Dichloroethane	U		0.0230	0.100	1	11/12/2020 16:50	WG1575337
1,2-Dichloroethane	U		0.0190	0.100	1	11/12/2020 16:50	WG1575337
1,1-Dichloroethene	U		0.0200	0.100	1	11/12/2020 16:50	WG1575337
cis-1,2-Dichloroethene	0.609		0.0276	0.100	1	11/12/2020 16:50	WG1575337
trans-1,2-Dichloroethene	2.05		0.0572	0.200	1	11/12/2020 16:50	WG1575337
1,2-Dichloropropane	U		0.0508	0.200	1	11/12/2020 16:50	WG1575337
1,1-Dichloropropene	U		0.0280	0.100	1	11/12/2020 16:50	WG1575337
1,3-Dichloropropane	U		0.0700	0.200	1	11/12/2020 16:50	WG1575337
cis-1,3-Dichloropropene	U		0.0271	0.100	1	11/12/2020 16:50	WG1575337
trans-1,3-Dichloropropene	U		0.0612	0.200	1	11/12/2020 16:50	WG1575337
2,2-Dichloropropane	U		0.0317	0.100	1	11/12/2020 16:50	WG1575337
Di-isopropyl ether	U		0.0140	0.0400	1	11/12/2020 16:50	WG1575337
Ethylbenzene	U		0.0212	0.100	1	11/12/2020 16:50	WG1575337
Hexachloro-1,3-butadiene	U		0.508	1.00	1	11/12/2020 16:50	WG1575337
Isopropylbenzene	U		0.0345	0.100	1	11/12/2020 16:50	WG1575337
p-Isopropyltoluene	U		0.0932	0.200	1	11/12/2020 16:50	WG1575337
2-Butanone (MEK)	U		0.500	1.00	1	11/12/2020 16:50	WG1575337
Methylene Chloride	U		0.265	1.00	1	11/12/2020 16:50	WG1575337
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	11/12/2020 16:50	WG1575337
Methyl tert-butyl ether	U		0.0118	0.0400	1	11/12/2020 16:50	WG1575337
Naphthalene	U		0.124	0.500	1	11/12/2020 16:50	WG1575337
n-Propylbenzene	U		0.0472	0.200	1	11/12/2020 16:50	WG1575337
Styrene	U		0.109	0.500	1	11/12/2020 16:50	WG1575337
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	11/12/2020 16:50	WG1575337
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	11/12/2020 16:50	WG1575337
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	11/12/2020 16:50	WG1575337
Tetrachloroethene	U		0.0280	0.100	1	11/12/2020 16:50	WG1575337
Toluene	U		0.0500	0.200	1	11/12/2020 16:50	WG1575337
1,2,3-Trichlorobenzene	U		0.0250	0.500	1	11/12/2020 16:50	WG1575337
1,2,4-Trichlorobenzene	U		0.193	0.500	1	11/12/2020 16:50	WG1575337
1,1,1-Trichloroethane	U		0.0110	0.100	1	11/12/2020 16:50	WG1575337

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Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,1,2-Trichloroethane	U		0.0353	0.100	1	11/12/2020 16:50	WG1575337
Trichloroethene	0.177		0.0160	0.0400	1	11/12/2020 16:50	WG1575337
Trichlorofluoromethane	U		0.0200	0.100	1	11/12/2020 16:50	WG1575337
1,2,3-Trichloropropane	U		0.204	0.500	1	11/12/2020 16:50	WG1575337
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	11/12/2020 16:50	WG1575337
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	11/12/2020 16:50	WG1575337
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	11/12/2020 16:50	WG1575337
Vinyl chloride	3.11		0.0273	0.100	1	11/12/2020 16:50	WG1575337
Xylenes, Total	U		0.191	0.260	1	11/12/2020 16:50	WG1575337
Ethyl Ether	U		0.0170	0.100	1	11/12/2020 16:50	WG1575337
Tetrahydrofuran	U		0.0900	0.500	1	11/12/2020 16:50	WG1575337
Iodomethane	U		0.242	0.500	1	11/12/2020 16:50	WG1575337
Allyl chloride	U		0.580	1.00	1	11/12/2020 16:50	WG1575337
Trans-1,4-Dichloro-2-butene	U	UJ C4	0.0560	0.200	1	11/12/2020 16:50	WG1575337
(S) Toluene-d8	*104*			*75.0-131*		*11/12/2020 16:50*	WG1575337
(S) 4-Bromofluorobenzene	*107*			*67.0-138*		*11/12/2020 16:50*	WG1575337
(S) 1,2-Dichloroethane-d4	*104*			*70.0-130*		*11/12/2020 16:50*	WG1575337

JC 12/7/2020

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Volatile Organic Compounds (GC/MS) by Method 8260D

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Acetone	1.08		0.548	1.00	1	11/12/2020 17:10	WG1575337
Acrylonitrile	U		0.0760	0.500	1	11/12/2020 17:10	WG1575337
Benzene	U		0.0160	0.0400	1	11/12/2020 17:10	WG1575337
Bromobenzene	U		0.0420	0.500	1	11/12/2020 17:10	WG1575337
Bromodichloromethane	U		0.0315	0.100	1	11/12/2020 17:10	WG1575337
Bromoform	U		0.239	1.00	1	11/12/2020 17:10	WG1575337
Bromomethane	U		0.148	0.500	1	11/12/2020 17:10	WG1575337
n-Butylbenzene	U		0.153	0.500	1	11/12/2020 17:10	WG1575337
sec-Butylbenzene	U		0.101	0.500	1	11/12/2020 17:10	WG1575337
tert-Butylbenzene	U		0.0620	0.200	1	11/12/2020 17:10	WG1575337
Carbon tetrachloride	U		0.0432	0.200	1	11/12/2020 17:10	WG1575337
Chlorobenzene	U		0.0229	0.100	1	11/12/2020 17:10	WG1575337
Chlorodibromomethane	U		0.0180	0.100	1	11/12/2020 17:10	WG1575337
Chloroethane	U		0.0432	0.200	1	11/12/2020 17:10	WG1575337
Chloroform	U		0.0166	0.100	1	11/12/2020 17:10	WG1575337
Chloromethane	U		0.0556	0.500	1	11/12/2020 17:10	WG1575337
2-Chlorotoluene	U		0.0368	0.100	1	11/12/2020 17:10	WG1575337
4-Chlorotoluene	U		0.0452	0.200	1	11/12/2020 17:10	WG1575337
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	11/12/2020 17:10	WG1575337
1,2-Dibromoethane	U		0.0210	0.100	1	11/12/2020 17:10	WG1575337
Dibromomethane	U		0.0400	0.200	1	11/12/2020 17:10	WG1575337
1,2-Dichlorobenzene	U		0.0580	0.200	1	11/12/2020 17:10	WG1575337
1,3-Dichlorobenzene	U		0.0680	0.200	1	11/12/2020 17:10	WG1575337
1,4-Dichlorobenzene	U		0.0788	0.200	1	11/12/2020 17:10	WG1575337
Dichlorodifluoromethane	U		0.0327	0.100	1	11/12/2020 17:10	WG1575337
1,1-Dichloroethane	U		0.0230	0.100	1	11/12/2020 17:10	WG1575337
1,2-Dichloroethane	U		0.0190	0.100	1	11/12/2020 17:10	WG1575337
1,1-Dichloroethene	U		0.0200	0.100	1	11/12/2020 17:10	WG1575337
cis-1,2-Dichloroethene	0.744		0.0276	0.100	1	11/12/2020 17:10	WG1575337
trans-1,2-Dichloroethene	1.99		0.0572	0.200	1	11/12/2020 17:10	WG1575337
1,2-Dichloropropane	U		0.0508	0.200	1	11/12/2020 17:10	WG1575337
1,1-Dichloropropene	U		0.0280	0.100	1	11/12/2020 17:10	WG1575337
1,3-Dichloropropane	U		0.0700	0.200	1	11/12/2020 17:10	WG1575337
cis-1,3-Dichloropropene	U		0.0271	0.100	1	11/12/2020 17:10	WG1575337
trans-1,3-Dichloropropene	U		0.0612	0.200	1	11/12/2020 17:10	WG1575337
2,2-Dichloropropane	U		0.0317	0.100	1	11/12/2020 17:10	WG1575337
Di-isopropyl ether	U		0.0140	0.0400	1	11/12/2020 17:10	WG1575337
Ethylbenzene	U		0.0212	0.100	1	11/12/2020 17:10	WG1575337
Hexachloro-1,3-butadiene	U		0.508	1.00	1	11/12/2020 17:10	WG1575337
Isopropylbenzene	U		0.0345	0.100	1	11/12/2020 17:10	WG1575337
p-Isopropyltoluene	U		0.0932	0.200	1	11/12/2020 17:10	WG1575337
2-Butanone (MEK)	U		0.500	1.00	1	11/12/2020 17:10	WG1575337
Methylene Chloride	U		0.265	1.00	1	11/12/2020 17:10	WG1575337
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	11/12/2020 17:10	WG1575337
Methyl tert-butyl ether	U		0.0118	0.0400	1	11/12/2020 17:10	WG1575337
Naphthalene	U		0.124	0.500	1	11/12/2020 17:10	WG1575337
n-Propylbenzene	U		0.0472	0.200	1	11/12/2020 17:10	WG1575337
Styrene	U		0.109	0.500	1	11/12/2020 17:10	WG1575337
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	11/12/2020 17:10	WG1575337
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	11/12/2020 17:10	WG1575337
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	11/12/2020 17:10	WG1575337
Tetrachloroethene	U		0.0280	0.100	1	11/12/2020 17:10	WG1575337
Toluene	0.204		0.0500	0.200	1	11/12/2020 17:10	WG1575337
1,2,3-Trichlorobenzene	U		0.0250	0.500	1	11/12/2020 17:10	WG1575337
1,2,4-Trichlorobenzene	U		0.193	0.500	1	11/12/2020 17:10	WG1575337
1,1,1-Trichloroethane	U		0.0110	0.100	1	11/12/2020 17:10	WG1575337

JC 12/7/2020

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,1,2-Trichloroethane	U		0.0353	0.100	1	11/12/2020 17:10	WG1575337
Trichloroethene	U		0.0160	0.0400	1	11/12/2020 17:10	WG1575337
Trichlorofluoromethane	U		0.0200	0.100	1	11/12/2020 17:10	WG1575337
1,2,3-Trichloropropane	U		0.204	0.500	1	11/12/2020 17:10	WG1575337
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	11/12/2020 17:10	WG1575337
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	11/12/2020 17:10	WG1575337
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	11/12/2020 17:10	WG1575337
Vinyl chloride	3.58		0.0273	0.100	1	11/12/2020 17:10	WG1575337
Xylenes, Total	U		0.191	0.260	1	11/12/2020 17:10	WG1575337
Ethyl Ether	U		0.0170	0.100	1	11/12/2020 17:10	WG1575337
Tetrahydrofuran	0.105 U	~~B J~~	0.0900	0.500	1	11/12/2020 17:10	WG1575337
Iodomethane	U		0.242	0.500	1	11/12/2020 17:10	WG1575337
Allyl chloride	U		0.580	1.00	1	11/12/2020 17:10	WG1575337
Trans-1,4-Dichloro-2-butene	U UJ	C4	0.0560	0.200	1	11/12/2020 17:10	WG1575337
(S) Toluene-d8	*104*			*75.0-131*		*11/12/2020 17:10*	WG1575337
(S) 4-Bromofluorobenzene	*106*			*67.0-138*		*11/12/2020 17:10*	WG1575337
(S) 1,2-Dichloroethane-d4	*103*			*70.0-130*		*11/12/2020 17:10*	WG1575337

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

JC 12/7/2020

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Sulfate	2650	J	594	5000	1	11/10/2020 19:39	WG1573990

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	83300		102	1000	1	11/16/2020 09:32	WG1576989

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	44600		1400	5000	50	11/16/2020 14:00	WG1574813
Manganese	7030		35.2	250	50	11/16/2020 14:00	WG1574813

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	29500		2.87	6.78	10	11/14/2020 05:36	WG1576276
Ethane	549		0.296	1.29	1	11/13/2020 11:43	WG1575600
Ethene	532		0.422	1.27	1	11/13/2020 11:43	WG1575600

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	5.40		0.548	1.00	1	11/12/2020 17:31	WG1575337
Acrylonitrile	U		0.0760	0.500	1	11/12/2020 17:31	WG1575337
Benzene	0.152		0.0160	0.0400	1	11/12/2020 17:31	WG1575337
Bromobenzene	U		0.0420	0.500	1	11/12/2020 17:31	WG1575337
Bromodichloromethane	U		0.0315	0.100	1	11/12/2020 17:31	WG1575337
Bromoform	U		0.239	1.00	1	11/12/2020 17:31	WG1575337
Bromomethane	U		0.148	0.500	1	11/12/2020 17:31	WG1575337
n-Butylbenzene	U		0.153	0.500	1	11/12/2020 17:31	WG1575337
sec-Butylbenzene	U		0.101	0.500	1	11/12/2020 17:31	WG1575337
tert-Butylbenzene	U		0.0620	0.200	1	11/12/2020 17:31	WG1575337
Carbon tetrachloride	U		0.0432	0.200	1	11/12/2020 17:31	WG1575337
Chlorobenzene	U		0.0229	0.100	1	11/12/2020 17:31	WG1575337
Chlorodibromomethane	U		0.0180	0.100	1	11/12/2020 17:31	WG1575337
Chloroethane	U		0.0432	0.200	1	11/12/2020 17:31	WG1575337
Chloroform	U		0.0166	0.100	1	11/12/2020 17:31	WG1575337
Chloromethane	U		0.0556	0.500	1	11/12/2020 17:31	WG1575337
2-Chlorotoluene	U		0.0368	0.100	1	11/12/2020 17:31	WG1575337
4-Chlorotoluene	U		0.0452	0.200	1	11/12/2020 17:31	WG1575337
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	11/12/2020 17:31	WG1575337
1,2-Dibromoethane	U		0.0210	0.100	1	11/12/2020 17:31	WG1575337
Dibromomethane	U		0.0400	0.200	1	11/12/2020 17:31	WG1575337
1,2-Dichlorobenzene	U		0.0580	0.200	1	11/12/2020 17:31	WG1575337
1,3-Dichlorobenzene	U		0.0680	0.200	1	11/12/2020 17:31	WG1575337
1,4-Dichlorobenzene	U		0.0788	0.200	1	11/12/2020 17:31	WG1575337
Dichlorodifluoromethane	U		0.0327	0.100	1	11/12/2020 17:31	WG1575337
1,1-Dichloroethane	U		0.0230	0.100	1	11/12/2020 17:31	WG1575337
1,2-Dichloroethane	U		0.0190	0.100	1	11/12/2020 17:31	WG1575337
1,1-Dichloroethene	0.553		0.0200	0.100	1	11/12/2020 17:31	WG1575337
cis-1,2-Dichloroethene	578		0.276	1.00	10	11/15/2020 10:23	WG1575966
trans-1,2-Dichloroethene	13.0		0.0572	0.200	1	11/12/2020 17:31	WG1575337
1,2-Dichloropropane	U		0.0508	0.200	1	11/12/2020 17:31	WG1575337

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Volatile Organic Compounds (GC/MS) by Method 8260D

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
1,1-Dichloropropene	U		0.0280	0.100	1	11/12/2020 17:31	WG1575337
1,3-Dichloropropane	U		0.0700	0.200	1	11/12/2020 17:31	WG1575337
cis-1,3-Dichloropropene	U		0.0271	0.100	1	11/12/2020 17:31	WG1575337
trans-1,3-Dichloropropene	U		0.0612	0.200	1	11/12/2020 17:31	WG1575337
2,2-Dichloropropane	U		0.0317	0.100	1	11/12/2020 17:31	WG1575337
Di-isopropyl ether	U		0.0140	0.0400	1	11/12/2020 17:31	WG1575337
Ethylbenzene	U		0.0212	0.100	1	11/12/2020 17:31	WG1575337
Hexachloro-1,3-butadiene	U		0.508	1.00	1	11/12/2020 17:31	WG1575337
Isopropylbenzene	U		0.0345	0.100	1	11/12/2020 17:31	WG1575337
p-Isopropyltoluene	U		0.0932	0.200	1	11/12/2020 17:31	WG1575337
2-Butanone (MEK)	1.44		0.500	1.00	1	11/12/2020 17:31	WG1575337
Methylene Chloride	U		0.265	1.00	1	11/12/2020 17:31	WG1575337
4-Methyl-2-pentanone (MIBK)	0.402	J	0.400	1.00	1	11/12/2020 17:31	WG1575337
Methyl tert-butyl ether	U		0.0118	0.0400	1	11/12/2020 17:31	WG1575337
Naphthalene	U		0.124	0.500	1	11/12/2020 17:31	WG1575337
n-Propylbenzene	U		0.0472	0.200	1	11/12/2020 17:31	WG1575337
Styrene	U		0.109	0.500	1	11/12/2020 17:31	WG1575337
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	11/12/2020 17:31	WG1575337
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	11/12/2020 17:31	WG1575337
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	11/12/2020 17:31	WG1575337
Tetrachloroethene	U		0.0280	0.100	1	11/12/2020 17:31	WG1575337
Toluene	0.625		0.0500	0.200	1	11/12/2020 17:31	WG1575337
1,2,3-Trichlorobenzene	U		0.0250	0.500	1	11/12/2020 17:31	WG1575337
1,2,4-Trichlorobenzene	U		0.193	0.500	1	11/12/2020 17:31	WG1575337
1,1,1-Trichloroethane	U		0.0110	0.100	1	11/12/2020 17:31	WG1575337
1,1,2-Trichloroethane	U		0.0353	0.100	1	11/12/2020 17:31	WG1575337
Trichloroethene	0.280		0.0160	0.0400	1	11/12/2020 17:31	WG1575337
Trichlorofluoromethane	U		0.0200	0.100	1	11/12/2020 17:31	WG1575337
1,2,3-Trichloropropane	U		0.204	0.500	1	11/12/2020 17:31	WG1575337
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	11/12/2020 17:31	WG1575337
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	11/12/2020 17:31	WG1575337
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	11/12/2020 17:31	WG1575337
Vinyl chloride	1170		0.273	1.00	10	11/15/2020 10:23	WG1575966
Xylenes, Total	U		0.191	0.260	1	11/12/2020 17:31	WG1575337
Ethyl Ether	U		0.0170	0.100	1	11/12/2020 17:31	WG1575337
Tetrahydrofuran	1.50	~~B~~	0.0900	0.500	1	11/12/2020 17:31	WG1575337
Iodomethane	U		0.242	0.500	1	11/12/2020 17:31	WG1575337
Allyl chloride	U		0.580	1.00	1	11/12/2020 17:31	WG1575337
Trans-1,4-Dichloro-2-butene	U UJ	C4	0.0560	0.200	1	11/12/2020 17:31	WG1575337
(S) Toluene-d8	*105*			*75.0-131*		*11/12/2020 17:31*	WG1575337
(S) Toluene-d8	*103*			*75.0-131*		*11/15/2020 10:23*	WG1575966
(S) 4-Bromofluorobenzene	*108*			*67.0-138*		*11/12/2020 17:31*	WG1575337
(S) 4-Bromofluorobenzene	*108*			*67.0-138*		*11/15/2020 10:23*	WG1575966
(S) 1,2-Dichloroethane-d4	*104*			*70.0-130*		*11/12/2020 17:31*	WG1575337
(S) 1,2-Dichloroethane-d4	*106*			*70.0-130*		*11/15/2020 10:23*	WG1575966

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Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Sulfate	2640	J	594	5000	1	11/10/2020 19:59	WG1573990

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	83200		102	1000	1	11/16/2020 09:47	WG1576989

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	44700		1400	5000	50	11/16/2020 14:04	WG1574813
Manganese	6920		35.2	250	50	11/16/2020 14:04	WG1574813

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	28200		2.87	6.78	10	11/14/2020 05:40	WG1576276
Ethane	529		0.296	1.29	1	11/13/2020 12:04	WG1575600
Ethene	499		0.422	1.27	1	11/13/2020 12:04	WG1575600

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	5.04		0.548	1.00	1	11/12/2020 17:51	WG1575337
Acrylonitrile	U		0.0760	0.500	1	11/12/2020 17:51	WG1575337
Benzene	0.138		0.0160	0.0400	1	11/12/2020 17:51	WG1575337
Bromobenzene	U		0.0420	0.500	1	11/12/2020 17:51	WG1575337
Bromodichloromethane	U		0.0315	0.100	1	11/12/2020 17:51	WG1575337
Bromoform	U		0.239	1.00	1	11/12/2020 17:51	WG1575337
Bromomethane	U		0.148	0.500	1	11/12/2020 17:51	WG1575337
n-Butylbenzene	U		0.153	0.500	1	11/12/2020 17:51	WG1575337
sec-Butylbenzene	U		0.101	0.500	1	11/12/2020 17:51	WG1575337
tert-Butylbenzene	U		0.0620	0.200	1	11/12/2020 17:51	WG1575337
Carbon tetrachloride	U		0.0432	0.200	1	11/12/2020 17:51	WG1575337
Chlorobenzene	U		0.0229	0.100	1	11/12/2020 17:51	WG1575337
Chlorodibromomethane	U		0.0180	0.100	1	11/12/2020 17:51	WG1575337
Chloroethane	U		0.0432	0.200	1	11/12/2020 17:51	WG1575337
Chloroform	U		0.0166	0.100	1	11/12/2020 17:51	WG1575337
Chloromethane	U		0.0556	0.500	1	11/12/2020 17:51	WG1575337
2-Chlorotoluene	U		0.0368	0.100	1	11/12/2020 17:51	WG1575337
4-Chlorotoluene	U		0.0452	0.200	1	11/12/2020 17:51	WG1575337
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	11/12/2020 17:51	WG1575337
1,2-Dibromoethane	U		0.0210	0.100	1	11/12/2020 17:51	WG1575337
Dibromomethane	U		0.0400	0.200	1	11/12/2020 17:51	WG1575337
1,2-Dichlorobenzene	U		0.0580	0.200	1	11/12/2020 17:51	WG1575337
1,3-Dichlorobenzene	U		0.0680	0.200	1	11/12/2020 17:51	WG1575337
1,4-Dichlorobenzene	U		0.0788	0.200	1	11/12/2020 17:51	WG1575337
Dichlorodifluoromethane	U		0.0327	0.100	1	11/12/2020 17:51	WG1575337
1,1-Dichloroethane	U		0.0230	0.100	1	11/12/2020 17:51	WG1575337
1,2-Dichloroethane	U		0.0190	0.100	1	11/12/2020 17:51	WG1575337
1,1-Dichloroethene	0.516		0.0200	0.100	1	11/12/2020 17:51	WG1575337
cis-1,2-Dichloroethene	578		0.276	1.00	10	11/15/2020 10:43	WG1575966
trans-1,2-Dichloroethene	12.6		0.0572	0.200	1	11/12/2020 17:51	WG1575337
1,2-Dichloropropane	U		0.0508	0.200	1	11/12/2020 17:51	WG1575337

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MW-165-110520

Collected date/time: 11/05/20 10:20

SAMPLE RESULTS - 06

L1283261

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
1,1-Dichloropropene	U		0.0280	0.100	1	11/12/2020 17:51	WG1575337
1,3-Dichloropropane	U		0.0700	0.200	1	11/12/2020 17:51	WG1575337
cis-1,3-Dichloropropene	U		0.0271	0.100	1	11/12/2020 17:51	WG1575337
trans-1,3-Dichloropropene	U		0.0612	0.200	1	11/12/2020 17:51	WG1575337
2,2-Dichloropropane	U		0.0317	0.100	1	11/12/2020 17:51	WG1575337
Di-isopropyl ether	U		0.0140	0.0400	1	11/12/2020 17:51	WG1575337
Ethylbenzene	U		0.0212	0.100	1	11/12/2020 17:51	WG1575337
Hexachloro-1,3-butadiene	U		0.508	1.00	1	11/12/2020 17:51	WG1575337
Isopropylbenzene	U		0.0345	0.100	1	11/12/2020 17:51	WG1575337
p-Isopropyltoluene	U		0.0932	0.200	1	11/12/2020 17:51	WG1575337
2-Butanone (MEK)	1.30		0.500	1.00	1	11/12/2020 17:51	WG1575337
Methylene Chloride	U		0.265	1.00	1	11/12/2020 17:51	WG1575337
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	11/12/2020 17:51	WG1575337
Methyl tert-butyl ether	U		0.0118	0.0400	1	11/12/2020 17:51	WG1575337
Naphthalene	U		0.124	0.500	1	11/12/2020 17:51	WG1575337
n-Propylbenzene	U		0.0472	0.200	1	11/12/2020 17:51	WG1575337
Styrene	U		0.109	0.500	1	11/12/2020 17:51	WG1575337
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	11/12/2020 17:51	WG1575337
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	11/12/2020 17:51	WG1575337
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	11/12/2020 17:51	WG1575337
Tetrachloroethene	U		0.0280	0.100	1	11/12/2020 17:51	WG1575337
Toluene	0.633		0.0500	0.200	1	11/12/2020 17:51	WG1575337
1,2,3-Trichlorobenzene	U		0.0250	0.500	1	11/12/2020 17:51	WG1575337
1,2,4-Trichlorobenzene	U		0.193	0.500	1	11/12/2020 17:51	WG1575337
1,1,1-Trichloroethane	U		0.0110	0.100	1	11/12/2020 17:51	WG1575337
1,1,2-Trichloroethane	U		0.0353	0.100	1	11/12/2020 17:51	WG1575337
Trichloroethene	0.276		0.0160	0.0400	1	11/12/2020 17:51	WG1575337
Trichlorofluoromethane	U		0.0200	0.100	1	11/12/2020 17:51	WG1575337
1,2,3-Trichloropropane	U		0.204	0.500	1	11/12/2020 17:51	WG1575337
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	11/12/2020 17:51	WG1575337
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	11/12/2020 17:51	WG1575337
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	11/12/2020 17:51	WG1575337
Vinyl chloride	1160		0.273	1.00	10	11/15/2020 10:43	WG1575966
Xylenes, Total	U		0.191	0.260	1	11/12/2020 17:51	WG1575337
Ethyl Ether	U		0.0170	0.100	1	11/12/2020 17:51	WG1575337
Tetrahydrofuran	1.46	~~B~~	0.0900	0.500	1	11/12/2020 17:51	WG1575337
Iodomethane	U		0.242	0.500	1	11/12/2020 17:51	WG1575337
Allyl chloride	U		0.580	1.00	1	11/12/2020 17:51	WG1575337
Trans-1,4-Dichloro-2-butene	U UJ	C4	0.0560	0.200	1	11/12/2020 17:51	WG1575337
(S) Toluene-d8	*106*			*75.0-131*		*11/12/2020 17:51*	WG1575337
(S) Toluene-d8	*105*			*75.0-131*		*11/15/2020 10:43*	WG1575966
(S) 4-Bromofluorobenzene	*108*			*67.0-138*		*11/12/2020 17:51*	WG1575337
(S) 4-Bromofluorobenzene	*115*			*67.0-138*		*11/15/2020 10:43*	WG1575966
(S) 1,2-Dichloroethane-d4	*104*			*70.0-130*		*11/12/2020 17:51*	WG1575337
(S) 1,2-Dichloroethane-d4	*105*			*70.0-130*		*11/15/2020 10:43*	WG1575966

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Volatile Organic Compounds (GC/MS) by Method 8260D

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Acetone	0.777	J	0.548	1.00	1	11/12/2020 18:12	WG1575337
Acrylonitrile	U		0.0760	0.500	1	11/12/2020 18:12	WG1575337
Benzene	U		0.0160	0.0400	1	11/12/2020 18:12	WG1575337
Bromobenzene	U		0.0420	0.500	1	11/12/2020 18:12	WG1575337
Bromodichloromethane	U		0.0315	0.100	1	11/12/2020 18:12	WG1575337
Bromoform	U		0.239	1.00	1	11/12/2020 18:12	WG1575337
Bromomethane	U		0.148	0.500	1	11/12/2020 18:12	WG1575337
n-Butylbenzene	U		0.153	0.500	1	11/12/2020 18:12	WG1575337
sec-Butylbenzene	U		0.101	0.500	1	11/12/2020 18:12	WG1575337
tert-Butylbenzene	U		0.0620	0.200	1	11/12/2020 18:12	WG1575337
Carbon tetrachloride	U		0.0432	0.200	1	11/12/2020 18:12	WG1575337
Chlorobenzene	U		0.0229	0.100	1	11/12/2020 18:12	WG1575337
Chlorodibromomethane	U		0.0180	0.100	1	11/12/2020 18:12	WG1575337
Chloroethane	U		0.0432	0.200	1	11/12/2020 18:12	WG1575337
Chloroform	U		0.0166	0.100	1	11/12/2020 18:12	WG1575337
Chloromethane	U		0.0556	0.500	1	11/12/2020 18:12	WG1575337
2-Chlorotoluene	U		0.0368	0.100	1	11/12/2020 18:12	WG1575337
4-Chlorotoluene	U		0.0452	0.200	1	11/12/2020 18:12	WG1575337
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	11/12/2020 18:12	WG1575337
1,2-Dibromoethane	U		0.0210	0.100	1	11/12/2020 18:12	WG1575337
Dibromomethane	U		0.0400	0.200	1	11/12/2020 18:12	WG1575337
1,2-Dichlorobenzene	U		0.0580	0.200	1	11/12/2020 18:12	WG1575337
1,3-Dichlorobenzene	U		0.0680	0.200	1	11/12/2020 18:12	WG1575337
1,4-Dichlorobenzene	U		0.0788	0.200	1	11/12/2020 18:12	WG1575337
Dichlorodifluoromethane	U		0.0327	0.100	1	11/12/2020 18:12	WG1575337
1,1-Dichloroethane	U		0.0230	0.100	1	11/12/2020 18:12	WG1575337
1,2-Dichloroethane	U		0.0190	0.100	1	11/12/2020 18:12	WG1575337
1,1-Dichloroethene	U		0.0200	0.100	1	11/12/2020 18:12	WG1575337
cis-1,2-Dichloroethene	U		0.0276	0.100	1	11/15/2020 09:01	WG1575966
trans-1,2-Dichloroethene	U		0.0572	0.200	1	11/12/2020 18:12	WG1575337
1,2-Dichloropropane	U		0.0508	0.200	1	11/12/2020 18:12	WG1575337
1,1-Dichloropropene	U		0.0280	0.100	1	11/12/2020 18:12	WG1575337
1,3-Dichloropropane	U		0.0700	0.200	1	11/12/2020 18:12	WG1575337
cis-1,3-Dichloropropene	U		0.0271	0.100	1	11/12/2020 18:12	WG1575337
trans-1,3-Dichloropropene	U		0.0612	0.200	1	11/12/2020 18:12	WG1575337
2,2-Dichloropropane	U		0.0317	0.100	1	11/12/2020 18:12	WG1575337
Di-isopropyl ether	U		0.0140	0.0400	1	11/12/2020 18:12	WG1575337
Ethylbenzene	U		0.0212	0.100	1	11/12/2020 18:12	WG1575337
Hexachloro-1,3-butadiene	U		0.508	1.00	1	11/12/2020 18:12	WG1575337
Isopropylbenzene	U		0.0345	0.100	1	11/12/2020 18:12	WG1575337
p-Isopropyltoluene	U		0.0932	0.200	1	11/12/2020 18:12	WG1575337
2-Butanone (MEK)	U		0.500	1.00	1	11/12/2020 18:12	WG1575337
Methylene Chloride	U		0.265	1.00	1	11/12/2020 18:12	WG1575337
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	11/12/2020 18:12	WG1575337
Methyl tert-butyl ether	U		0.0118	0.0400	1	11/12/2020 18:12	WG1575337
Naphthalene	U		0.124	0.500	1	11/12/2020 18:12	WG1575337
n-Propylbenzene	U		0.0472	0.200	1	11/12/2020 18:12	WG1575337
Styrene	U		0.109	0.500	1	11/12/2020 18:12	WG1575337
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	11/12/2020 18:12	WG1575337
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	11/12/2020 18:12	WG1575337
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	11/12/2020 18:12	WG1575337
Tetrachloroethene	U		0.0280	0.100	1	11/12/2020 18:12	WG1575337
Toluene	0.195	J	0.0500	0.200	1	11/12/2020 18:12	WG1575337
1,2,3-Trichlorobenzene	U		0.0250	0.500	1	11/12/2020 18:12	WG1575337
1,2,4-Trichlorobenzene	U		0.193	0.500	1	11/12/2020 18:12	WG1575337
1,1,1-Trichloroethane	U		0.0110	0.100	1	11/12/2020 18:12	WG1575337

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1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
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Volatile Organic Compounds (GC/MS) by Method 8260D

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
1,1,2-Trichloroethane	U		0.0353	0.100	1	11/12/2020 18:12	WG1575337
Trichloroethene	U		0.0160	0.0400	1	11/12/2020 18:12	WG1575337
Trichlorofluoromethane	U		0.0200	0.100	1	11/12/2020 18:12	WG1575337
1,2,3-Trichloropropane	U		0.204	0.500	1	11/12/2020 18:12	WG1575337
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	11/12/2020 18:12	WG1575337
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	11/12/2020 18:12	WG1575337
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	11/12/2020 18:12	WG1575337
Vinyl chloride	U		0.0273	0.100	1	11/15/2020 09:01	WG1575966
Xylenes, Total	U		0.191	0.260	1	11/12/2020 18:12	WG1575337
Ethyl Ether	U		0.0170	0.100	1	11/12/2020 18:12	WG1575337
Tetrahydrofuran	U		0.0900	0.500	1	11/12/2020 18:12	WG1575337
Iodomethane	U		0.242	0.500	1	11/12/2020 18:12	WG1575337
Allyl chloride	U		0.580	1.00	1	11/12/2020 18:12	WG1575337
Trans-1,4-Dichloro-2-butene	U UJ	C4	0.0560	0.200	1	11/12/2020 18:12	WG1575337
(S) Toluene-d8	*106*			*75.0-131*		*11/12/2020 18:12*	WG1575337
(S) Toluene-d8	*103*			*75.0-131*		*11/15/2020 09:01*	WG1575966
(S) 4-Bromofluorobenzene	*109*			*67.0-138*		*11/12/2020 18:12*	WG1575337
(S) 4-Bromofluorobenzene	*109*			*67.0-138*		*11/15/2020 09:01*	WG1575966
(S) 1,2-Dichloroethane-d4	*102*			*70.0-130*		*11/12/2020 18:12*	WG1575337
(S) 1,2-Dichloroethane-d4	*103*			*70.0-130*		*11/15/2020 09:01*	WG1575966

JC 12/7/2020

1 Cp
2 Tc
3 Ss
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Volatile Organic Compounds (GC/MS) by Method 8260D

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Acetone	0.818	J	0.548	1.00	1	11/12/2020 18:32	WG1575337
Acrylonitrile	U		0.0760	0.500	1	11/12/2020 18:32	WG1575337
Benzene	U		0.0160	0.0400	1	11/12/2020 18:32	WG1575337
Bromobenzene	U		0.0420	0.500	1	11/12/2020 18:32	WG1575337
Bromodichloromethane	U		0.0315	0.100	1	11/12/2020 18:32	WG1575337
Bromoform	U		0.239	1.00	1	11/12/2020 18:32	WG1575337
Bromomethane	U		0.148	0.500	1	11/12/2020 18:32	WG1575337
n-Butylbenzene	U		0.153	0.500	1	11/12/2020 18:32	WG1575337
sec-Butylbenzene	U		0.101	0.500	1	11/12/2020 18:32	WG1575337
tert-Butylbenzene	U		0.0620	0.200	1	11/12/2020 18:32	WG1575337
Carbon tetrachloride	U		0.0432	0.200	1	11/12/2020 18:32	WG1575337
Chlorobenzene	U		0.0229	0.100	1	11/12/2020 18:32	WG1575337
Chlorodibromomethane	U		0.0180	0.100	1	11/12/2020 18:32	WG1575337
Chloroethane	U		0.0432	0.200	1	11/12/2020 18:32	WG1575337
Chloroform	U		0.0166	0.100	1	11/12/2020 18:32	WG1575337
Chloromethane	U		0.0556	0.500	1	11/12/2020 18:32	WG1575337
2-Chlorotoluene	U		0.0368	0.100	1	11/12/2020 18:32	WG1575337
4-Chlorotoluene	U		0.0452	0.200	1	11/12/2020 18:32	WG1575337
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	11/12/2020 18:32	WG1575337
1,2-Dibromoethane	U		0.0210	0.100	1	11/12/2020 18:32	WG1575337
Dibromomethane	U		0.0400	0.200	1	11/12/2020 18:32	WG1575337
1,2-Dichlorobenzene	U		0.0580	0.200	1	11/12/2020 18:32	WG1575337
1,3-Dichlorobenzene	U		0.0680	0.200	1	11/12/2020 18:32	WG1575337
1,4-Dichlorobenzene	U		0.0788	0.200	1	11/12/2020 18:32	WG1575337
Dichlorodifluoromethane	U		0.0327	0.100	1	11/12/2020 18:32	WG1575337
1,1-Dichloroethane	U		0.0230	0.100	1	11/12/2020 18:32	WG1575337
1,2-Dichloroethane	U		0.0190	0.100	1	11/12/2020 18:32	WG1575337
1,1-Dichloroethene	U		0.0200	0.100	1	11/12/2020 18:32	WG1575337
cis-1,2-Dichloroethene	0.675		0.0276	0.100	1	11/12/2020 18:32	WG1575337
trans-1,2-Dichloroethene	U		0.0572	0.200	1	11/12/2020 18:32	WG1575337
1,2-Dichloropropane	U		0.0508	0.200	1	11/12/2020 18:32	WG1575337
1,1-Dichloropropene	U		0.0280	0.100	1	11/12/2020 18:32	WG1575337
1,3-Dichloropropane	U		0.0700	0.200	1	11/12/2020 18:32	WG1575337
cis-1,3-Dichloropropene	U		0.0271	0.100	1	11/12/2020 18:32	WG1575337
trans-1,3-Dichloropropene	U		0.0612	0.200	1	11/12/2020 18:32	WG1575337
2,2-Dichloropropane	U		0.0317	0.100	1	11/12/2020 18:32	WG1575337
Di-isopropyl ether	U		0.0140	0.0400	1	11/12/2020 18:32	WG1575337
Ethylbenzene	U		0.0212	0.100	1	11/12/2020 18:32	WG1575337
Hexachloro-1,3-butadiene	U		0.508	1.00	1	11/12/2020 18:32	WG1575337
Isopropylbenzene	U		0.0345	0.100	1	11/12/2020 18:32	WG1575337
p-Isopropyltoluene	U		0.0932	0.200	1	11/12/2020 18:32	WG1575337
2-Butanone (MEK)	U		0.500	1.00	1	11/12/2020 18:32	WG1575337
Methylene Chloride	U		0.265	1.00	1	11/12/2020 18:32	WG1575337
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	11/12/2020 18:32	WG1575337
Methyl tert-butyl ether	U		0.0118	0.0400	1	11/12/2020 18:32	WG1575337
Naphthalene	U		0.124	0.500	1	11/12/2020 18:32	WG1575337
n-Propylbenzene	U		0.0472	0.200	1	11/12/2020 18:32	WG1575337
Styrene	U		0.109	0.500	1	11/12/2020 18:32	WG1575337
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	11/12/2020 18:32	WG1575337
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	11/12/2020 18:32	WG1575337
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	11/12/2020 18:32	WG1575337
Tetrachloroethene	U		0.0280	0.100	1	11/12/2020 18:32	WG1575337
Toluene	0.255		0.0500	0.200	1	11/12/2020 18:32	WG1575337
1,2,3-Trichlorobenzene	U		0.0250	0.500	1	11/12/2020 18:32	WG1575337
1,2,4-Trichlorobenzene	U		0.193	0.500	1	11/12/2020 18:32	WG1575337
1,1,1-Trichloroethane	U		0.0110	0.100	1	11/12/2020 18:32	WG1575337

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Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,1,2-Trichloroethane	U		0.0353	0.100	1	11/12/2020 18:32	WG1575337
Trichloroethene	U		0.0160	0.0400	1	11/12/2020 18:32	WG1575337
Trichlorofluoromethane	U		0.0200	0.100	1	11/12/2020 18:32	WG1575337
1,2,3-Trichloropropane	U		0.204	0.500	1	11/12/2020 18:32	WG1575337
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	11/12/2020 18:32	WG1575337
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	11/12/2020 18:32	WG1575337
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	11/12/2020 18:32	WG1575337
Vinyl chloride	0.897		0.0273	0.100	1	11/12/2020 18:32	WG1575337
Xylenes, Total	U		0.191	0.260	1	11/12/2020 18:32	WG1575337
Ethyl Ether	U		0.0170	0.100	1	11/12/2020 18:32	WG1575337
Tetrahydrofuran	0.462	U ~~B J~~	0.0900	0.500	1	11/12/2020 18:32	WG1575337
Iodomethane	U		0.242	0.500	1	11/12/2020 18:32	WG1575337
Allyl chloride	U		0.580	1.00	1	11/12/2020 18:32	WG1575337
Trans-1,4-Dichloro-2-butene	U	UJ C4	0.0560	0.200	1	11/12/2020 18:32	WG1575337
(S) Toluene-d8	*106*			*75.0-131*		*11/12/2020 18:32*	WG1575337
(S) 4-Bromofluorobenzene	*107*			*67.0-138*		*11/12/2020 18:32*	WG1575337
(S) 1,2-Dichloroethane-d4	*104*			*70.0-130*		*11/12/2020 18:32*	WG1575337

1 Cp
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Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	20.3		0.548	1.00	1	11/12/2020 18:52	WG1575337
Acrylonitrile	U		0.0760	0.500	1	11/12/2020 18:52	WG1575337
Benzene	U		0.0160	0.0400	1	11/12/2020 18:52	WG1575337
Bromobenzene	U		0.0420	0.500	1	11/12/2020 18:52	WG1575337
Bromodichloromethane	U		0.0315	0.100	1	11/12/2020 18:52	WG1575337
Bromoform	U		0.239	1.00	1	11/12/2020 18:52	WG1575337
Bromomethane	U		0.148	0.500	1	11/12/2020 18:52	WG1575337
n-Butylbenzene	U		0.153	0.500	1	11/12/2020 18:52	WG1575337
sec-Butylbenzene	U		0.101	0.500	1	11/12/2020 18:52	WG1575337
tert-Butylbenzene	U		0.0620	0.200	1	11/12/2020 18:52	WG1575337
Carbon tetrachloride	U		0.0432	0.200	1	11/12/2020 18:52	WG1575337
Chlorobenzene	U		0.0229	0.100	1	11/12/2020 18:52	WG1575337
Chlorodibromomethane	U		0.0180	0.100	1	11/12/2020 18:52	WG1575337
Chloroethane	U		0.0432	0.200	1	11/12/2020 18:52	WG1575337
Chloroform	U		0.0166	0.100	1	11/12/2020 18:52	WG1575337
Chloromethane	U		0.0556	0.500	1	11/12/2020 18:52	WG1575337
2-Chlorotoluene	U		0.0368	0.100	1	11/12/2020 18:52	WG1575337
4-Chlorotoluene	U		0.0452	0.200	1	11/12/2020 18:52	WG1575337
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	11/12/2020 18:52	WG1575337
1,2-Dibromoethane	U		0.0210	0.100	1	11/12/2020 18:52	WG1575337
Dibromomethane	U		0.0400	0.200	1	11/12/2020 18:52	WG1575337
1,2-Dichlorobenzene	U		0.0580	0.200	1	11/12/2020 18:52	WG1575337
1,3-Dichlorobenzene	U		0.0680	0.200	1	11/12/2020 18:52	WG1575337
1,4-Dichlorobenzene	U		0.0788	0.200	1	11/12/2020 18:52	WG1575337
Dichlorodifluoromethane	U		0.0327	0.100	1	11/12/2020 18:52	WG1575337
1,1-Dichloroethane	U		0.0230	0.100	1	11/12/2020 18:52	WG1575337
1,2-Dichloroethane	U		0.0190	0.100	1	11/12/2020 18:52	WG1575337
1,1-Dichloroethene	U		0.0200	0.100	1	11/12/2020 18:52	WG1575337
cis-1,2-Dichloroethene	1.92		0.0276	0.100	1	11/12/2020 18:52	WG1575337
trans-1,2-Dichloroethene	U		0.0572	0.200	1	11/12/2020 18:52	WG1575337
1,2-Dichloropropane	U		0.0508	0.200	1	11/12/2020 18:52	WG1575337
1,1-Dichloropropene	U		0.0280	0.100	1	11/12/2020 18:52	WG1575337
1,3-Dichloropropane	U		0.0700	0.200	1	11/12/2020 18:52	WG1575337
cis-1,3-Dichloropropene	U		0.0271	0.100	1	11/12/2020 18:52	WG1575337
trans-1,3-Dichloropropene	U		0.0612	0.200	1	11/12/2020 18:52	WG1575337
2,2-Dichloropropane	U		0.0317	0.100	1	11/12/2020 18:52	WG1575337
Di-isopropyl ether	U		0.0140	0.0400	1	11/12/2020 18:52	WG1575337
Ethylbenzene	U		0.0212	0.100	1	11/12/2020 18:52	WG1575337
Hexachloro-1,3-butadiene	U		0.508	1.00	1	11/12/2020 18:52	WG1575337
Isopropylbenzene	U		0.0345	0.100	1	11/12/2020 18:52	WG1575337
p-Isopropyltoluene	U		0.0932	0.200	1	11/12/2020 18:52	WG1575337
2-Butanone (MEK)	3.86		0.500	1.00	1	11/12/2020 18:52	WG1575337
Methylene Chloride	U		0.265	1.00	1	11/12/2020 18:52	WG1575337
4-Methyl-2-pentanone (MIBK)	0.559	J	0.400	1.00	1	11/12/2020 18:52	WG1575337
Methyl tert-butyl ether	U		0.0118	0.0400	1	11/12/2020 18:52	WG1575337
Naphthalene	U		0.124	0.500	1	11/12/2020 18:52	WG1575337
n-Propylbenzene	U		0.0472	0.200	1	11/12/2020 18:52	WG1575337
Styrene	U		0.109	0.500	1	11/12/2020 18:52	WG1575337
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	11/12/2020 18:52	WG1575337
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	11/12/2020 18:52	WG1575337
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	11/12/2020 18:52	WG1575337
Tetrachloroethene	U		0.0280	0.100	1	11/12/2020 18:52	WG1575337
Toluene	0.314		0.0500	0.200	1	11/12/2020 18:52	WG1575337
1,2,3-Trichlorobenzene	U		0.0250	0.500	1	11/12/2020 18:52	WG1575337
1,2,4-Trichlorobenzene	U		0.193	0.500	1	11/12/2020 18:52	WG1575337
1,1,1-Trichloroethane	U		0.0110	0.100	1	11/12/2020 18:52	WG1575337

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Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l		Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,1,2-Trichloroethane	U			0.0353	0.100	1	11/12/2020 18:52	WG1575337
Trichloroethene	U			0.0160	0.0400	1	11/12/2020 18:52	WG1575337
Trichlorofluoromethane	U			0.0200	0.100	1	11/12/2020 18:52	WG1575337
1,2,3-Trichloropropane	U			0.204	0.500	1	11/12/2020 18:52	WG1575337
1,2,4-Trimethylbenzene	U			0.0464	0.200	1	11/12/2020 18:52	WG1575337
1,2,3-Trimethylbenzene	U			0.0460	0.200	1	11/12/2020 18:52	WG1575337
1,3,5-Trimethylbenzene	U			0.0432	0.200	1	11/12/2020 18:52	WG1575337
Vinyl chloride	0.407			0.0273	0.100	1	11/12/2020 18:52	WG1575337
Xylenes, Total	U			0.191	0.260	1	11/12/2020 18:52	WG1575337
Ethyl Ether	U			0.0170	0.100	1	11/12/2020 18:52	WG1575337
Tetrahydrofuran	U			0.0900	0.500	1	11/12/2020 18:52	WG1575337
Iodomethane	U			0.242	0.500	1	11/12/2020 18:52	WG1575337
Allyl chloride	U			0.580	1.00	1	11/12/2020 18:52	WG1575337
Trans-1,4-Dichloro-2-butene	U	UJ	C4	0.0560	0.200	1	11/12/2020 18:52	WG1575337
(S) Toluene-d8	*104*				*75.0-131*		*11/12/2020 18:52*	WG1575337
(S) 4-Bromofluorobenzene	*107*				*67.0-138*		*11/12/2020 18:52*	WG1575337
(S) 1,2-Dichloroethane-d4	*104*				*70.0-130*		*11/12/2020 18:52*	WG1575337

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Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Sulfate	4670	J	594	5000	1	11/10/2020 20:17	WG1573990

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	42200		102	1000	1	11/16/2020 10:01	WG1576989

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	36600		562	2000	20	11/16/2020 14:22	WG1574832
Manganese	2030		14.1	100	20	11/16/2020 14:22	WG1574832

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	34500		2.87	6.78	10	11/14/2020 05:46	WG1576276
Ethane	940		0.296	1.29	1	11/13/2020 13:06	WG1575600
Ethene	1890		0.422	1.27	1	11/13/2020 13:06	WG1575600

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	2.40		0.548	1.00	1	11/12/2020 19:13	WG1575337
Acrylonitrile	U		0.0760	0.500	1	11/12/2020 19:13	WG1575337
Benzene	0.0909		0.0160	0.0400	1	11/12/2020 19:13	WG1575337
Bromobenzene	U		0.0420	0.500	1	11/12/2020 19:13	WG1575337
Bromodichloromethane	U		0.0315	0.100	1	11/12/2020 19:13	WG1575337
Bromoform	U		0.239	1.00	1	11/12/2020 19:13	WG1575337
Bromomethane	U		0.148	0.500	1	11/12/2020 19:13	WG1575337
n-Butylbenzene	U		0.153	0.500	1	11/12/2020 19:13	WG1575337
sec-Butylbenzene	U		0.101	0.500	1	11/12/2020 19:13	WG1575337
tert-Butylbenzene	U		0.0620	0.200	1	11/12/2020 19:13	WG1575337
Carbon tetrachloride	U		0.0432	0.200	1	11/12/2020 19:13	WG1575337
Chlorobenzene	U		0.0229	0.100	1	11/12/2020 19:13	WG1575337
Chlorodibromomethane	U		0.0180	0.100	1	11/12/2020 19:13	WG1575337
Chloroethane	U		0.0432	0.200	1	11/12/2020 19:13	WG1575337
Chloroform	U		0.0166	0.100	1	11/12/2020 19:13	WG1575337
Chloromethane	U		0.0556	0.500	1	11/12/2020 19:13	WG1575337
2-Chlorotoluene	U		0.0368	0.100	1	11/12/2020 19:13	WG1575337
4-Chlorotoluene	U		0.0452	0.200	1	11/12/2020 19:13	WG1575337
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	11/12/2020 19:13	WG1575337
1,2-Dibromoethane	U		0.0210	0.100	1	11/12/2020 19:13	WG1575337
Dibromomethane	U		0.0400	0.200	1	11/12/2020 19:13	WG1575337
1,2-Dichlorobenzene	U		0.0580	0.200	1	11/12/2020 19:13	WG1575337
1,3-Dichlorobenzene	U		0.0680	0.200	1	11/12/2020 19:13	WG1575337
1,4-Dichlorobenzene	U		0.0788	0.200	1	11/12/2020 19:13	WG1575337
Dichlorodifluoromethane	U		0.0327	0.100	1	11/12/2020 19:13	WG1575337
1,1-Dichloroethane	U		0.0230	0.100	1	11/12/2020 19:13	WG1575337
1,2-Dichloroethane	U		0.0190	0.100	1	11/12/2020 19:13	WG1575337
1,1-Dichloroethene	9.04		0.0200	0.100	1	11/12/2020 19:13	WG1575337
cis-1,2-Dichloroethene	6090		13.8	50.0	500	11/15/2020 11:04	WG1575966
trans-1,2-Dichloroethene	27.4		0.0572	0.200	1	11/12/2020 19:13	WG1575337
1,2-Dichloropropane	U		0.0508	0.200	1	11/12/2020 19:13	WG1575337

JC 12/7/2020

MW-166-110520

Collected date/time: 11/05/20 12:25

SAMPLE RESULTS - 10

L1283261

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,1-Dichloropropene	U		0.0280	0.100	1	11/12/2020 19:13	WG1575337
1,3-Dichloropropane	U		0.0700	0.200	1	11/12/2020 19:13	WG1575337
cis-1,3-Dichloropropene	U		0.0271	0.100	1	11/12/2020 19:13	WG1575337
trans-1,3-Dichloropropene	U		0.0612	0.200	1	11/12/2020 19:13	WG1575337
2,2-Dichloropropane	U		0.0317	0.100	1	11/12/2020 19:13	WG1575337
Di-isopropyl ether	U		0.0140	0.0400	1	11/12/2020 19:13	WG1575337
Ethylbenzene	U		0.0212	0.100	1	11/12/2020 19:13	WG1575337
Hexachloro-1,3-butadiene	U		0.508	1.00	1	11/12/2020 19:13	WG1575337
Isopropylbenzene	U		0.0345	0.100	1	11/12/2020 19:13	WG1575337
p-Isopropyltoluene	U		0.0932	0.200	1	11/12/2020 19:13	WG1575337
2-Butanone (MEK)	U		0.500	1.00	1	11/12/2020 19:13	WG1575337
Methylene Chloride	U		0.265	1.00	1	11/12/2020 19:13	WG1575337
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	11/12/2020 19:13	WG1575337
Methyl tert-butyl ether	U		0.0118	0.0400	1	11/12/2020 19:13	WG1575337
Naphthalene	U		0.124	0.500	1	11/12/2020 19:13	WG1575337
n-Propylbenzene	U		0.0472	0.200	1	11/12/2020 19:13	WG1575337
Styrene	U		0.109	0.500	1	11/12/2020 19:13	WG1575337
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	11/12/2020 19:13	WG1575337
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	11/12/2020 19:13	WG1575337
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	11/12/2020 19:13	WG1575337
Tetrachloroethene	U		0.0280	0.100	1	11/12/2020 19:13	WG1575337
Toluene	0.143	J	0.0500	0.200	1	11/12/2020 19:13	WG1575337
1,2,3-Trichlorobenzene	U		0.0250	0.500	1	11/12/2020 19:13	WG1575337
1,2,4-Trichlorobenzene	U		0.193	0.500	1	11/12/2020 19:13	WG1575337
1,1,1-Trichloroethane	U		0.0110	0.100	1	11/12/2020 19:13	WG1575337
1,1,2-Trichloroethane	U		0.0353	0.100	1	11/12/2020 19:13	WG1575337
Trichloroethene	0.271		0.0160	0.0400	1	11/12/2020 19:13	WG1575337
Trichlorofluoromethane	U		0.0200	0.100	1	11/12/2020 19:13	WG1575337
1,2,3-Trichloropropane	U		0.204	0.500	1	11/12/2020 19:13	WG1575337
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	11/12/2020 19:13	WG1575337
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	11/12/2020 19:13	WG1575337
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	11/12/2020 19:13	WG1575337
Vinyl chloride	3380		13.6	50.0	500	11/15/2020 11:04	WG1575966
Xylenes, Total	U		0.191	0.260	1	11/12/2020 19:13	WG1575337
Ethyl Ether	U		0.0170	0.100	1	11/12/2020 19:13	WG1575337
Tetrahydrofuran	0.855	~~B~~	0.0900	0.500	1	11/12/2020 19:13	WG1575337
Iodomethane	U		0.242	0.500	1	11/12/2020 19:13	WG1575337
Allyl chloride	U		0.580	1.00	1	11/12/2020 19:13	WG1575337
Trans-1,4-Dichloro-2-butene	U	UJ C4	0.0560	0.200	1	11/12/2020 19:13	WG1575337
(S) Toluene-d8	*104*			*75.0-131*		*11/12/2020 19:13*	WG1575337
(S) Toluene-d8	*92.8*			*75.0-131*		*11/15/2020 11:04*	WG1575966
(S) 4-Bromofluorobenzene	*107*			*67.0-138*		*11/12/2020 19:13*	WG1575337
(S) 4-Bromofluorobenzene	*111*			*67.0-138*		*11/15/2020 11:04*	WG1575966
(S) 1,2-Dichloroethane-d4	*105*			*70.0-130*		*11/12/2020 19:13*	WG1575337
(S) 1,2-Dichloroethane-d4	*105*			*70.0-130*		*11/15/2020 11:04*	WG1575966

JC 12/7/2020

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Volatile Organic Compounds (GC/MS) by Method 8260D

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Acetone	0.938	J	0.548	1.00	1	11/12/2020 19:33	WG1575337
Acrylonitrile	U		0.0760	0.500	1	11/12/2020 19:33	WG1575337
Benzene	U		0.0160	0.0400	1	11/12/2020 19:33	WG1575337
Bromobenzene	U		0.0420	0.500	1	11/12/2020 19:33	WG1575337
Bromodichloromethane	U		0.0315	0.100	1	11/12/2020 19:33	WG1575337
Bromoform	U		0.239	1.00	1	11/12/2020 19:33	WG1575337
Bromomethane	U		0.148	0.500	1	11/12/2020 19:33	WG1575337
n-Butylbenzene	U		0.153	0.500	1	11/12/2020 19:33	WG1575337
sec-Butylbenzene	U		0.101	0.500	1	11/12/2020 19:33	WG1575337
tert-Butylbenzene	U		0.0620	0.200	1	11/12/2020 19:33	WG1575337
Carbon tetrachloride	U		0.0432	0.200	1	11/12/2020 19:33	WG1575337
Chlorobenzene	U		0.0229	0.100	1	11/12/2020 19:33	WG1575337
Chlorodibromomethane	U		0.0180	0.100	1	11/12/2020 19:33	WG1575337
Chloroethane	U		0.0432	0.200	1	11/12/2020 19:33	WG1575337
Chloroform	U		0.0166	0.100	1	11/12/2020 19:33	WG1575337
Chloromethane	U		0.0556	0.500	1	11/12/2020 19:33	WG1575337
2-Chlorotoluene	U		0.0368	0.100	1	11/12/2020 19:33	WG1575337
4-Chlorotoluene	U		0.0452	0.200	1	11/12/2020 19:33	WG1575337
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	11/12/2020 19:33	WG1575337
1,2-Dibromoethane	U		0.0210	0.100	1	11/12/2020 19:33	WG1575337
Dibromomethane	U		0.0400	0.200	1	11/12/2020 19:33	WG1575337
1,2-Dichlorobenzene	U		0.0580	0.200	1	11/12/2020 19:33	WG1575337
1,3-Dichlorobenzene	U		0.0680	0.200	1	11/12/2020 19:33	WG1575337
1,4-Dichlorobenzene	U		0.0788	0.200	1	11/12/2020 19:33	WG1575337
Dichlorodifluoromethane	U		0.0327	0.100	1	11/12/2020 19:33	WG1575337
1,1-Dichloroethane	U		0.0230	0.100	1	11/12/2020 19:33	WG1575337
1,2-Dichloroethane	U		0.0190	0.100	1	11/12/2020 19:33	WG1575337
1,1-Dichloroethene	U		0.0200	0.100	1	11/12/2020 19:33	WG1575337
cis-1,2-Dichloroethene	U		0.0276	0.100	1	11/15/2020 09:22	WG1575966
trans-1,2-Dichloroethene	U		0.0572	0.200	1	11/12/2020 19:33	WG1575337
1,2-Dichloropropane	U		0.0508	0.200	1	11/12/2020 19:33	WG1575337
1,1-Dichloropropene	U		0.0280	0.100	1	11/12/2020 19:33	WG1575337
1,3-Dichloropropane	U		0.0700	0.200	1	11/12/2020 19:33	WG1575337
cis-1,3-Dichloropropene	U		0.0271	0.100	1	11/12/2020 19:33	WG1575337
trans-1,3-Dichloropropene	U		0.0612	0.200	1	11/12/2020 19:33	WG1575337
2,2-Dichloropropane	U		0.0317	0.100	1	11/12/2020 19:33	WG1575337
Di-isopropyl ether	0.217		0.0140	0.0400	1	11/12/2020 19:33	WG1575337
Ethylbenzene	U		0.0212	0.100	1	11/12/2020 19:33	WG1575337
Hexachloro-1,3-butadiene	U		0.508	1.00	1	11/12/2020 19:33	WG1575337
Isopropylbenzene	U		0.0345	0.100	1	11/12/2020 19:33	WG1575337
p-Isopropyltoluene	U		0.0932	0.200	1	11/12/2020 19:33	WG1575337
2-Butanone (MEK)	U		0.500	1.00	1	11/12/2020 19:33	WG1575337
Methylene Chloride	U		0.265	1.00	1	11/12/2020 19:33	WG1575337
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	11/12/2020 19:33	WG1575337
Methyl tert-butyl ether	U		0.0118	0.0400	1	11/12/2020 19:33	WG1575337
Naphthalene	U		0.124	0.500	1	11/12/2020 19:33	WG1575337
n-Propylbenzene	U		0.0472	0.200	1	11/12/2020 19:33	WG1575337
Styrene	U		0.109	0.500	1	11/12/2020 19:33	WG1575337
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	11/12/2020 19:33	WG1575337
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	11/12/2020 19:33	WG1575337
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	11/12/2020 19:33	WG1575337
Tetrachloroethene	U		0.0280	0.100	1	11/12/2020 19:33	WG1575337
Toluene	0.253		0.0500	0.200	1	11/12/2020 19:33	WG1575337
1,2,3-Trichlorobenzene	U		0.0250	0.500	1	11/12/2020 19:33	WG1575337
1,2,4-Trichlorobenzene	U		0.193	0.500	1	11/12/2020 19:33	WG1575337
1,1,1-Trichloroethane	U		0.0110	0.100	1	11/12/2020 19:33	WG1575337

JC 12/7/2020

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,1,2-Trichloroethane	U		0.0353	0.100	1	11/12/2020 19:33	WG1575337
Trichloroethene	U		0.0160	0.0400	1	11/12/2020 19:33	WG1575337
Trichlorofluoromethane	U		0.0200	0.100	1	11/12/2020 19:33	WG1575337
1,2,3-Trichloropropane	U		0.204	0.500	1	11/12/2020 19:33	WG1575337
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	11/12/2020 19:33	WG1575337
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	11/12/2020 19:33	WG1575337
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	11/12/2020 19:33	WG1575337
Vinyl chloride	U		0.0273	0.100	1	11/15/2020 09:22	WG1575966
Xylenes, Total	U		0.191	0.260	1	11/12/2020 19:33	WG1575337
Ethyl Ether	U		0.0170	0.100	1	11/12/2020 19:33	WG1575337
Tetrahydrofuran	U		0.0900	0.500	1	11/12/2020 19:33	WG1575337
Iodomethane	U		0.242	0.500	1	11/12/2020 19:33	WG1575337
Allyl chloride	U		0.580	1.00	1	11/12/2020 19:33	WG1575337
Trans-1,4-Dichloro-2-butene	U UJ	C4	0.0560	0.200	1	11/12/2020 19:33	WG1575337
(S) Toluene-d8	*104*			*75.0-131*		*11/12/2020 19:33*	WG1575337
(S) Toluene-d8	*104*			*75.0-131*		*11/15/2020 09:22*	WG1575966
(S) 4-Bromofluorobenzene	*105*			*67.0-138*		*11/12/2020 19:33*	WG1575337
(S) 4-Bromofluorobenzene	*108*			*67.0-138*		*11/15/2020 09:22*	WG1575966
(S) 1,2-Dichloroethane-d4	*103*			*70.0-130*		*11/12/2020 19:33*	WG1575337
(S) 1,2-Dichloroethane-d4	*104*			*70.0-130*		*11/15/2020 09:22*	WG1575966

JC 12/7/2020

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	0.643	J	0.548	1.00	1	11/12/2020 19:54	WG1575337
Acrylonitrile	U		0.0760	0.500	1	11/12/2020 19:54	WG1575337
Benzene	U		0.0160	0.0400	1	11/12/2020 19:54	WG1575337
Bromobenzene	U		0.0420	0.500	1	11/12/2020 19:54	WG1575337
Bromodichloromethane	U		0.0315	0.100	1	11/12/2020 19:54	WG1575337
Bromoform	U		0.239	1.00	1	11/12/2020 19:54	WG1575337
Bromomethane	U		0.148	0.500	1	11/12/2020 19:54	WG1575337
n-Butylbenzene	U		0.153	0.500	1	11/12/2020 19:54	WG1575337
sec-Butylbenzene	U		0.101	0.500	1	11/12/2020 19:54	WG1575337
tert-Butylbenzene	U		0.0620	0.200	1	11/12/2020 19:54	WG1575337
Carbon tetrachloride	U		0.0432	0.200	1	11/12/2020 19:54	WG1575337
Chlorobenzene	U		0.0229	0.100	1	11/12/2020 19:54	WG1575337
Chlorodibromomethane	U		0.0180	0.100	1	11/12/2020 19:54	WG1575337
Chloroethane	U		0.0432	0.200	1	11/12/2020 19:54	WG1575337
Chloroform	U		0.0166	0.100	1	11/12/2020 19:54	WG1575337
Chloromethane	U		0.0556	0.500	1	11/12/2020 19:54	WG1575337
2-Chlorotoluene	U		0.0368	0.100	1	11/12/2020 19:54	WG1575337
4-Chlorotoluene	U		0.0452	0.200	1	11/12/2020 19:54	WG1575337
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	11/12/2020 19:54	WG1575337
1,2-Dibromoethane	U		0.0210	0.100	1	11/12/2020 19:54	WG1575337
Dibromomethane	U		0.0400	0.200	1	11/12/2020 19:54	WG1575337
1,2-Dichlorobenzene	U		0.0580	0.200	1	11/12/2020 19:54	WG1575337
1,3-Dichlorobenzene	U		0.0680	0.200	1	11/12/2020 19:54	WG1575337
1,4-Dichlorobenzene	U		0.0788	0.200	1	11/12/2020 19:54	WG1575337
Dichlorodifluoromethane	U		0.0327	0.100	1	11/12/2020 19:54	WG1575337
1,1-Dichloroethane	U		0.0230	0.100	1	11/12/2020 19:54	WG1575337
1,2-Dichloroethane	U		0.0190	0.100	1	11/12/2020 19:54	WG1575337
1,1-Dichloroethene	U		0.0200	0.100	1	11/12/2020 19:54	WG1575337
cis-1,2-Dichloroethene	U		0.0276	0.100	1	11/15/2020 09:42	WG1575966
trans-1,2-Dichloroethene	U		0.0572	0.200	1	11/12/2020 19:54	WG1575337
1,2-Dichloropropane	U		0.0508	0.200	1	11/12/2020 19:54	WG1575337
1,1-Dichloropropene	U		0.0280	0.100	1	11/12/2020 19:54	WG1575337
1,3-Dichloropropane	U		0.0700	0.200	1	11/12/2020 19:54	WG1575337
cis-1,3-Dichloropropene	U		0.0271	0.100	1	11/12/2020 19:54	WG1575337
trans-1,3-Dichloropropene	U		0.0612	0.200	1	11/12/2020 19:54	WG1575337
2,2-Dichloropropane	U		0.0317	0.100	1	11/12/2020 19:54	WG1575337
Di-isopropyl ether	U		0.0140	0.0400	1	11/12/2020 19:54	WG1575337
Ethylbenzene	U		0.0212	0.100	1	11/12/2020 19:54	WG1575337
Hexachloro-1,3-butadiene	U		0.508	1.00	1	11/12/2020 19:54	WG1575337
Isopropylbenzene	U		0.0345	0.100	1	11/12/2020 19:54	WG1575337
p-Isopropyltoluene	U		0.0932	0.200	1	11/12/2020 19:54	WG1575337
2-Butanone (MEK)	U		0.500	1.00	1	11/12/2020 19:54	WG1575337
Methylene Chloride	U		0.265	1.00	1	11/12/2020 19:54	WG1575337
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	11/12/2020 19:54	WG1575337
Methyl tert-butyl ether	U		0.0118	0.0400	1	11/12/2020 19:54	WG1575337
Naphthalene	U		0.124	0.500	1	11/12/2020 19:54	WG1575337
n-Propylbenzene	U		0.0472	0.200	1	11/12/2020 19:54	WG1575337
Styrene	U		0.109	0.500	1	11/12/2020 19:54	WG1575337
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	11/12/2020 19:54	WG1575337
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	11/12/2020 19:54	WG1575337
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	11/12/2020 19:54	WG1575337
Tetrachloroethene	U		0.0280	0.100	1	11/12/2020 19:54	WG1575337
Toluene	0.427		0.0500	0.200	1	11/12/2020 19:54	WG1575337
1,2,3-Trichlorobenzene	U		0.0250	0.500	1	11/12/2020 19:54	WG1575337
1,2,4-Trichlorobenzene	U		0.193	0.500	1	11/12/2020 19:54	WG1575337
1,1,1-Trichloroethane	U		0.0110	0.100	1	11/12/2020 19:54	WG1575337

JC 12/7/2020

MW-307-110620

Collected date/time: 11/06/20 09:45

SAMPLE RESULTS - 01

L1283292

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,1,2-Trichloroethane	U		0.0353	0.100	1	11/12/2020 19:54	WG1575337
Trichloroethene	U		0.0160	0.0400	1	11/12/2020 19:54	WG1575337
Trichlorofluoromethane	U		0.0200	0.100	1	11/12/2020 19:54	WG1575337
1,2,3-Trichloropropane	U		0.204	0.500	1	11/12/2020 19:54	WG1575337
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	11/12/2020 19:54	WG1575337
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	11/12/2020 19:54	WG1575337
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	11/12/2020 19:54	WG1575337
Vinyl chloride	U		0.0273	0.100	1	11/15/2020 09:42	WG1575966
Xylenes, Total	U		0.191	0.260	1	11/12/2020 19:54	WG1575337
Ethyl Ether	U		0.0170	0.100	1	11/12/2020 19:54	WG1575337
Tetrahydrofuran	U		0.0900	0.500	1	11/12/2020 19:54	WG1575337
Iodomethane	U		0.242	0.500	1	11/12/2020 19:54	WG1575337
Allyl chloride	U		0.580	1.00	1	11/12/2020 19:54	WG1575337
Trans-1,4-Dichloro-2-butene	U	UJ ~~C4~~	0.0560	0.200	1	11/12/2020 19:54	WG1575337
(S) Toluene-d8	*103*			*75.0-131*		*11/12/2020 19:54*	WG1575337
(S) Toluene-d8	*104*			*75.0-131*		*11/15/2020 09:42*	WG1575966
(S) 4-Bromofluorobenzene	*106*			*67.0-138*		*11/12/2020 19:54*	WG1575337
(S) 4-Bromofluorobenzene	*108*			*67.0-138*		*11/15/2020 09:42*	WG1575966
(S) 1,2-Dichloroethane-d4	*104*			*70.0-130*		*11/12/2020 19:54*	WG1575337
(S) 1,2-Dichloroethane-d4	*103*			*70.0-130*		*11/15/2020 09:42*	WG1575966

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

JC 12/7/2020

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	0.854	J	0.548	1.00	1	11/12/2020 20:14	WG1575337
Acrylonitrile	U		0.0760	0.500	1	11/12/2020 20:14	WG1575337
Benzene	U		0.0160	0.0400	1	11/12/2020 20:14	WG1575337
Bromobenzene	U		0.0420	0.500	1	11/12/2020 20:14	WG1575337
Bromodichloromethane	U		0.0315	0.100	1	11/12/2020 20:14	WG1575337
Bromoform	U		0.239	1.00	1	11/12/2020 20:14	WG1575337
Bromomethane	U		0.148	0.500	1	11/12/2020 20:14	WG1575337
n-Butylbenzene	U		0.153	0.500	1	11/12/2020 20:14	WG1575337
sec-Butylbenzene	U		0.101	0.500	1	11/12/2020 20:14	WG1575337
tert-Butylbenzene	U		0.0620	0.200	1	11/12/2020 20:14	WG1575337
Carbon tetrachloride	U		0.0432	0.200	1	11/12/2020 20:14	WG1575337
Chlorobenzene	U		0.0229	0.100	1	11/12/2020 20:14	WG1575337
Chlorodibromomethane	U		0.0180	0.100	1	11/12/2020 20:14	WG1575337
Chloroethane	U		0.0432	0.200	1	11/12/2020 20:14	WG1575337
Chloroform	U		0.0166	0.100	1	11/12/2020 20:14	WG1575337
Chloromethane	U		0.0556	0.500	1	11/12/2020 20:14	WG1575337
2-Chlorotoluene	U		0.0368	0.100	1	11/12/2020 20:14	WG1575337
4-Chlorotoluene	U		0.0452	0.200	1	11/12/2020 20:14	WG1575337
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	11/12/2020 20:14	WG1575337
1,2-Dibromoethane	U		0.0210	0.100	1	11/12/2020 20:14	WG1575337
Dibromomethane	U		0.0400	0.200	1	11/12/2020 20:14	WG1575337
1,2-Dichlorobenzene	U		0.0580	0.200	1	11/12/2020 20:14	WG1575337
1,3-Dichlorobenzene	U		0.0680	0.200	1	11/12/2020 20:14	WG1575337
1,4-Dichlorobenzene	U		0.0788	0.200	1	11/12/2020 20:14	WG1575337
Dichlorodifluoromethane	U		0.0327	0.100	1	11/12/2020 20:14	WG1575337
1,1-Dichloroethane	U		0.0230	0.100	1	11/12/2020 20:14	WG1575337
1,2-Dichloroethane	U		0.0190	0.100	1	11/12/2020 20:14	WG1575337
1,1-Dichloroethene	U		0.0200	0.100	1	11/12/2020 20:14	WG1575337
cis-1,2-Dichloroethene	U		0.0276	0.100	1	11/15/2020 10:03	WG1575966
trans-1,2-Dichloroethene	U		0.0572	0.200	1	11/12/2020 20:14	WG1575337
1,2-Dichloropropane	U		0.0508	0.200	1	11/12/2020 20:14	WG1575337
1,1-Dichloropropene	U		0.0280	0.100	1	11/12/2020 20:14	WG1575337
1,3-Dichloropropane	U		0.0700	0.200	1	11/12/2020 20:14	WG1575337
cis-1,3-Dichloropropene	U		0.0271	0.100	1	11/12/2020 20:14	WG1575337
trans-1,3-Dichloropropene	U		0.0612	0.200	1	11/12/2020 20:14	WG1575337
2,2-Dichloropropane	U		0.0317	0.100	1	11/12/2020 20:14	WG1575337
Di-isopropyl ether	U		0.0140	0.0400	1	11/12/2020 20:14	WG1575337
Ethylbenzene	U		0.0212	0.100	1	11/12/2020 20:14	WG1575337
Hexachloro-1,3-butadiene	U		0.508	1.00	1	11/12/2020 20:14	WG1575337
Isopropylbenzene	U		0.0345	0.100	1	11/12/2020 20:14	WG1575337
p-Isopropyltoluene	U		0.0932	0.200	1	11/12/2020 20:14	WG1575337
2-Butanone (MEK)	U		0.500	1.00	1	11/12/2020 20:14	WG1575337
Methylene Chloride	U		0.265	1.00	1	11/12/2020 20:14	WG1575337
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	11/12/2020 20:14	WG1575337
Methyl tert-butyl ether	U		0.0118	0.0400	1	11/12/2020 20:14	WG1575337
Naphthalene	U		0.124	0.500	1	11/12/2020 20:14	WG1575337
n-Propylbenzene	U		0.0472	0.200	1	11/12/2020 20:14	WG1575337
Styrene	U		0.109	0.500	1	11/12/2020 20:14	WG1575337
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	11/12/2020 20:14	WG1575337
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	11/12/2020 20:14	WG1575337
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	11/12/2020 20:14	WG1575337
Tetrachloroethene	U		0.0280	0.100	1	11/12/2020 20:14	WG1575337
Toluene	U		0.0500	0.200	1	11/12/2020 20:14	WG1575337
1,2,3-Trichlorobenzene	U		0.0250	0.500	1	11/12/2020 20:14	WG1575337
1,2,4-Trichlorobenzene	U		0.193	0.500	1	11/12/2020 20:14	WG1575337
1,1,1-Trichloroethane	U		0.0110	0.100	1	11/12/2020 20:14	WG1575337

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Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,1,2-Trichloroethane	U		0.0353	0.100	1	11/12/2020 20:14	WG1575337
Trichloroethene	U		0.0160	0.0400	1	11/12/2020 20:14	WG1575337
Trichlorofluoromethane	U		0.0200	0.100	1	11/12/2020 20:14	WG1575337
1,2,3-Trichloropropane	U		0.204	0.500	1	11/12/2020 20:14	WG1575337
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	11/12/2020 20:14	WG1575337
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	11/12/2020 20:14	WG1575337
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	11/12/2020 20:14	WG1575337
Vinyl chloride	U		0.0273	0.100	1	11/15/2020 10:03	WG1575966
Xylenes, Total	U		0.191	0.260	1	11/12/2020 20:14	WG1575337
Ethyl Ether	U		0.0170	0.100	1	11/12/2020 20:14	WG1575337
Tetrahydrofuran	U		0.0900	0.500	1	11/12/2020 20:14	WG1575337
Iodomethane	U		0.242	0.500	1	11/12/2020 20:14	WG1575337
Allyl chloride	U		0.580	1.00	1	11/12/2020 20:14	WG1575337
Trans-1,4-Dichloro-2-butene	U UJ	~~C4~~	0.0560	0.200	1	11/12/2020 20:14	WG1575337
(S) Toluene-d8	*104*			*75.0-131*		*11/12/2020 20:14*	WG1575337
(S) Toluene-d8	*103*			*75.0-131*		*11/15/2020 10:03*	WG1575966
(S) 4-Bromofluorobenzene	*106*			*67.0-138*		*11/12/2020 20:14*	WG1575337
(S) 4-Bromofluorobenzene	*109*			*67.0-138*		*11/15/2020 10:03*	WG1575966
(S) 1,2-Dichloroethane-d4	*106*			*70.0-130*		*11/12/2020 20:14*	WG1575337
(S) 1,2-Dichloroethane-d4	*105*			*70.0-130*		*11/15/2020 10:03*	WG1575966

JC 12/7/2020

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U UJ	C3	0.548	1.00	1	11/15/2020 15:26	WG1576904
Acrylonitrile	U		0.0760	0.500	1	11/15/2020 15:26	WG1576904
Benzene	38.4		0.0160	0.0400	1	11/15/2020 15:26	WG1576904
Bromobenzene	U		0.0420	0.500	1	11/15/2020 15:26	WG1576904
Bromodichloromethane	U		0.0315	0.100	1	11/15/2020 15:26	WG1576904
Bromoform	U		0.239	1.00	1	11/15/2020 15:26	WG1576904
Bromomethane	U	~~J4~~	0.148	0.500	1	11/15/2020 15:26	WG1576904
n-Butylbenzene	U		0.153	0.500	1	11/15/2020 15:26	WG1576904
sec-Butylbenzene	0.159	J	0.101	0.500	1	11/15/2020 15:26	WG1576904
tert-Butylbenzene	U		0.0620	0.200	1	11/15/2020 15:26	WG1576904
Carbon tetrachloride	U		0.0432	0.200	1	11/15/2020 15:26	WG1576904
Chlorobenzene	U		0.0229	0.100	1	11/15/2020 15:26	WG1576904
Chlorodibromomethane	U		0.0180	0.100	1	11/15/2020 15:26	WG1576904
Chloroethane	U	~~J4~~	0.0432	0.200	1	11/15/2020 15:26	WG1576904
Chloroform	U		0.0166	0.100	1	11/15/2020 15:26	WG1576904
Chloromethane	U		0.0556	0.500	1	11/15/2020 15:26	WG1576904
2-Chlorotoluene	U		0.0368	0.100	1	11/15/2020 15:26	WG1576904
4-Chlorotoluene	U		0.0452	0.200	1	11/15/2020 15:26	WG1576904
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	11/15/2020 15:26	WG1576904
1,2-Dibromoethane	U		0.0210	0.100	1	11/15/2020 15:26	WG1576904
Dibromomethane	U		0.0400	0.200	1	11/15/2020 15:26	WG1576904
1,2-Dichlorobenzene	U		0.0580	0.200	1	11/15/2020 15:26	WG1576904
1,3-Dichlorobenzene	U		0.0680	0.200	1	11/15/2020 15:26	WG1576904
1,4-Dichlorobenzene	U		0.0788	0.200	1	11/15/2020 15:26	WG1576904
Dichlorodifluoromethane	U		0.0327	0.100	1	11/15/2020 15:26	WG1576904
1,1-Dichloroethane	U		0.0230	0.100	1	11/15/2020 15:26	WG1576904
1,2-Dichloroethane	U		0.0190	0.100	1	11/15/2020 15:26	WG1576904
1,1-Dichloroethene	U		0.0200	0.100	1	11/15/2020 15:26	WG1576904
cis-1,2-Dichloroethene	6.38		0.0276	0.100	1	11/15/2020 15:26	WG1576904
trans-1,2-Dichloroethene	0.260		0.0572	0.200	1	11/15/2020 15:26	WG1576904
1,2-Dichloropropane	U		0.0508	0.200	1	11/15/2020 15:26	WG1576904
1,1-Dichloropropene	U		0.0280	0.100	1	11/15/2020 15:26	WG1576904
1,3-Dichloropropane	U		0.0700	0.200	1	11/15/2020 15:26	WG1576904
cis-1,3-Dichloropropene	U		0.0271	0.100	1	11/15/2020 15:26	WG1576904
trans-1,3-Dichloropropene	U		0.0612	0.200	1	11/15/2020 15:26	WG1576904
2,2-Dichloropropane	U		0.0317	0.100	1	11/15/2020 15:26	WG1576904
Di-isopropyl ether	0.245		0.0140	0.0400	1	11/15/2020 15:26	WG1576904
Ethylbenzene	0.115		0.0212	0.100	1	11/15/2020 15:26	WG1576904
Hexachloro-1,3-butadiene	U		0.508	1.00	1	11/15/2020 15:26	WG1576904
Isopropylbenzene	5.05		0.0345	0.100	1	11/15/2020 15:26	WG1576904
p-Isopropyltoluene	U		0.0932	0.200	1	11/15/2020 15:26	WG1576904
2-Butanone (MEK)	U		0.500	1.00	1	11/15/2020 15:26	WG1576904
Methylene Chloride	U		0.265	1.00	1	11/15/2020 15:26	WG1576904
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	11/15/2020 15:26	WG1576904
Methyl tert-butyl ether	U		0.0118	0.0400	1	11/15/2020 15:26	WG1576904
Naphthalene	U		0.124	0.500	1	11/15/2020 15:26	WG1576904
n-Propylbenzene	0.845		0.0472	0.200	1	11/15/2020 15:26	WG1576904
Styrene	U		0.109	0.500	1	11/15/2020 15:26	WG1576904
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	11/15/2020 15:26	WG1576904
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	11/15/2020 15:26	WG1576904
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	11/15/2020 15:26	WG1576904
Tetrachloroethene	0.0324	J	0.0280	0.100	1	11/15/2020 15:26	WG1576904
Toluene	0.480		0.0500	0.200	1	11/15/2020 15:26	WG1576904
1,2,3-Trichlorobenzene	U UJ	~~C4~~	0.0250	0.500	1	11/15/2020 15:26	WG1576904
1,2,4-Trichlorobenzene	U		0.193	0.500	1	11/15/2020 15:26	WG1576904
1,1,1-Trichloroethane	U		0.0110	0.100	1	11/15/2020 15:26	WG1576904

JC 12/7/2020

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l		Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,1,2-Trichloroethane	U			0.0353	0.100	1	11/15/2020 15:26	WG1576904
Trichloroethene	U			0.0160	0.0400	1	11/15/2020 15:26	WG1576904
Trichlorofluoromethane	U			0.0200	0.100	1	11/15/2020 15:26	WG1576904
1,2,3-Trichloropropane	U			0.204	0.500	1	11/15/2020 15:26	WG1576904
1,2,4-Trimethylbenzene	0.0797	U	~~B J~~	0.0464	0.200	1	11/15/2020 15:26	WG1576904
1,2,3-Trimethylbenzene	0.106		J	0.0460	0.200	1	11/15/2020 15:26	WG1576904
1,3,5-Trimethylbenzene	U			0.0432	0.200	1	11/15/2020 15:26	WG1576904
Vinyl chloride	2.73			0.0273	0.100	1	11/17/2020 04:11	WG1577289
Xylenes, Total	0.516			0.191	0.260	1	11/15/2020 15:26	WG1576904
Ethyl Ether	0.356			0.0170	0.100	1	11/15/2020 15:26	WG1576904
Tetrahydrofuran	U	UJ	C3	0.0900	0.500	1	11/15/2020 15:26	WG1576904
Iodomethane	U			0.242	0.500	1	11/15/2020 15:26	WG1576904
Allyl chloride	U			0.580	1.00	1	11/15/2020 15:26	WG1576904
Trans-1,4-Dichloro-2-butene	U	UJ	C3	0.0560	0.200	1	11/15/2020 15:26	WG1576904
(S) Toluene-d8	*106*				*75.0-131*		*11/15/2020 15:26*	WG1576904
(S) Toluene-d8	*104*				*75.0-131*		*11/17/2020 04:11*	WG1577289
(S) 4-Bromofluorobenzene	*110*				*67.0-138*		*11/15/2020 15:26*	WG1576904
(S) 4-Bromofluorobenzene	*98.8*				*67.0-138*		*11/17/2020 04:11*	WG1577289
(S) 1,2-Dichloroethane-d4	*106*				*70.0-130*		*11/15/2020 15:26*	WG1576904
(S) 1,2-Dichloroethane-d4	*94.6*				*70.0-130*		*11/17/2020 04:11*	WG1577289

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Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U	UJ C3	0.548	1.00	1	11/15/2020 15:46	WG1576904
Acrylonitrile	U		0.0760	0.500	1	11/15/2020 15:46	WG1576904
Benzene	0.0314	J	0.0160	0.0400	1	11/15/2020 15:46	WG1576904
Bromobenzene	U		0.0420	0.500	1	11/15/2020 15:46	WG1576904
Bromodichloromethane	U		0.0315	0.100	1	11/15/2020 15:46	WG1576904
Bromoform	U		0.239	1.00	1	11/15/2020 15:46	WG1576904
Bromomethane	U	~~J4~~	0.148	0.500	1	11/15/2020 15:46	WG1576904
n-Butylbenzene	U		0.153	0.500	1	11/15/2020 15:46	WG1576904
sec-Butylbenzene	U		0.101	0.500	1	11/15/2020 15:46	WG1576904
tert-Butylbenzene	U		0.0620	0.200	1	11/15/2020 15:46	WG1576904
Carbon tetrachloride	0.118	J	0.0432	0.200	1	11/15/2020 15:46	WG1576904
Chlorobenzene	U		0.0229	0.100	1	11/15/2020 15:46	WG1576904
Chlorodibromomethane	U		0.0180	0.100	1	11/15/2020 15:46	WG1576904
Chloroethane	U	~~J4~~	0.0432	0.200	1	11/15/2020 15:46	WG1576904
Chloroform	0.0515	J	0.0166	0.100	1	11/15/2020 15:46	WG1576904
Chloromethane	U		0.0556	0.500	1	11/15/2020 15:46	WG1576904
2-Chlorotoluene	U		0.0368	0.100	1	11/15/2020 15:46	WG1576904
4-Chlorotoluene	U		0.0452	0.200	1	11/15/2020 15:46	WG1576904
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	11/15/2020 15:46	WG1576904
1,2-Dibromoethane	U		0.0210	0.100	1	11/15/2020 15:46	WG1576904
Dibromomethane	U		0.0400	0.200	1	11/15/2020 15:46	WG1576904
1,2-Dichlorobenzene	U		0.0580	0.200	1	11/15/2020 15:46	WG1576904
1,3-Dichlorobenzene	U		0.0680	0.200	1	11/15/2020 15:46	WG1576904
1,4-Dichlorobenzene	U		0.0788	0.200	1	11/15/2020 15:46	WG1576904
Dichlorodifluoromethane	U		0.0327	0.100	1	11/15/2020 15:46	WG1576904
1,1-Dichloroethane	U		0.0230	0.100	1	11/15/2020 15:46	WG1576904
1,2-Dichloroethane	U		0.0190	0.100	1	11/15/2020 15:46	WG1576904
1,1-Dichloroethene	U		0.0200	0.100	1	11/15/2020 15:46	WG1576904
cis-1,2-Dichloroethene	0.107		0.0276	0.100	1	11/15/2020 15:46	WG1576904
trans-1,2-Dichloroethene	U		0.0572	0.200	1	11/15/2020 15:46	WG1576904
1,2-Dichloropropane	U		0.0508	0.200	1	11/15/2020 15:46	WG1576904
1,1-Dichloropropene	U		0.0280	0.100	1	11/15/2020 15:46	WG1576904
1,3-Dichloropropane	U		0.0700	0.200	1	11/15/2020 15:46	WG1576904
cis-1,3-Dichloropropene	U		0.0271	0.100	1	11/15/2020 15:46	WG1576904
trans-1,3-Dichloropropene	U		0.0612	0.200	1	11/15/2020 15:46	WG1576904
2,2-Dichloropropane	U		0.0317	0.100	1	11/15/2020 15:46	WG1576904
Di-isopropyl ether	U		0.0140	0.0400	1	11/15/2020 15:46	WG1576904
Ethylbenzene	U		0.0212	0.100	1	11/15/2020 15:46	WG1576904
Hexachloro-1,3-butadiene	U		0.508	1.00	1	11/15/2020 15:46	WG1576904
Isopropylbenzene	0.0704	J	0.0345	0.100	1	11/15/2020 15:46	WG1576904
p-Isopropyltoluene	U		0.0932	0.200	1	11/15/2020 15:46	WG1576904
2-Butanone (MEK)	U		0.500	1.00	1	11/15/2020 15:46	WG1576904
Methylene Chloride	U		0.265	1.00	1	11/15/2020 15:46	WG1576904
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	11/15/2020 15:46	WG1576904
Methyl tert-butyl ether	U		0.0118	0.0400	1	11/15/2020 15:46	WG1576904
Naphthalene	U		0.124	0.500	1	11/15/2020 15:46	WG1576904
n-Propylbenzene	U		0.0472	0.200	1	11/15/2020 15:46	WG1576904
Styrene	U		0.109	0.500	1	11/15/2020 15:46	WG1576904
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	11/15/2020 15:46	WG1576904
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	11/15/2020 15:46	WG1576904
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	11/15/2020 15:46	WG1576904
Tetrachloroethene	U		0.0280	0.100	1	11/15/2020 15:46	WG1576904
Toluene	0.234		0.0500	0.200	1	11/15/2020 15:46	WG1576904
1,2,3-Trichlorobenzene	U	UJ J0	0.0250	0.500	1	11/15/2020 15:46	WG1576904
1,2,4-Trichlorobenzene	U		0.193	0.500	1	11/15/2020 15:46	WG1576904
1,1,1-Trichloroethane	U		0.0110	0.100	1	11/15/2020 15:46	WG1576904

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Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,1,2-Trichloroethane	U		0.0353	0.100	1	11/15/2020 15:46	WG1576904
Trichloroethene	U		0.0160	0.0400	1	11/15/2020 15:46	WG1576904
Trichlorofluoromethane	U		0.0200	0.100	1	11/15/2020 15:46	WG1576904
1,2,3-Trichloropropane	U		0.204	0.500	1	11/15/2020 15:46	WG1576904
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	11/15/2020 15:46	WG1576904
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	11/15/2020 15:46	WG1576904
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	11/15/2020 15:46	WG1576904
Vinyl chloride	U		0.0273	0.100	1	11/17/2020 04:30	WG1577289
Xylenes, Total	U		0.191	0.260	1	11/15/2020 15:46	WG1576904
Ethyl Ether	U		0.0170	0.100	1	11/15/2020 15:46	WG1576904
Tetrahydrofuran	U UJ	C3	0.0900	0.500	1	11/15/2020 15:46	WG1576904
Iodomethane	U		0.242	0.500	1	11/15/2020 15:46	WG1576904
Allyl chloride	U		0.580	1.00	1	11/15/2020 15:46	WG1576904
Trans-1,4-Dichloro-2-butene	U UJ	C3	0.0560	0.200	1	11/15/2020 15:46	WG1576904
(S) Toluene-d8	*104*			*75.0-131*		*11/15/2020 15:46*	WG1576904
(S) Toluene-d8	*106*			*75.0-131*		*11/17/2020 04:30*	WG1577289
(S) 4-Bromofluorobenzene	*108*			*67.0-138*		*11/15/2020 15:46*	WG1576904
(S) 4-Bromofluorobenzene	*97.6*			*67.0-138*		*11/17/2020 04:30*	WG1577289
(S) 1,2-Dichloroethane-d4	*107*			*70.0-130*		*11/15/2020 15:46*	WG1576904
(S) 1,2-Dichloroethane-d4	*90.3*			*70.0-130*		*11/17/2020 04:30*	WG1577289

JC 12/7/2020

MW-306-110620

Collected date/time: 11/06/20 13:00

SAMPLE RESULTS - 05

L1283292

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U UJ	C3	0.548	1.00	1	11/15/2020 16:07	WG1576904
Acrylonitrile	U		0.0760	0.500	1	11/15/2020 16:07	WG1576904
Benzene	U		0.0160	0.0400	1	11/15/2020 16:07	WG1576904
Bromobenzene	U		0.0420	0.500	1	11/15/2020 16:07	WG1576904
Bromodichloromethane	U		0.0315	0.100	1	11/15/2020 16:07	WG1576904
Bromoform	U		0.239	1.00	1	11/15/2020 16:07	WG1576904
Bromomethane	U	~~J4~~	0.148	0.500	1	11/15/2020 16:07	WG1576904
n-Butylbenzene	U		0.153	0.500	1	11/15/2020 16:07	WG1576904
sec-Butylbenzene	U		0.101	0.500	1	11/15/2020 16:07	WG1576904
tert-Butylbenzene	U		0.0620	0.200	1	11/15/2020 16:07	WG1576904
Carbon tetrachloride	U		0.0432	0.200	1	11/15/2020 16:07	WG1576904
Chlorobenzene	U		0.0229	0.100	1	11/15/2020 16:07	WG1576904
Chlorodibromomethane	U		0.0180	0.100	1	11/15/2020 16:07	WG1576904
Chloroethane	U	~~J4~~	0.0432	0.200	1	11/15/2020 16:07	WG1576904
Chloroform	U		0.0166	0.100	1	11/15/2020 16:07	WG1576904
Chloromethane	U		0.0556	0.500	1	11/15/2020 16:07	WG1576904
2-Chlorotoluene	U		0.0368	0.100	1	11/15/2020 16:07	WG1576904
4-Chlorotoluene	U		0.0452	0.200	1	11/15/2020 16:07	WG1576904
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	11/15/2020 16:07	WG1576904
1,2-Dibromoethane	U		0.0210	0.100	1	11/15/2020 16:07	WG1576904
Dibromomethane	U		0.0400	0.200	1	11/15/2020 16:07	WG1576904
1,2-Dichlorobenzene	U		0.0580	0.200	1	11/15/2020 16:07	WG1576904
1,3-Dichlorobenzene	U		0.0680	0.200	1	11/15/2020 16:07	WG1576904
1,4-Dichlorobenzene	U		0.0788	0.200	1	11/15/2020 16:07	WG1576904
Dichlorodifluoromethane	U		0.0327	0.100	1	11/15/2020 16:07	WG1576904
1,1-Dichloroethane	U		0.0230	0.100	1	11/15/2020 16:07	WG1576904
1,2-Dichloroethane	U		0.0190	0.100	1	11/15/2020 16:07	WG1576904
1,1-Dichloroethene	U		0.0200	0.100	1	11/15/2020 16:07	WG1576904
cis-1,2-Dichloroethene	0.0418	J	0.0276	0.100	1	11/15/2020 16:07	WG1576904
trans-1,2-Dichloroethene	U		0.0572	0.200	1	11/15/2020 16:07	WG1576904
1,2-Dichloropropane	U		0.0508	0.200	1	11/15/2020 16:07	WG1576904
1,1-Dichloropropene	U		0.0280	0.100	1	11/15/2020 16:07	WG1576904
1,3-Dichloropropane	U		0.0700	0.200	1	11/15/2020 16:07	WG1576904
cis-1,3-Dichloropropene	U		0.0271	0.100	1	11/15/2020 16:07	WG1576904
trans-1,3-Dichloropropene	U		0.0612	0.200	1	11/15/2020 16:07	WG1576904
2,2-Dichloropropane	U		0.0317	0.100	1	11/15/2020 16:07	WG1576904
Di-isopropyl ether	U		0.0140	0.0400	1	11/15/2020 16:07	WG1576904
Ethylbenzene	U		0.0212	0.100	1	11/15/2020 16:07	WG1576904
Hexachloro-1,3-butadiene	U		0.508	1.00	1	11/15/2020 16:07	WG1576904
Isopropylbenzene	U		0.0345	0.100	1	11/15/2020 16:07	WG1576904
p-Isopropyltoluene	U		0.0932	0.200	1	11/15/2020 16:07	WG1576904
2-Butanone (MEK)	U		0.500	1.00	1	11/15/2020 16:07	WG1576904
Methylene Chloride	U		0.265	1.00	1	11/15/2020 16:07	WG1576904
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	11/15/2020 16:07	WG1576904
Methyl tert-butyl ether	U		0.0118	0.0400	1	11/15/2020 16:07	WG1576904
Naphthalene	U		0.124	0.500	1	11/15/2020 16:07	WG1576904
n-Propylbenzene	U		0.0472	0.200	1	11/15/2020 16:07	WG1576904
Styrene	U		0.109	0.500	1	11/15/2020 16:07	WG1576904
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	11/15/2020 16:07	WG1576904
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	11/15/2020 16:07	WG1576904
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	11/15/2020 16:07	WG1576904
Tetrachloroethene	U		0.0280	0.100	1	11/15/2020 16:07	WG1576904
Toluene	0.182	J	0.0500	0.200	1	11/15/2020 16:07	WG1576904
1,2,3-Trichlorobenzene	U UJ	~~C4~~	0.0250	0.500	1	11/15/2020 16:07	WG1576904
1,2,4-Trichlorobenzene	U		0.193	0.500	1	11/15/2020 16:07	WG1576904
1,1,1-Trichloroethane	U		0.0110	0.100	1	11/15/2020 16:07	WG1576904

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Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,1,2-Trichloroethane	U		0.0353	0.100	1	11/15/2020 16:07	WG1576904
Trichloroethene	U		0.0160	0.0400	1	11/15/2020 16:07	WG1576904
Trichlorofluoromethane	U		0.0200	0.100	1	11/15/2020 16:07	WG1576904
1,2,3-Trichloropropane	U		0.204	0.500	1	11/15/2020 16:07	WG1576904
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	11/15/2020 16:07	WG1576904
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	11/15/2020 16:07	WG1576904
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	11/15/2020 16:07	WG1576904
Vinyl chloride	U	~~J4~~	0.0273	0.100	1	11/15/2020 16:07	WG1576904
Xylenes, Total	U		0.191	0.260	1	11/15/2020 16:07	WG1576904
Ethyl Ether	U		0.0170	0.100	1	11/15/2020 16:07	WG1576904
Tetrahydrofuran	U UJ	C3	0.0900	0.500	1	11/15/2020 16:07	WG1576904
Iodomethane	U		0.242	0.500	1	11/15/2020 16:07	WG1576904
Allyl chloride	U		0.580	1.00	1	11/15/2020 16:07	WG1576904
Trans-1,4-Dichloro-2-butene	U UJ	C3	0.0560	0.200	1	11/15/2020 16:07	WG1576904
(S) Toluene-d8	*104*			*75.0-131*		*11/15/2020 16:07*	WG1576904
(S) 4-Bromofluorobenzene	*107*			*67.0-138*		*11/15/2020 16:07*	WG1576904
(S) 1,2-Dichloroethane-d4	*106*			*70.0-130*		*11/15/2020 16:07*	WG1576904

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

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Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	0.582 J	C3 J	0.548	1.00	1	11/15/2020 16:28	WG1576904
Acrylonitrile	U		0.0760	0.500	1	11/15/2020 16:28	WG1576904
Benzene	0.473		0.0160	0.0400	1	11/15/2020 16:28	WG1576904
Bromobenzene	U		0.0420	0.500	1	11/15/2020 16:28	WG1576904
Bromodichloromethane	U		0.0315	0.100	1	11/15/2020 16:28	WG1576904
Bromoform	U		0.239	1.00	1	11/15/2020 16:28	WG1576904
Bromomethane	U	~~J4~~	0.148	0.500	1	11/15/2020 16:28	WG1576904
n-Butylbenzene	U		0.153	0.500	1	11/15/2020 16:28	WG1576904
sec-Butylbenzene	U		0.101	0.500	1	11/15/2020 16:28	WG1576904
tert-Butylbenzene	U		0.0620	0.200	1	11/15/2020 16:28	WG1576904
Carbon tetrachloride	U		0.0432	0.200	1	11/15/2020 16:28	WG1576904
Chlorobenzene	U		0.0229	0.100	1	11/15/2020 16:28	WG1576904
Chlorodibromomethane	U		0.0180	0.100	1	11/15/2020 16:28	WG1576904
Chloroethane	U	~~J4~~	0.0432	0.200	1	11/15/2020 16:28	WG1576904
Chloroform	U		0.0166	0.100	1	11/15/2020 16:28	WG1576904
Chloromethane	U		0.0556	0.500	1	11/15/2020 16:28	WG1576904
2-Chlorotoluene	U		0.0368	0.100	1	11/15/2020 16:28	WG1576904
4-Chlorotoluene	U		0.0452	0.200	1	11/15/2020 16:28	WG1576904
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	11/15/2020 16:28	WG1576904
1,2-Dibromoethane	U		0.0210	0.100	1	11/15/2020 16:28	WG1576904
Dibromomethane	U		0.0400	0.200	1	11/15/2020 16:28	WG1576904
1,2-Dichlorobenzene	U		0.0580	0.200	1	11/15/2020 16:28	WG1576904
1,3-Dichlorobenzene	U		0.0680	0.200	1	11/15/2020 16:28	WG1576904
1,4-Dichlorobenzene	U		0.0788	0.200	1	11/15/2020 16:28	WG1576904
Dichlorodifluoromethane	U		0.0327	0.100	1	11/15/2020 16:28	WG1576904
1,1-Dichloroethane	U		0.0230	0.100	1	11/15/2020 16:28	WG1576904
1,2-Dichloroethane	U		0.0190	0.100	1	11/15/2020 16:28	WG1576904
1,1-Dichloroethene	U		0.0200	0.100	1	11/15/2020 16:28	WG1576904
cis-1,2-Dichloroethene	0.187		0.0276	0.100	1	11/15/2020 16:28	WG1576904
trans-1,2-Dichloroethene	U		0.0572	0.200	1	11/15/2020 16:28	WG1576904
1,2-Dichloropropane	U		0.0508	0.200	1	11/15/2020 16:28	WG1576904
1,1-Dichloropropene	U		0.0280	0.100	1	11/15/2020 16:28	WG1576904
1,3-Dichloropropane	U		0.0700	0.200	1	11/15/2020 16:28	WG1576904
cis-1,3-Dichloropropene	U		0.0271	0.100	1	11/15/2020 16:28	WG1576904
trans-1,3-Dichloropropene	U		0.0612	0.200	1	11/15/2020 16:28	WG1576904
2,2-Dichloropropane	U		0.0317	0.100	1	11/15/2020 16:28	WG1576904
Di-isopropyl ether	U		0.0140	0.0400	1	11/15/2020 16:28	WG1576904
Ethylbenzene	0.0388	J	0.0212	0.100	1	11/15/2020 16:28	WG1576904
Hexachloro-1,3-butadiene	U		0.508	1.00	1	11/15/2020 16:28	WG1576904
Isopropylbenzene	0.0465	J	0.0345	0.100	1	11/15/2020 16:28	WG1576904
p-Isopropyltoluene	U		0.0932	0.200	1	11/15/2020 16:28	WG1576904
2-Butanone (MEK)	U		0.500	1.00	1	11/15/2020 16:28	WG1576904
Methylene Chloride	U		0.265	1.00	1	11/15/2020 16:28	WG1576904
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	11/15/2020 16:28	WG1576904
Methyl tert-butyl ether	U		0.0118	0.0400	1	11/15/2020 16:28	WG1576904
Naphthalene	U		0.124	0.500	1	11/15/2020 16:28	WG1576904
n-Propylbenzene	U		0.0472	0.200	1	11/15/2020 16:28	WG1576904
Styrene	U		0.109	0.500	1	11/15/2020 16:28	WG1576904
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	11/15/2020 16:28	WG1576904
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	11/15/2020 16:28	WG1576904
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	11/15/2020 16:28	WG1576904
Tetrachloroethene	0.0726	J	0.0280	0.100	1	11/15/2020 16:28	WG1576904
Toluene	U		0.0500	0.200	1	11/15/2020 16:28	WG1576904
1,2,3-Trichlorobenzene	U UJ	~~C4~~	0.0250	0.500	1	11/15/2020 16:28	WG1576904
1,2,4-Trichlorobenzene	U		0.193	0.500	1	11/15/2020 16:28	WG1576904
1,1,1-Trichloroethane	U		0.0110	0.100	1	11/15/2020 16:28	WG1576904

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Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l		Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,1,2-Trichloroethane	U			0.0353	0.100	1	11/15/2020 16:28	WG1576904
Trichloroethene	U			0.0160	0.0400	1	11/15/2020 16:28	WG1576904
Trichlorofluoromethane	U			0.0200	0.100	1	11/15/2020 16:28	WG1576904
1,2,3-Trichloropropane	U			0.204	0.500	1	11/15/2020 16:28	WG1576904
1,2,4-Trimethylbenzene	U			0.0464	0.200	1	11/15/2020 16:28	WG1576904
1,2,3-Trimethylbenzene	U			0.0460	0.200	1	11/15/2020 16:28	WG1576904
1,3,5-Trimethylbenzene	U			0.0432	0.200	1	11/15/2020 16:28	WG1576904
Vinyl chloride	10.5			0.0273	0.100	1	11/17/2020 04:48	WG1577289
Xylenes, Total	U			0.191	0.260	1	11/15/2020 16:28	WG1576904
Ethyl Ether	U			0.0170	0.100	1	11/15/2020 16:28	WG1576904
Tetrahydrofuran	U	UJ	C3	0.0900	0.500	1	11/15/2020 16:28	WG1576904
Iodomethane	U			0.242	0.500	1	11/15/2020 16:28	WG1576904
Allyl chloride	U			0.580	1.00	1	11/15/2020 16:28	WG1576904
Trans-1,4-Dichloro-2-butene	U	UJ	C3	0.0560	0.200	1	11/15/2020 16:28	WG1576904
(S) Toluene-d8	*104*				*75.0-131*		*11/15/2020 16:28*	WG1576904
(S) Toluene-d8	*105*				*75.0-131*		*11/17/2020 04:48*	WG1577289
(S) 4-Bromofluorobenzene	*108*				*67.0-138*		*11/15/2020 16:28*	WG1576904
(S) 4-Bromofluorobenzene	*96.2*				*67.0-138*		*11/17/2020 04:48*	WG1577289
(S) 1,2-Dichloroethane-d4	*106*				*70.0-130*		*11/15/2020 16:28*	WG1576904
(S) 1,2-Dichloroethane-d4	*91.6*				*70.0-130*		*11/17/2020 04:48*	WG1577289

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

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1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U UJ	C3	0.548	1.00	1	11/15/2020 16:48	WG1576904
Acrylonitrile	U		0.0760	0.500	1	11/15/2020 16:48	WG1576904
Benzene	0.0407		0.0160	0.0400	1	11/15/2020 16:48	WG1576904
Bromobenzene	U		0.0420	0.500	1	11/15/2020 16:48	WG1576904
Bromodichloromethane	U		0.0315	0.100	1	11/15/2020 16:48	WG1576904
Bromoform	U		0.239	1.00	1	11/15/2020 16:48	WG1576904
Bromomethane	U	~~J4~~	0.148	0.500	1	11/15/2020 16:48	WG1576904
n-Butylbenzene	U		0.153	0.500	1	11/15/2020 16:48	WG1576904
sec-Butylbenzene	U		0.101	0.500	1	11/15/2020 16:48	WG1576904
tert-Butylbenzene	U		0.0620	0.200	1	11/15/2020 16:48	WG1576904
Carbon tetrachloride	U		0.0432	0.200	1	11/15/2020 16:48	WG1576904
Chlorobenzene	U		0.0229	0.100	1	11/15/2020 16:48	WG1576904
Chlorodibromomethane	U		0.0180	0.100	1	11/15/2020 16:48	WG1576904
Chloroethane	U	~~J4~~	0.0432	0.200	1	11/15/2020 16:48	WG1576904
Chloroform	U		0.0166	0.100	1	11/15/2020 16:48	WG1576904
Chloromethane	U		0.0556	0.500	1	11/15/2020 16:48	WG1576904
2-Chlorotoluene	U		0.0368	0.100	1	11/15/2020 16:48	WG1576904
4-Chlorotoluene	U		0.0452	0.200	1	11/15/2020 16:48	WG1576904
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	11/15/2020 16:48	WG1576904
1,2-Dibromoethane	U		0.0210	0.100	1	11/15/2020 16:48	WG1576904
Dibromomethane	U		0.0400	0.200	1	11/15/2020 16:48	WG1576904
1,2-Dichlorobenzene	U		0.0580	0.200	1	11/15/2020 16:48	WG1576904
1,3-Dichlorobenzene	U		0.0680	0.200	1	11/15/2020 16:48	WG1576904
1,4-Dichlorobenzene	U		0.0788	0.200	1	11/15/2020 16:48	WG1576904
Dichlorodifluoromethane	U		0.0327	0.100	1	11/15/2020 16:48	WG1576904
1,1-Dichloroethane	1.08		0.0230	0.100	1	11/15/2020 16:48	WG1576904
1,2-Dichloroethane	U		0.0190	0.100	1	11/15/2020 16:48	WG1576904
1,1-Dichloroethene	U		0.0200	0.100	1	11/15/2020 16:48	WG1576904
cis-1,2-Dichloroethene	0.0728	J	0.0276	0.100	1	11/15/2020 16:48	WG1576904
trans-1,2-Dichloroethene	U		0.0572	0.200	1	11/15/2020 16:48	WG1576904
1,2-Dichloropropane	U		0.0508	0.200	1	11/15/2020 16:48	WG1576904
1,1-Dichloropropene	U		0.0280	0.100	1	11/15/2020 16:48	WG1576904
1,3-Dichloropropane	U		0.0700	0.200	1	11/15/2020 16:48	WG1576904
cis-1,3-Dichloropropene	U		0.0271	0.100	1	11/15/2020 16:48	WG1576904
trans-1,3-Dichloropropene	U		0.0612	0.200	1	11/15/2020 16:48	WG1576904
2,2-Dichloropropane	U		0.0317	0.100	1	11/15/2020 16:48	WG1576904
Di-isopropyl ether	U		0.0140	0.0400	1	11/15/2020 16:48	WG1576904
Ethylbenzene	0.0354	J	0.0212	0.100	1	11/15/2020 16:48	WG1576904
Hexachloro-1,3-butadiene	U		0.508	1.00	1	11/15/2020 16:48	WG1576904
Isopropylbenzene	U		0.0345	0.100	1	11/15/2020 16:48	WG1576904
p-Isopropyltoluene	U		0.0932	0.200	1	11/15/2020 16:48	WG1576904
2-Butanone (MEK)	U		0.500	1.00	1	11/15/2020 16:48	WG1576904
Methylene Chloride	U		0.265	1.00	1	11/15/2020 16:48	WG1576904
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	11/15/2020 16:48	WG1576904
Methyl tert-butyl ether	U		0.0118	0.0400	1	11/15/2020 16:48	WG1576904
Naphthalene	U		0.124	0.500	1	11/15/2020 16:48	WG1576904
n-Propylbenzene	0.0566	J	0.0472	0.200	1	11/15/2020 16:48	WG1576904
Styrene	U		0.109	0.500	1	11/15/2020 16:48	WG1576904
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	11/15/2020 16:48	WG1576904
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	11/15/2020 16:48	WG1576904
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	11/15/2020 16:48	WG1576904
Tetrachloroethene	U		0.0280	0.100	1	11/15/2020 16:48	WG1576904
Toluene	0.230		0.0500	0.200	1	11/15/2020 16:48	WG1576904
1,2,3-Trichlorobenzene	U UJ	~~C4~~	0.0250	0.500	1	11/15/2020 16:48	WG1576904
1,2,4-Trichlorobenzene	U		0.193	0.500	1	11/15/2020 16:48	WG1576904
1,1,1-Trichloroethane	U		0.0110	0.100	1	11/15/2020 16:48	WG1576904

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MW-331-110620

Collected date/time: 11/06/20 15:10

SAMPLE RESULTS - 07

L1283292

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,1,2-Trichloroethane	U		0.0353	0.100	1	11/15/2020 16:48	WG1576904
Trichloroethene	U		0.0160	0.0400	1	11/15/2020 16:48	WG1576904
Trichlorofluoromethane	U		0.0200	0.100	1	11/15/2020 16:48	WG1576904
1,2,3-Trichloropropane	U		0.204	0.500	1	11/15/2020 16:48	WG1576904
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	11/15/2020 16:48	WG1576904
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	11/15/2020 16:48	WG1576904
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	11/15/2020 16:48	WG1576904
Vinyl chloride	0.264		0.0273	0.100	1	11/17/2020 05:07	WG1577289
Xylenes, Total	0.219	J	0.191	0.260	1	11/15/2020 16:48	WG1576904
Ethyl Ether	U		0.0170	0.100	1	11/15/2020 16:48	WG1576904
Tetrahydrofuran	U UJ	C3	0.0900	0.500	1	11/15/2020 16:48	WG1576904
Iodomethane	U		0.242	0.500	1	11/15/2020 16:48	WG1576904
Allyl chloride	U		0.580	1.00	1	11/15/2020 16:48	WG1576904
Trans-1,4-Dichloro-2-butene	U UJ	C3	0.0560	0.200	1	11/15/2020 16:48	WG1576904
(S) Toluene-d8	*105*			*75.0-131*		*11/15/2020 16:48*	WG1576904
(S) Toluene-d8	*106*			*75.0-131*		*11/17/2020 05:07*	WG1577289
(S) 4-Bromofluorobenzene	*111*			*67.0-138*		*11/15/2020 16:48*	WG1576904
(S) 4-Bromofluorobenzene	*99.3*			*67.0-138*		*11/17/2020 05:07*	WG1577289
(S) 1,2-Dichloroethane-d4	*107*			*70.0-130*		*11/15/2020 16:48*	WG1576904
(S) 1,2-Dichloroethane-d4	*91.3*			*70.0-130*		*11/17/2020 05:07*	WG1577289

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Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U UJ	C3	0.548	1.00	1	11/15/2020 17:08	WG1576904
Acrylonitrile	U		0.0760	0.500	1	11/15/2020 17:08	WG1576904
Benzene	0.0275	J	0.0160	0.0400	1	11/15/2020 17:08	WG1576904
Bromobenzene	U		0.0420	0.500	1	11/15/2020 17:08	WG1576904
Bromodichloromethane	U		0.0315	0.100	1	11/15/2020 17:08	WG1576904
Bromoform	U		0.239	1.00	1	11/15/2020 17:08	WG1576904
Bromomethane	U	~~J4~~	0.148	0.500	1	11/15/2020 17:08	WG1576904
n-Butylbenzene	U		0.153	0.500	1	11/15/2020 17:08	WG1576904
sec-Butylbenzene	U		0.101	0.500	1	11/15/2020 17:08	WG1576904
tert-Butylbenzene	U		0.0620	0.200	1	11/15/2020 17:08	WG1576904
Carbon tetrachloride	U		0.0432	0.200	1	11/15/2020 17:08	WG1576904
Chlorobenzene	U		0.0229	0.100	1	11/15/2020 17:08	WG1576904
Chlorodibromomethane	U		0.0180	0.100	1	11/15/2020 17:08	WG1576904
Chloroethane	U	~~J4~~	0.0432	0.200	1	11/15/2020 17:08	WG1576904
Chloroform	U		0.0166	0.100	1	11/15/2020 17:08	WG1576904
Chloromethane	U		0.0556	0.500	1	11/15/2020 17:08	WG1576904
2-Chlorotoluene	U		0.0368	0.100	1	11/15/2020 17:08	WG1576904
4-Chlorotoluene	U		0.0452	0.200	1	11/15/2020 17:08	WG1576904
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	11/15/2020 17:08	WG1576904
1,2-Dibromoethane	U		0.0210	0.100	1	11/15/2020 17:08	WG1576904
Dibromomethane	U		0.0400	0.200	1	11/15/2020 17:08	WG1576904
1,2-Dichlorobenzene	U		0.0580	0.200	1	11/15/2020 17:08	WG1576904
1,3-Dichlorobenzene	U		0.0680	0.200	1	11/15/2020 17:08	WG1576904
1,4-Dichlorobenzene	U		0.0788	0.200	1	11/15/2020 17:08	WG1576904
Dichlorodifluoromethane	U		0.0327	0.100	1	11/15/2020 17:08	WG1576904
1,1-Dichloroethane	U		0.0230	0.100	1	11/15/2020 17:08	WG1576904
1,2-Dichloroethane	U		0.0190	0.100	1	11/15/2020 17:08	WG1576904
1,1-Dichloroethene	U		0.0200	0.100	1	11/15/2020 17:08	WG1576904
cis-1,2-Dichloroethene	0.134		0.0276	0.100	1	11/15/2020 17:08	WG1576904
trans-1,2-Dichloroethene	U		0.0572	0.200	1	11/15/2020 17:08	WG1576904
1,2-Dichloropropane	U		0.0508	0.200	1	11/15/2020 17:08	WG1576904
1,1-Dichloropropene	U		0.0280	0.100	1	11/15/2020 17:08	WG1576904
1,3-Dichloropropane	U		0.0700	0.200	1	11/15/2020 17:08	WG1576904
cis-1,3-Dichloropropene	U		0.0271	0.100	1	11/15/2020 17:08	WG1576904
trans-1,3-Dichloropropene	U		0.0612	0.200	1	11/15/2020 17:08	WG1576904
2,2-Dichloropropane	U		0.0317	0.100	1	11/15/2020 17:08	WG1576904
Di-isopropyl ether	0.0445		0.0140	0.0400	1	11/15/2020 17:08	WG1576904
Ethylbenzene	U		0.0212	0.100	1	11/15/2020 17:08	WG1576904
Hexachloro-1,3-butadiene	U		0.508	1.00	1	11/15/2020 17:08	WG1576904
Isopropylbenzene	0.0868	J	0.0345	0.100	1	11/15/2020 17:08	WG1576904
p-Isopropyltoluene	U		0.0932	0.200	1	11/15/2020 17:08	WG1576904
2-Butanone (MEK)	U		0.500	1.00	1	11/15/2020 17:08	WG1576904
Methylene Chloride	U		0.265	1.00	1	11/15/2020 17:08	WG1576904
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	11/15/2020 17:08	WG1576904
Methyl tert-butyl ether	U		0.0118	0.0400	1	11/15/2020 17:08	WG1576904
Naphthalene	U		0.124	0.500	1	11/15/2020 17:08	WG1576904
n-Propylbenzene	U		0.0472	0.200	1	11/15/2020 17:08	WG1576904
Styrene	U		0.109	0.500	1	11/15/2020 17:08	WG1576904
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	11/15/2020 17:08	WG1576904
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	11/15/2020 17:08	WG1576904
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	11/15/2020 17:08	WG1576904
Tetrachloroethene	U		0.0280	0.100	1	11/15/2020 17:08	WG1576904
Toluene	0.348		0.0500	0.200	1	11/15/2020 17:08	WG1576904
1,2,3-Trichlorobenzene	U UJ	J0	0.0250	0.500	1	11/15/2020 17:08	WG1576904
1,2,4-Trichlorobenzene	U		0.193	0.500	1	11/15/2020 17:08	WG1576904
1,1,1-Trichloroethane	U		0.0110	0.100	1	11/15/2020 17:08	WG1576904

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Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,1,2-Trichloroethane	U		0.0353	0.100	1	11/15/2020 17:08	WG1576904
Trichloroethene	0.0554		0.0160	0.0400	1	11/15/2020 17:08	WG1576904
Trichlorofluoromethane	U		0.0200	0.100	1	11/15/2020 17:08	WG1576904
1,2,3-Trichloropropane	U		0.204	0.500	1	11/15/2020 17:08	WG1576904
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	11/15/2020 17:08	WG1576904
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	11/15/2020 17:08	WG1576904
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	11/15/2020 17:08	WG1576904
Vinyl chloride	U	~~J4~~	0.0273	0.100	1	11/15/2020 17:08	WG1576904
Xylenes, Total	U		0.191	0.260	1	11/15/2020 17:08	WG1576904
Ethyl Ether	0.0585	J	0.0170	0.100	1	11/15/2020 17:08	WG1576904
Tetrahydrofuran	U UJ	C3	0.0900	0.500	1	11/15/2020 17:08	WG1576904
Iodomethane	U		0.242	0.500	1	11/15/2020 17:08	WG1576904
Allyl chloride	U		0.580	1.00	1	11/15/2020 17:08	WG1576904
Trans-1,4-Dichloro-2-butene	U UJ	C3	0.0560	0.200	1	11/15/2020 17:08	WG1576904
(S) Toluene-d8	*103*			*75.0-131*		*11/15/2020 17:08*	WG1576904
(S) 4-Bromofluorobenzene	*107*			*67.0-138*		*11/15/2020 17:08*	WG1576904
(S) 1,2-Dichloroethane-d4	*105*			*70.0-130*		*11/15/2020 17:08*	WG1576904

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MEMORANDUM

TO: Project File **DATE:** December 14, 2020

FROM: Jessie Compeau

SUBJECT: Laboratory Data Validation Review

PROJECT: American Linen Data Validation

PROJECT #: 1413.001.02.501G and 1413.001.05.601

TASK: EIM Data Validation Level EPA2A for 4th Quarter Monitoring – Groundwater Samples – Group 2

LAB: Pace Sample Delivery Groups (SDGs): L1283490, L1284447, L1285153, and L1285785

Forty-six (46) groundwater samples including two field duplicates, one equipment blank, and three trip blanks were collected as part of the 4th Quarterly Monitoring Round for 2020 for the ongoing Remedial Investigation (RI) sampling at the Former American Linen Supply Site, in Seattle, Washington on November 4 and 9-12, 2020. The samples were shipped and delivered to Pace Lab Sciences (Pace) of Mount Juliet, TN for laboratory analysis. Selected samples were analyzed for the following:

- Volatile organic compounds (VOCs) by United States Environmental Protection Agency (USEPA) Method 8260D;
- Total petroleum hydrocarbons as gasoline (TPH-Gx) by NWTPH-Gx per analytical method stipulated by Washington State Department of Ecology;
- VOCs (dissolved gases – methane, ethane, and ethene) by EPA SOP RSK 175;
- Alkalinity by Method 2320 B-2011;
- Anion (sulfate) by USEPA Method 9056A;
- Total Organic Carbon (TOC) by USEPA Method 9060A; and
- Metals (iron and manganese) by USEPA Method 6020B.

Results are reported in multiple SDGs from Pace. Pace SDGs are reviewed in small groups for each data validation report. Group 2 analytical results are reported in SDGs L1283490, L1284447, L1285153, and L1285785. The quality assurance review of the laboratory data associated with Group 2 is summarized below.

DATA QUALIFICATIONS

Guidelines established by USEPA for a limited data validation review of analytical data along with Pace control limit criteria were used to validate the data. The comments presented in this memorandum refer to the laboratory's performance in meeting the quality control criteria outlined in the USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (USEPA, 2017) and USEPA Contract Laboratory

Program National Functional Guidelines for Inorganic Superfund Methods Data Review (USEPA, 2017). Following Guidelines, non-project-specific laboratory duplicates and matrix spike results were not evaluated as part of this data validation.

DATA VALIDATION

Completeness

All samples were collected and analyzed as requested.

Sample Collection and Preservation

Samples were collected in laboratory-supplied sample containers preserved as appropriate for the individual analyses conducted. The samples were packed on ice in coolers and delivered by courier to the analytical laboratory. The laboratory reported that the coolers were received at a cooler temperature less than the recommended temperature preservation of 6°C with one exception:

- SDG L1283490: Sample cooler was shipped to the laboratory on Thursday (11/5/2020) and arrived on Monday (11/9/2020) due to delay in courier (FedEx) shipping. Sample cooler temperature upon receipt was 9.6^{o} C and above EPA recommended preservation temperature of 6.0^{o} C but below guidance upper criteria limit of 10.0^{o} C. No action is taken on this basis.

Overall, samples were received in good condition. No data were qualified based upon the sample collection and preservation information.

Holding Times

USEPA Method 8260D:
All samples were analyzed for VOCs within the EPA recommended holding time of fourteen days for preserved waters from the date of collection. All holding time criteria are met.

NWTPH-Gx Method:
All samples were analyzed within the WA State recommended holding time of fourteen days for preserved waters from the date of sample collection. All holding time criteria are met.

Dissolved Gases (Methane, Ethane, and Ethene) by RSK 175:
All samples were analyzed within the WA State recommended holding time of fourteen days for preserved waters from the date of sample collection. All holding time criteria are met.

USEPA Method 6020B:
All samples were analyzed within the USEPA recommended holding time for iron and manganese of 180 days for preserved waters from the date of sample collection. All holding time criteria are met.

General Chemistry (Alkalinity, Sulfate, and TOC):

All samples were analyzed within the USEPA recommended holding time for alkalinity (14 days), sulfate (28 days), and TOC (28 days) for preserved waters from the date of sample collection. All holding time criteria are met.

Initial and Continuing Calibration

Calibration data for this project are not required for this deliverable however Pace's notes indicate the following:

- Multiple SDGs - *USEPA Method 8260D:* Continuing calibration verification (CCV) issues were noted by Pace for multiple compounds associated with analytical batches in each SDG. These compounds are qualified by the laboratory "C3" to indicate that percent difference CCV is below laboratory acceptance criteria and showing low bias. **Associated sample results with laboratory qualified (C3) results are estimated and qualified (J-/UJ). Results reported below the RDL are estimated (J) and bias is not assigned.**

- Multiple SDGs - *USEPA Method 8260D:* Continuing calibration verification (CCV) issues were noted by Pace for multiple compounds associated with analytical batches in each SDG. These compounds are qualified by the laboratory "C4" to indicate that percent difference CCV is below laboratory acceptance criteria and showing low bias. **Associated sample results with laboratory qualified (C4) results are estimated and qualified (J-/UJ). Results reported below the RDL are estimated (J) and bias is not assigned.**

- Multiple SDGs - *USEPA Method 8260D:* Continuing calibration verification (CCV) issues were noted by Pace for multiple compounds associated with analytical batches in each SDG. These compounds are qualified by the laboratory "C5" to indicate that percent difference CCV is above laboratory acceptance criteria and showing high bias. **Associated sample results with laboratory qualified (C5) positively detected results are estimated and qualified (J+). Results reported below the RDL are estimated (J) and bias is not assigned.**

Method Blank Results

USEPA Method 8260D:
Laboratory method blanks were included with the analytical batches per method requirement. The target analytes were not detected in the method blanks at or above the reporting detection limits (RDLs) with the following exceptions:

- SDG L1283490 - Analytical batch WG1573882: Low levels of sec-butylbenzene, p-isopropyltoluene, naphthalene, and 1,2,3-trichlorobenzene are detected in the method blank. No action is required since these analytes are not detected in the associated samples.

- SDG L1283490 - Analytical batch WG1576904: Low levels of n-butylbenzene, tert-butylbenzene, p-isopropyltoluene 1,2,3-trichlorobenzene, 1,2,4-trichlorobenzene, 1,2,4-trimethylbenzene, and 1,3,5-trimethylbenzene are detected in the method blank. No action is required since these analytes are not detected in the associated samples with the following exception:

  - A low level of 1,2,4-trimethylbenzene, below the RDL, is detected in the method blank and in associated samples MW-183-11042, MW-182-110420, and MW-187-110420**. 1,2,4-Trimethylbenzene detections in samples (MW-183-11042, MW-182-110420, and MW-187-110420) are laboratory qualified (BJ) and qualified as not detected (U) due to method blank contamination.**

- SDG L1283490 - Analytical batch WG1578255: A low level of methylene chloride, below the RDL, is detected in the method blank. No action is needed since methylene chloride was not detected in the associated sample (trip blank).

- SDG L1284447 - Analytical batch WG1578255: A low level of methylene chloride, below the RDL, is detected in the method blank. No action is needed since methylene chloride is not detected in the associated samples.

- SDG L1284447 - Analytical batch WG1578897: A low level of acetone, below the RDL, is detected in the samples MW-942-111020 and GEI-MW-1-111020. **Low level acetone detections in samples MW-942-111020 and GEI-MW-1-111020 are qualified as not detected (U) due to low level blank contamination.**

- SDG L1285153 - Analytical batch WG1578897: A low level of acetone, below the RDL, is detected in the method blank and in associated sample MW119-111120. **The acetone detection in sample MW119-111120 is laboratory qualified (BJ) and qualified as not detected (U) due to method blank contamination.** Professional judgment, per Guidance, was used and no action is taken for sample acetone detections above the RDL.

- SDG L1285785 - Analytical batch WG1578897: A low level of acetone, below the RDL, is detected in the method blank, equipment blank, and in associated samples (MW-320-111220, MW-332-111220, and MW115-111220). **Acetone detections in samples (MW-320-111220, MW-332-111220, and MW115-111220) are laboratory qualified (BJ) and qualified as not detected (U) due to method blank contamination.** Per Guidance, professional judgment was used, and no action is taken for sample acetone detections above the RDL.

- SDG L1285785 - Analytical batch WG1580676: Low levels (below the RDL) of naphthalene, 1,2,3-trichlorobenzene, and 1,2,4-trimethylbenzene were detected in the method blank. No action is needed since these compounds are not detected in the associated sample or in the associated field QC samples (equipment blank and trip blank).

NWTPH-Gx Method:
Laboratory method blanks were included with the analytical batches per method requirement. The target analyte (gasoline) was not detected in the method blanks at or above the RDLs with the following exception:

- SDG L1284447 – Analytical batches WG1576631 and WG1577448: Low levels of gasoline were detected below the RDL in the method blank and trip blank. No action is needed since gasoline detections in the associated samples are far greater than the established action level. Refer to the Section on the Trip Blanks for additional details.

Dissolved Gases (Methane, Ethane, and Ethene) by RSK 175:
Laboratory method blanks were included with the analytical batches per method requirement. The target analytes (dissolved gases) are not detected in the method blanks at or above the RDLs.

USEPA Method 6020B and General Chemistry (Alkalinity, Sulfate, and TOC):
Laboratory method blanks were included with the analytical batches per method requirement. The target analytes were detected in the method blanks below the RDLs. Per Guidance, no action is taken for blank detections less than the RDL when associated sample detections are greater than the RDL. General chemistry and metal blank detections are shown below:

SDG	Batch	Method	Analyte	Method Blank Result	Qualifier	RDL	Units	Associated Result(s) Qualified
L1283490	WG1576989	9060A	TOC	362	J	1000	µg/L	NO
L1283490	WG1576993	9060A	TOC	280	J	1000	µg/L	NO
L1283490	WG1577908	9060A	TOC	308	J	1000	µg/L	NO
L1284447	WG1577659	9060A	TOC	170	J	1000	µg/L	NO
L1285153	WG1580392	9060A	TOC	293	J	1000	µg/L	NO
L1285785	WG1582403	9060A	TOC	470	J	1000	µg/L	NO

Target analytes were detected in method blanks at low levels with no impact to the associated samples with the following discussion:

- SDG L1284447: A low level of TOC was detected at 170 µg/L in the method blank. TOC was also detected at 956 µg/L in associated sample MW-153-110920. No action is taken in this case. Sample MW-153-110920 TOC result is qualified as estimated since the result is below the RDL (1000 µg/L).

Trip Blank Results

USEPA Method 8260D and NWTPH-Gx:
Three trip blanks (TB-110520 (SDG L1283490), TB-111020 (SDG L1284447), and TB-111220 (SDG L1285785)) were collected and analyzed for VOCs only or both VOCs and gasoline. The target analytes were not detected in the associated samples with the following exceptions:

- SDG L1284447: Low levels of gasoline and acetone were detected in the trip blank (TB-111020) and in the associated method blank**. Low levels of acetone below the RDL, are detected in samples MW-942-111020 and GEI-MW-1-111020 and are qualified as not detected (U).** No action was taken for gasoline or acetone detections above the RDLs.

Field, Rinsate, or Equipment Blank Results

All Analytical Methods:

One equipment blank associated with Group 2 was collected and analyzed. Details are as follows:

- Equipment blank (EQ-111220 with SDG L1285785) is associated with all samples except sample MW123-111220 collected via bladder pump on November 12, 2020. Specifically, this equipment blank is associated with samples MW-312-111120, MW-320-111220, MW116-111220, MW-332-111220, MW-318-111220, MW115-111220, and MW-319-111220. Low levels of TOC, manganese, and acetone are detected in the equipment blank. No action is taken for these TOC and manganese detections since these are either not detected in the associated samples or sample detections are far greater than detection in the equipment blank. **Associated acetone results for samples MW-320-111220, MW-332-111220, MW115-111220, and MW123-111220 are detected below the RDL. These results are qualified as not detected (U) due to method and/or equipment blank contamination.**

Field Duplicate Analyses

Field duplicate pairs were submitted and analyzed. Field duplicate sample pairs are as follows:

- SDG L1283490: MW-181-110420 is a field duplicate of MW-940-110420
- SDG L1284447: MW106-111020 is a field duplicate of MW-942-111020

Target analyte results are comparable and within a relative percent difference (RPD) of 30% (± 1x RDL for groundwater results <5X the RDL) for the field duplicate pairs.

Laboratory Duplicate Analyses

USEPA Method 8260D:
Laboratory duplicate samples were not analyzed. Refer to laboratory control sample/sample duplicate (LCS/LCSD) or matrix spike/matrix spike duplicate (MS/MSD) results for precision data.

NWTPH-Gx Method:
Laboratory duplicate samples were not analyzed. Refer to MS/MSD results associated with SDG L1284447 for precision data.

Dissolved Gases (Methane, Ethane, and Ethene) by RSK 175:
Laboratory duplicate sample analyses were performed on client and non-client samples within the analytical batches. The primary/duplicate RPDs for dissolved gas analyses are within the laboratory control limit of 20%.

USEPA Method 6020B:
Laboratory duplicate samples were not analyzed. Precision data are not available for Refer to MS/MSD results for precision data.

General Chemistry (Alkalinity, Sulfate, and TOC):

Laboratory duplicate sample analyses were performed on client samples and/or on non-client samples. The primary/duplicate RPDs for general chemistry parameters are within the laboratory control RPD limits or ± 1x RDL for groundwater results <5X the RDL.

Surrogate Recoveries

USEPA Method 8260D:
The surrogate recovery results for the samples, laboratory control samples, matrix spike samples, and the method blanks are within the laboratory surrogate control limits for all the analyses with the following exception:

- SDG L1284447: Sample MW106-111020 surrogate toluene-d8 recovery is above criteria. **Associated positive detections in sample MW106-111020 are estimated and qualified (J).**
- SDG L1285153: Sample MW-159-111120 surrogate toluene-d8 recovery is above criteria. **Associated positive detections in sample MW-159-111120 are estimated and qualified (J).**
- SDG L1285785: Samples MW-320-111220, MW-332-111220, and trip blank (TB-111220) surrogates 4-bromofluorobenzene, toluene-d8 or 1,2-dichloroethane-d4 recoveries are above criteria. **Associated positive detections in samples MW-320-111220 and MW-332-111220 are estimated and qualified (J).** Note sample MW-320-111220 “U” qualifier on the acetone result supersedes the “J” qualifier due to blank contamination.

NWTPH-Gx Method:
The surrogate recovery results for the samples, laboratory control samples, matrix spike samples, and the method blanks are within the laboratory surrogate control limits for all analyses.

Laboratory Control Samples

USEPA Method 8260D:
Laboratory control sample/laboratory control sample duplicate (LCS/LCSD) or laboratory control sample (LCS) were analyzed by USEPA Method 8260D method. The LCS % Rs or LCS/LCSD % Rs and RPDs for the target compounds are within the laboratory control criteria for waters with the following exceptions:

- SDG L1283490 - Analytical batch WG1576904: LCS/LCSD % recoveries for bromomethane and chloroethane are above laboratory acceptance criteria and laboratory qualified (J4). Associated sample MW-183-110420 and MW-187-110420 and chloroethane results are estimated (J) due to elevated LCS recoveries.

- SDG L1283490 - Analytical batch WG1578255: LCS % recovery for chloroethane is above laboratory acceptance criteria and laboratory qualified (J4). No action is needed since chloroethane is not detected in the associated sample.

- SDG L1284447 - Analytical batch WG1578255: LCS % recovery for chloroethane is above laboratory acceptance criteria and laboratory qualified (J4). No action is needed since chloroethane is not detected in the associated sample.

- SDG L1284447 - Analytical batch WG1578897: LCS % recoveries for carbon tetrachloride, chloroethane, ethyl ether, and vinyl chloride are above laboratory acceptance criteria and laboratory qualified (J4). **Associated sample GEI-MW-1-111020 ethyl ether results are estimated (J) due to elevated LCS recoveries.**

- SDG L1285153 - Analytical batch WG1578897: LCS % recoveries for carbon tetrachloride, chloroethane, ethyl ether, and vinyl chloride are above laboratory acceptance criteria and laboratory qualified (J4). **Sample FMW-129-111020 vinyl chloride and ethyl ether results are estimated (J) due to elevated LCS recoveries. Sample MW-159-111120, MW-155-111120, MW-156-111120, and MW119-111120 vinyl chloride results are estimated (J) due to elevated LCS recoveries.**

- SDG L1285785 - Analytical batch WG1578897: LCS % recoveries for carbon tetrachloride, chloroethane, ethyl ether, and vinyl chloride are above laboratory acceptance criteria and laboratory qualified (J4). **Samples MW-332-111220, MW-318-111220, MW115-111220, and MW-319-111220 vinyl chloride results are estimated (J) due to elevated LCS recoveries. Samples MW-318-111220 and MW115-111220 vinyl chloride and ethyl ether results are estimated (J) due to elevated LCS recoveries.**

- SDG L1285785 - Analytical batch WG1580676: LCS/LCSD % recoveries for bromomethane are above laboratory acceptance criteria and laboratory qualified (J4). LCS/LCSD RPD for dichlorodifluoromethane exceeded criteria and is laboratory qualified (J3). No action is needed in either case since these compounds were not detected in the associated sample.

NWTPH-Gx Method:
The LCS % Rs or LCS/LCSD % Rs and RPDs for the target compound (gasoline) are within the laboratory control criteria for waters. In one case, no measure of precision is provided with the analytical batch. No action is taken other than to note this.

Dissolved Gases (Methane, Ethane, and Ethene) by RSK 175:
The LCS/LCSD % Rs and RPDs for the target compound (dissolved gases) are within the laboratory control criteria for waters.

USEPA Method 6020B:
The LCS % R or LCS/LCSD % Rs and RPDs for the target compound (iron and manganese) are within the laboratory control criteria for waters.

General Chemistry (Alkalinity, Sulfate, and TOC):
The LCS % Rs for general chemistry parameters are within the laboratory control criteria for waters.

Matrix Spike/Matrix Spike Duplicates

USEPA Method 8260D:
MS/MSD analyses were not performed. Refer to LCS results. No action was taken other than to note this.

NWTPH-Gx Method:
Gasoline analysis was only requested on the following SDG:

- SDG L1284447 - Analytical batch WG1577448: MS/MSD analyses were performed on a non-client sample. The MS/MSD % Rs and RPD are acceptable. Two additional batches were analyzed without a matrix spike. Refer to LCS results for both batches.

Dissolved Gases (Methane, Ethane, and Ethene) by RSK 175:
MS/MSD analyses were not performed. Refer to LCS results and field duplicate sample for accuracy and precision data.

USEPA Method 6020B:
MS/MSD analyses were performed on client and on non-client samples within the analytical batches. The MS/MSD % Rs and RPD were acceptable and within laboratory control limit criteria for water samples.

General Chemistry (Alkalinity, Sulfate, and TOC):
MS or MS/MSD analyses were performed on client and/or non-client samples within the analytical batches. In cases where MS/MSD spike analyses are not performed refer to LCS/LCSD or laboratory duplicate data for accuracy and precision data. The MS/MSD % Rs and RPDs are acceptable and within laboratory control limit criteria for water samples.

Other Quality Control Issues

No laboratory quality control issues were identified in the laboratory report with the following discussion:

- Electronic data deliverables (EDDs) for these SDGs were provided by the laboratory and data validator qualifiers were entered. In some cases, different chemical synonyms are used between the EDD and the hardcopy however associated Chemical Abstracts Service (CAS) numbers are provided in the EDD to confirm chemical identifications.

Compound Identification and Quantitation Limits

Results of the analyses were reported based on laboratory RDLs for all compounds. RDLs for selected compounds are elevated due to method-required dilutions. No action is taken other than to note this.

Gasoline and gasoline range organics are analyzed for via Volatile Organic Compounds (GC) by Washington State Method NWTPHGx (using a gas chromatograph/flame ionization detector (GC/FID)) and Pace reported gasoline range organic-NWTPH results. Several chlorinated VOC compounds (including cis-1,2-dichloroethene, trans-1,2-dichloroethene, trichloroethene, and tetrachloroethene) elute within the gasoline range organics (GRO) retention time range as specified by Washington State (detections falling between the toluene and dodecane range).

Non-petroleum organics (e.g. chlorinated VOC compounds) eluting within the gasoline range contribute to the GRO result and GRO results are likely biased high (J+). PES requested that Pace evaluate chromatograms associated with positive sample detections to confirm the potential presence of gasoline. Per PES's request Pace reviewed selected sample chromatograms against the gasoline standard chromatograms and assigned "no discernible petroleum pattern" to GRO results associated with this Task. PES assigned an additional project level qualifier (Z) to GRO results when the chromatogram for the sample does not match a discernible gasoline standard pattern. Associated chromatograms and qualified samples for this Task are as follows:

Sample ID	**Laboratory Identification**	**Gasoline Range Organic Result (µg/L)**	**DV Qualifier**	**Data Validation Comments**	**Pace Chromatogram Review Notes**
MW-147-111020	L1284447-11	2930	Z, J+	Elevated chlorinated VOCs detected within the GRO elution range	No discernible petroleum pattern present.
MW-146-111020	L1284447-15	2850	Z, J+	Elevated chlorinated VOCs detected within the GRO elution range	No discernible petroleum pattern present.

Project level qualifiers have been included to the PES's project database (Epiphany) as (ZJ+). Washington State EIM valid values were reviewed. In this case no Washington State EIM valid value descriptor is ideal, and the default estimated value (J) has been selected as the best match to qualify GRO (Z, J+) data.

Data Assessment

The laboratory data reported for this project were reviewed based on the criteria outlined in:

- USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (USEPA, 2017); and
- USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Superfund Methods Data Review (USEPA, 2017).

Data qualifiers are assigned and laboratory report pages with qualifiers are attached. All data, including qualified data, are judged to be acceptable for their intended use.

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Wet Chemistry by Method 9056A

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Sulfate	11600		594	5000	1	11/16/2020 11:27	WG1576516

Wet Chemistry by Method 9060A

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
TOC (Total Organic Carbon)	36000		102	1000	1	11/16/2020 10:16	WG1576989

Metals (ICPMS) by Method 6020B

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Iron	13200		281	1000	10	11/13/2020 13:01	WG1574947
Manganese	1550		7.04	50.0	10	11/13/2020 13:01	WG1574947

Volatile Organic Compounds (GC) by Method RSK175

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Methane	28500		2.87	6.78	10	11/14/2020 05:54	WG1576276
Ethane	36.5		0.296	1.29	1	11/14/2020 04:05	WG1576414
Ethene	3810		0.422	1.27	1	11/14/2020 04:05	WG1576414

Volatile Organic Compounds (GC/MS) by Method 8260D

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Acetone	6.90		0.548	1.00	1	11/10/2020 16:04	WG1573882
Acrylonitrile	U		0.0760	0.500	1	11/10/2020 16:04	WG1573882
Benzene	0.349		0.0160	0.0400	1	11/10/2020 16:04	WG1573882
Bromobenzene	U		0.0420	0.500	1	11/10/2020 16:04	WG1573882
Bromodichloromethane	U		0.0315	0.100	1	11/10/2020 16:04	WG1573882
Bromoform	U		0.239	1.00	1	11/10/2020 16:04	WG1573882
Bromomethane	U		0.148	0.500	1	11/10/2020 16:04	WG1573882
n-Butylbenzene	U		0.153	0.500	1	11/10/2020 16:04	WG1573882
sec-Butylbenzene	U		0.101	0.500	1	11/10/2020 16:04	WG1573882
tert-Butylbenzene	U		0.0620	0.200	1	11/10/2020 16:04	WG1573882
Carbon tetrachloride	U		0.0432	0.200	1	11/10/2020 16:04	WG1573882
Chlorobenzene	U		0.0229	0.100	1	11/10/2020 16:04	WG1573882
Chlorodibromomethane	U		0.0180	0.100	1	11/10/2020 16:04	WG1573882
Chloroethane	U		0.0432	0.200	1	11/10/2020 16:04	WG1573882
Chloroform	U		0.0166	0.100	1	11/10/2020 16:04	WG1573882
Chloromethane	U		0.0556	0.500	1	11/10/2020 16:04	WG1573882
2-Chlorotoluene	U		0.0368	0.100	1	11/10/2020 16:04	WG1573882
4-Chlorotoluene	U		0.0452	0.200	1	11/10/2020 16:04	WG1573882
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	11/10/2020 16:04	WG1573882
1,2-Dibromoethane	U		0.0210	0.100	1	11/10/2020 16:04	WG1573882
Dibromomethane	U		0.0400	0.200	1	11/10/2020 16:04	WG1573882
1,2-Dichlorobenzene	U		0.0580	0.200	1	11/10/2020 16:04	WG1573882
1,3-Dichlorobenzene	U		0.0680	0.200	1	11/10/2020 16:04	WG1573882
1,4-Dichlorobenzene	U		0.0788	0.200	1	11/10/2020 16:04	WG1573882
Dichlorodifluoromethane	U		0.0327	0.100	1	11/10/2020 16:04	WG1573882
1,1-Dichloroethane	U		0.0230	0.100	1	11/10/2020 16:04	WG1573882
1,2-Dichloroethane	U		0.0190	0.100	1	11/10/2020 16:04	WG1573882
1,1-Dichloroethene	8.76		0.0200	0.100	1	11/10/2020 16:04	WG1573882
cis-1,2-Dichloroethene	1740		13.8	50.0	500	11/12/2020 14:47	WG1574656
trans-1,2-Dichloroethene	60.5		0.0572	0.200	1	11/10/2020 16:04	WG1573882
1,2-Dichloropropane	U		0.0508	0.200	1	11/10/2020 16:04	WG1573882

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Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,1-Dichloropropene	U		0.0280	0.100	1	11/10/2020 16:04	WG1573882
1,3-Dichloropropane	U		0.0700	0.200	1	11/10/2020 16:04	WG1573882
cis-1,3-Dichloropropene	U		0.0271	0.100	1	11/10/2020 16:04	WG1573882
trans-1,3-Dichloropropene	U		0.0612	0.200	1	11/10/2020 16:04	WG1573882
2,2-Dichloropropane	U		0.0317	0.100	1	11/10/2020 16:04	WG1573882
Di-isopropyl ether	U		0.0140	0.0400	1	11/10/2020 16:04	WG1573882
Ethylbenzene	U		0.0212	0.100	1	11/10/2020 16:04	WG1573882
Hexachloro-1,3-butadiene	U		0.508	1.00	1	11/10/2020 16:04	WG1573882
Isopropylbenzene	U		0.0345	0.100	1	11/10/2020 16:04	WG1573882
p-Isopropyltoluene	U		0.0932	0.200	1	11/10/2020 16:04	WG1573882
2-Butanone (MEK)	1.51		0.500	1.00	1	11/10/2020 16:04	WG1573882
Methylene Chloride	U		0.265	1.00	1	11/10/2020 16:04	WG1573882
4-Methyl-2-pentanone (MIBK)	0.709	J	0.400	1.00	1	11/10/2020 16:04	WG1573882
Methyl tert-butyl ether	U		0.0118	0.0400	1	11/10/2020 16:04	WG1573882
Naphthalene	U		0.124	0.500	1	11/10/2020 16:04	WG1573882
n-Propylbenzene	U		0.0472	0.200	1	11/10/2020 16:04	WG1573882
Styrene	U		0.109	0.500	1	11/10/2020 16:04	WG1573882
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	11/10/2020 16:04	WG1573882
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	11/10/2020 16:04	WG1573882
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	11/10/2020 16:04	WG1573882
Tetrachloroethene	U		0.0280	0.100	1	11/10/2020 16:04	WG1573882
Toluene	0.183	J	0.0500	0.200	1	11/10/2020 16:04	WG1573882
1,2,3-Trichlorobenzene	U UJ	C4	0.0250	0.500	1	11/10/2020 16:04	WG1573882
1,2,4-Trichlorobenzene	U UJ	C4	0.193	0.500	1	11/10/2020 16:04	WG1573882
1,1,1-Trichloroethane	U		0.0110	0.100	1	11/10/2020 16:04	WG1573882
1,1,2-Trichloroethane	U		0.0353	0.100	1	11/10/2020 16:04	WG1573882
Trichloroethene	0.156		0.0160	0.0400	1	11/10/2020 16:04	WG1573882
Trichlorofluoromethane	U		0.0200	0.100	1	11/10/2020 16:04	WG1573882
1,2,3-Trichloropropane	U		0.204	0.500	1	11/10/2020 16:04	WG1573882
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	11/10/2020 16:04	WG1573882
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	11/10/2020 16:04	WG1573882
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	11/10/2020 16:04	WG1573882
Vinyl chloride	7380		13.6	50.0	500	11/12/2020 14:47	WG1574656
Xylenes, Total	U		0.191	0.260	1	11/10/2020 16:04	WG1573882
Ethyl Ether	U		0.0170	0.100	1	11/10/2020 16:04	WG1573882
Tetrahydrofuran	U UJ	C4	0.0900	0.500	1	11/10/2020 16:04	WG1573882
Iodomethane	U		0.242	0.500	1	11/10/2020 16:04	WG1573882
Allyl chloride	U		0.580	1.00	1	11/10/2020 16:04	WG1573882
Trans-1,4-Dichloro-2-butene	U UJ	C4	0.0560	0.200	1	11/10/2020 16:04	WG1573882
(S) Toluene-d8	*107*			*75.0-131*		*11/10/2020 16:04*	WG1573882
(S) Toluene-d8	*106*			*75.0-131*		*11/12/2020 14:47*	WG1574656
(S) 4-Bromofluorobenzene	*107*			*67.0-138*		*11/10/2020 16:04*	WG1573882
(S) 4-Bromofluorobenzene	*107*			*67.0-138*		*11/12/2020 14:47*	WG1574656
(S) 1,2-Dichloroethane-d4	*101*			*70.0-130*		*11/10/2020 16:04*	WG1573882
(S) 1,2-Dichloroethane-d4	*100*			*70.0-130*		*11/12/2020 14:47*	WG1574656

JC 12/8/2020

MW-181-110420
Collected date/time: 11/04/20 09:10

SAMPLE RESULTS - 02

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Wet Chemistry by Method 9056A

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Sulfate	13000		594	5000	1	11/16/2020 11:43	WG1576516

Wet Chemistry by Method 9060A

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
TOC (Total Organic Carbon)	36300		102	1000	1	11/16/2020 10:31	WG1576989

Metals (ICPMS) by Method 6020B

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Iron	12900		281	1000	10	11/13/2020 13:04	WG1574947
Manganese	1510		7.04	50.0	10	11/13/2020 13:04	WG1574947

Volatile Organic Compounds (GC) by Method RSK175

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Methane	29900		2.87	6.78	10	11/14/2020 05:57	WG1576276
Ethane	29.1		0.296	1.29	1	11/14/2020 04:09	WG1576414
Ethene	3720		0.422	1.27	1	11/14/2020 04:09	WG1576414

Volatile Organic Compounds (GC/MS) by Method 8260D

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Acetone	6.48		0.548	1.00	1	11/10/2020 16:24	WG1573882
Acrylonitrile	U		0.0760	0.500	1	11/10/2020 16:24	WG1573882
Benzene	0.336		0.0160	0.0400	1	11/10/2020 16:24	WG1573882
Bromobenzene	U		0.0420	0.500	1	11/10/2020 16:24	WG1573882
Bromodichloromethane	U		0.0315	0.100	1	11/10/2020 16:24	WG1573882
Bromoform	U		0.239	1.00	1	11/10/2020 16:24	WG1573882
Bromomethane	U		0.148	0.500	1	11/10/2020 16:24	WG1573882
n-Butylbenzene	U		0.153	0.500	1	11/10/2020 16:24	WG1573882
sec-Butylbenzene	U		0.101	0.500	1	11/10/2020 16:24	WG1573882
tert-Butylbenzene	U		0.0620	0.200	1	11/10/2020 16:24	WG1573882
Carbon tetrachloride	U		0.0432	0.200	1	11/10/2020 16:24	WG1573882
Chlorobenzene	U		0.0229	0.100	1	11/10/2020 16:24	WG1573882
Chlorodibromomethane	U		0.0180	0.100	1	11/10/2020 16:24	WG1573882
Chloroethane	U		0.0432	0.200	1	11/10/2020 16:24	WG1573882
Chloroform	U		0.0166	0.100	1	11/10/2020 16:24	WG1573882
Chloromethane	U		0.0556	0.500	1	11/10/2020 16:24	WG1573882
2-Chlorotoluene	U		0.0368	0.100	1	11/10/2020 16:24	WG1573882
4-Chlorotoluene	U		0.0452	0.200	1	11/10/2020 16:24	WG1573882
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	11/10/2020 16:24	WG1573882
1,2-Dibromoethane	U		0.0210	0.100	1	11/10/2020 16:24	WG1573882
Dibromomethane	U		0.0400	0.200	1	11/10/2020 16:24	WG1573882
1,2-Dichlorobenzene	U		0.0580	0.200	1	11/10/2020 16:24	WG1573882
1,3-Dichlorobenzene	U		0.0680	0.200	1	11/10/2020 16:24	WG1573882
1,4-Dichlorobenzene	U		0.0788	0.200	1	11/10/2020 16:24	WG1573882
Dichlorodifluoromethane	U		0.0327	0.100	1	11/10/2020 16:24	WG1573882
1,1-Dichloroethane	U		0.0230	0.100	1	11/10/2020 16:24	WG1573882
1,2-Dichloroethane	U		0.0190	0.100	1	11/10/2020 16:24	WG1573882
1,1-Dichloroethene	8.27		0.0200	0.100	1	11/10/2020 16:24	WG1573882
cis-1,2-Dichloroethene	1360		13.8	50.0	500	11/12/2020 15:07	WG1574656
trans-1,2-Dichloroethene	58.9		0.0572	0.200	1	11/10/2020 16:24	WG1573882
1,2-Dichloropropane	U		0.0508	0.200	1	11/10/2020 16:24	WG1573882

JC 12/8/2020

MW-181-110420

Collected date/time: 11/04/20 09:10

SAMPLE RESULTS - 02

L1283490

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,1-Dichloropropene	U		0.0280	0.100	1	11/10/2020 16:24	WG1573882
1,3-Dichloropropane	U		0.0700	0.200	1	11/10/2020 16:24	WG1573882
cis-1,3-Dichloropropene	U		0.0271	0.100	1	11/10/2020 16:24	WG1573882
trans-1,3-Dichloropropene	U		0.0612	0.200	1	11/10/2020 16:24	WG1573882
2,2-Dichloropropane	U		0.0317	0.100	1	11/10/2020 16:24	WG1573882
Di-isopropyl ether	U		0.0140	0.0400	1	11/10/2020 16:24	WG1573882
Ethylbenzene	U		0.0212	0.100	1	11/10/2020 16:24	WG1573882
Hexachloro-1,3-butadiene	U		0.508	1.00	1	11/10/2020 16:24	WG1573882
Isopropylbenzene	U		0.0345	0.100	1	11/10/2020 16:24	WG1573882
p-Isopropyltoluene	U		0.0932	0.200	1	11/10/2020 16:24	WG1573882
2-Butanone (MEK)	1.53		0.500	1.00	1	11/10/2020 16:24	WG1573882
Methylene Chloride	U		0.265	1.00	1	11/10/2020 16:24	WG1573882
4-Methyl-2-pentanone (MIBK)	0.777	J	0.400	1.00	1	11/10/2020 16:24	WG1573882
Methyl tert-butyl ether	U		0.0118	0.0400	1	11/10/2020 16:24	WG1573882
Naphthalene	U		0.124	0.500	1	11/10/2020 16:24	WG1573882
n-Propylbenzene	U		0.0472	0.200	1	11/10/2020 16:24	WG1573882
Styrene	U		0.109	0.500	1	11/10/2020 16:24	WG1573882
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	11/10/2020 16:24	WG1573882
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	11/10/2020 16:24	WG1573882
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	11/10/2020 16:24	WG1573882
Tetrachloroethene	U		0.0280	0.100	1	11/10/2020 16:24	WG1573882
Toluene	0.188	J	0.0500	0.200	1	11/10/2020 16:24	WG1573882
1,2,3-Trichlorobenzene	U UJ	C4	0.0250	0.500	1	11/10/2020 16:24	WG1573882
1,2,4-Trichlorobenzene	U UJ	C4	0.193	0.500	1	11/10/2020 16:24	WG1573882
1,1,1-Trichloroethane	U		0.0110	0.100	1	11/10/2020 16:24	WG1573882
1,1,2-Trichloroethane	U		0.0353	0.100	1	11/10/2020 16:24	WG1573882
Trichloroethene	0.147		0.0160	0.0400	1	11/10/2020 16:24	WG1573882
Trichlorofluoromethane	U		0.0200	0.100	1	11/10/2020 16:24	WG1573882
1,2,3-Trichloropropane	U		0.204	0.500	1	11/10/2020 16:24	WG1573882
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	11/10/2020 16:24	WG1573882
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	11/10/2020 16:24	WG1573882
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	11/10/2020 16:24	WG1573882
Vinyl chloride	6650		13.6	50.0	500	11/12/2020 15:07	WG1574656
Xylenes, Total	U		0.191	0.260	1	11/10/2020 16:24	WG1573882
Ethyl Ether	U		0.0170	0.100	1	11/10/2020 16:24	WG1573882
Tetrahydrofuran	0.409 J	C4 J	0.0900	0.500	1	11/10/2020 16:24	WG1573882
Iodomethane	U		0.242	0.500	1	11/10/2020 16:24	WG1573882
Allyl chloride	U		0.580	1.00	1	11/10/2020 16:24	WG1573882
Trans-1,4-Dichloro-2-butene	U UJ	C4	0.0560	0.200	1	11/10/2020 16:24	WG1573882
(S) Toluene-d8	*105*			*75.0-131*		*11/10/2020 16:24*	WG1573882
(S) Toluene-d8	*104*			*75.0-131*		*11/12/2020 15:07*	WG1574656
(S) 4-Bromofluorobenzene	*107*			*67.0-138*		*11/10/2020 16:24*	WG1573882
(S) 4-Bromofluorobenzene	*105*			*67.0-138*		*11/12/2020 15:07*	WG1574656
(S) 1,2-Dichloroethane-d4	*98.4*			*70.0-130*		*11/10/2020 16:24*	WG1573882
(S) 1,2-Dichloroethane-d4	*102*			*70.0-130*		*11/12/2020 15:07*	WG1574656

JC 12/8/2020

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Sulfate	41200		594	5000	1	11/16/2020 04:54	WG1576516

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	9810		102	1000	1	11/16/2020 10:46	WG1576989

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	2720		281	1000	10	11/13/2020 13:08	WG1574947
Manganese	739		7.04	50.0	10	11/13/2020 13:08	WG1574947

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	11000		2.87	6.78	10	11/14/2020 06:01	WG1576276
Ethane	4.75		0.296	1.29	1	11/14/2020 04:11	WG1576414
Ethene	40.4		0.422	1.27	1	11/14/2020 04:11	WG1576414

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	0.580 J	C3 J	0.548	1.00	1	11/15/2020 17:29	WG1576904
Acrylonitrile	U		0.0760	0.500	1	11/15/2020 17:29	WG1576904
Benzene	U		0.0160	0.0400	1	11/15/2020 17:29	WG1576904
Bromobenzene	U		0.0420	0.500	1	11/15/2020 17:29	WG1576904
Bromodichloromethane	U		0.0315	0.100	1	11/15/2020 17:29	WG1576904
Bromoform	U		0.239	1.00	1	11/15/2020 17:29	WG1576904
Bromomethane	U UJ	~~J4~~	0.148	0.500	1	11/15/2020 17:29	WG1576904
n-Butylbenzene	U		0.153	0.500	1	11/15/2020 17:29	WG1576904
sec-Butylbenzene	U		0.101	0.500	1	11/15/2020 17:29	WG1576904
tert-Butylbenzene	U		0.0620	0.200	1	11/15/2020 17:29	WG1576904
Carbon tetrachloride	U		0.0432	0.200	1	11/15/2020 17:29	WG1576904
Chlorobenzene	U		0.0229	0.100	1	11/15/2020 17:29	WG1576904
Chlorodibromomethane	U		0.0180	0.100	1	11/15/2020 17:29	WG1576904
Chloroethane	2.58	J	1.08	5.00	25	11/17/2020 07:20	WG1577289
Chloroform	U		0.0166	0.100	1	11/15/2020 17:29	WG1576904
Chloromethane	U		0.0556	0.500	1	11/15/2020 17:29	WG1576904
2-Chlorotoluene	U		0.0368	0.100	1	11/15/2020 17:29	WG1576904
4-Chlorotoluene	U		0.0452	0.200	1	11/15/2020 17:29	WG1576904
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	11/15/2020 17:29	WG1576904
1,2-Dibromoethane	U		0.0210	0.100	1	11/15/2020 17:29	WG1576904
Dibromomethane	U		0.0400	0.200	1	11/15/2020 17:29	WG1576904
1,2-Dichlorobenzene	U		0.0580	0.200	1	11/15/2020 17:29	WG1576904
1,3-Dichlorobenzene	U		0.0680	0.200	1	11/15/2020 17:29	WG1576904
1,4-Dichlorobenzene	U		0.0788	0.200	1	11/15/2020 17:29	WG1576904
Dichlorodifluoromethane	U		0.0327	0.100	1	11/15/2020 17:29	WG1576904
1,1-Dichloroethane	U		0.0230	0.100	1	11/15/2020 17:29	WG1576904
1,2-Dichloroethane	U		0.0190	0.100	1	11/15/2020 17:29	WG1576904
1,1-Dichloroethene	3.48		0.0200	0.100	1	11/15/2020 17:29	WG1576904
cis-1,2-Dichloroethene	752		0.690	2.50	25	11/17/2020 07:20	WG1577289
trans-1,2-Dichloroethene	1.83		0.0572	0.200	1	11/15/2020 17:29	WG1576904
1,2-Dichloropropane	U		0.0508	0.200	1	11/15/2020 17:29	WG1576904

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Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,1-Dichloropropene	U		0.0280	0.100	1	11/15/2020 17:29	WG1576904
1,3-Dichloropropane	U		0.0700	0.200	1	11/15/2020 17:29	WG1576904
cis-1,3-Dichloropropene	U		0.0271	0.100	1	11/15/2020 17:29	WG1576904
trans-1,3-Dichloropropene	U		0.0612	0.200	1	11/15/2020 17:29	WG1576904
2,2-Dichloropropane	U		0.0317	0.100	1	11/15/2020 17:29	WG1576904
Di-isopropyl ether	U		0.0140	0.0400	1	11/15/2020 17:29	WG1576904
Ethylbenzene	U		0.0212	0.100	1	11/15/2020 17:29	WG1576904
Hexachloro-1,3-butadiene	U		0.508	1.00	1	11/15/2020 17:29	WG1576904
Isopropylbenzene	U		0.0345	0.100	1	11/15/2020 17:29	WG1576904
p-Isopropyltoluene	U		0.0932	0.200	1	11/15/2020 17:29	WG1576904
2-Butanone (MEK)	U		0.500	1.00	1	11/15/2020 17:29	WG1576904
Methylene Chloride	U		0.265	1.00	1	11/15/2020 17:29	WG1576904
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	11/15/2020 17:29	WG1576904
Methyl tert-butyl ether	U		0.0118	0.0400	1	11/15/2020 17:29	WG1576904
Naphthalene	U		0.124	0.500	1	11/15/2020 17:29	WG1576904
n-Propylbenzene	U		0.0472	0.200	1	11/15/2020 17:29	WG1576904
Styrene	U		0.109	0.500	1	11/15/2020 17:29	WG1576904
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	11/15/2020 17:29	WG1576904
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	11/15/2020 17:29	WG1576904
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	11/15/2020 17:29	WG1576904
Tetrachloroethene	22.5		0.0280	0.100	1	11/15/2020 17:29	WG1576904
Toluene	0.140	J	0.0500	0.200	1	11/15/2020 17:29	WG1576904
1,2,3-Trichlorobenzene	U UJ	C4	0.0250	0.500	1	11/15/2020 17:29	WG1576904
1,2,4-Trichlorobenzene	U		0.193	0.500	1	11/15/2020 17:29	WG1576904
1,1,1-Trichloroethane	U		0.0110	0.100	1	11/15/2020 17:29	WG1576904
1,1,2-Trichloroethane	U		0.0353	0.100	1	11/15/2020 17:29	WG1576904
Trichloroethene	34.7		0.0160	0.0400	1	11/15/2020 17:29	WG1576904
Trichlorofluoromethane	U		0.0200	0.100	1	11/15/2020 17:29	WG1576904
1,2,3-Trichloropropane	U		0.204	0.500	1	11/15/2020 17:29	WG1576904
1,2,4-Trimethylbenzene	0.0625 U	B J	0.0464	0.200	1	11/15/2020 17:29	WG1576904
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	11/15/2020 17:29	WG1576904
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	11/15/2020 17:29	WG1576904
Vinyl chloride	208		0.682	2.50	25	11/17/2020 07:20	WG1577289
Xylenes, Total	U		0.191	0.260	1	11/15/2020 17:29	WG1576904
Ethyl Ether	U		0.0170	0.100	1	11/15/2020 17:29	WG1576904
Tetrahydrofuran	U UJ	C3	0.0900	0.500	1	11/15/2020 17:29	WG1576904
Iodomethane	U		0.242	0.500	1	11/15/2020 17:29	WG1576904
Allyl chloride	U		0.580	1.00	1	11/15/2020 17:29	WG1576904
Trans-1,4-Dichloro-2-butene	U UJ	C3	0.0560	0.200	1	11/15/2020 17:29	WG1576904
(S) Toluene-d8	*104*			*75.0-131*		*11/15/2020 17:29*	WG1576904
(S) Toluene-d8	*103*			*75.0-131*		*11/17/2020 07:20*	WG1577289
(S) 4-Bromofluorobenzene	*109*			*67.0-138*		*11/15/2020 17:29*	WG1576904
(S) 4-Bromofluorobenzene	*101*			*67.0-138*		*11/17/2020 07:20*	WG1577289
(S) 1,2-Dichloroethane-d4	*105*			*70.0-130*		*11/15/2020 17:29*	WG1576904
(S) 1,2-Dichloroethane-d4	*90.7*			*70.0-130*		*11/17/2020 07:20*	WG1577289

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Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U	UJ C3	0.548	1.00	1	11/15/2020 17:49	WG1576904
Acrylonitrile	U		0.0760	0.500	1	11/15/2020 17:49	WG1576904
Benzene	0.0287	J	0.0160	0.0400	1	11/15/2020 17:49	WG1576904
Bromobenzene	U		0.0420	0.500	1	11/15/2020 17:49	WG1576904
Bromodichloromethane	U		0.0315	0.100	1	11/15/2020 17:49	WG1576904
Bromoform	U		0.239	1.00	1	11/15/2020 17:49	WG1576904
Bromomethane	U	~~J4~~	0.148	0.500	1	11/15/2020 17:49	WG1576904
n-Butylbenzene	U		0.153	0.500	1	11/15/2020 17:49	WG1576904
sec-Butylbenzene	U		0.101	0.500	1	11/15/2020 17:49	WG1576904
tert-Butylbenzene	U		0.0620	0.200	1	11/15/2020 17:49	WG1576904
Carbon tetrachloride	U		0.0432	0.200	1	11/15/2020 17:49	WG1576904
Chlorobenzene	U		0.0229	0.100	1	11/15/2020 17:49	WG1576904
Chlorodibromomethane	U		0.0180	0.100	1	11/15/2020 17:49	WG1576904
Chloroethane	U	~~J4~~	0.0432	0.200	1	11/15/2020 17:49	WG1576904
Chloroform	U		0.0166	0.100	1	11/15/2020 17:49	WG1576904
Chloromethane	U		0.0556	0.500	1	11/15/2020 17:49	WG1576904
2-Chlorotoluene	U		0.0368	0.100	1	11/15/2020 17:49	WG1576904
4-Chlorotoluene	U		0.0452	0.200	1	11/15/2020 17:49	WG1576904
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	11/15/2020 17:49	WG1576904
1,2-Dibromoethane	U		0.0210	0.100	1	11/15/2020 17:49	WG1576904
Dibromomethane	U		0.0400	0.200	1	11/15/2020 17:49	WG1576904
1,2-Dichlorobenzene	U		0.0580	0.200	1	11/15/2020 17:49	WG1576904
1,3-Dichlorobenzene	U		0.0680	0.200	1	11/15/2020 17:49	WG1576904
1,4-Dichlorobenzene	U		0.0788	0.200	1	11/15/2020 17:49	WG1576904
Dichlorodifluoromethane	U		0.0327	0.100	1	11/15/2020 17:49	WG1576904
1,1-Dichloroethane	U		0.0230	0.100	1	11/15/2020 17:49	WG1576904
1,2-Dichloroethane	U		0.0190	0.100	1	11/15/2020 17:49	WG1576904
1,1-Dichloroethene	U		0.0200	0.100	1	11/15/2020 17:49	WG1576904
cis-1,2-Dichloroethene	2.66		0.0276	0.100	1	11/17/2020 05:26	WG1577289
trans-1,2-Dichloroethene	0.0593	J	0.0572	0.200	1	11/15/2020 17:49	WG1576904
1,2-Dichloropropane	U		0.0508	0.200	1	11/15/2020 17:49	WG1576904
1,1-Dichloropropene	U		0.0280	0.100	1	11/15/2020 17:49	WG1576904
1,3-Dichloropropane	U		0.0700	0.200	1	11/15/2020 17:49	WG1576904
cis-1,3-Dichloropropene	U		0.0271	0.100	1	11/15/2020 17:49	WG1576904
trans-1,3-Dichloropropene	U		0.0612	0.200	1	11/15/2020 17:49	WG1576904
2,2-Dichloropropane	U		0.0317	0.100	1	11/15/2020 17:49	WG1576904
Di-isopropyl ether	U		0.0140	0.0400	1	11/15/2020 17:49	WG1576904
Ethylbenzene	0.0319	J	0.0212	0.100	1	11/15/2020 17:49	WG1576904
Hexachloro-1,3-butadiene	U		0.508	1.00	1	11/15/2020 17:49	WG1576904
Isopropylbenzene	U		0.0345	0.100	1	11/15/2020 17:49	WG1576904
p-Isopropyltoluene	U		0.0932	0.200	1	11/15/2020 17:49	WG1576904
2-Butanone (MEK)	U		0.500	1.00	1	11/15/2020 17:49	WG1576904
Methylene Chloride	U		0.265	1.00	1	11/15/2020 17:49	WG1576904
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	11/15/2020 17:49	WG1576904
Methyl tert-butyl ether	U		0.0118	0.0400	1	11/15/2020 17:49	WG1576904
Naphthalene	U		0.124	0.500	1	11/15/2020 17:49	WG1576904
n-Propylbenzene	U		0.0472	0.200	1	11/15/2020 17:49	WG1576904
Styrene	U		0.109	0.500	1	11/15/2020 17:49	WG1576904
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	11/15/2020 17:49	WG1576904
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	11/15/2020 17:49	WG1576904
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	11/15/2020 17:49	WG1576904
Tetrachloroethene	0.169		0.0280	0.100	1	11/15/2020 17:49	WG1576904
Toluene	0.578		0.0500	0.200	1	11/15/2020 17:49	WG1576904
1,2,3-Trichlorobenzene	U	UJ C4	0.0250	0.500	1	11/15/2020 17:49	WG1576904
1,2,4-Trichlorobenzene	U		0.193	0.500	1	11/15/2020 17:49	WG1576904
1,1,1-Trichloroethane	U		0.0110	0.100	1	11/15/2020 17:49	WG1576904

JC 12/8/2020

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,1,2-Trichloroethane	U		0.0353	0.100	1	11/15/2020 17:49	WG1576904
Trichloroethene	0.524		0.0160	0.0400	1	11/15/2020 17:49	WG1576904
Trichlorofluoromethane	U		0.0200	0.100	1	11/15/2020 17:49	WG1576904
1,2,3-Trichloropropane	U		0.204	0.500	1	11/15/2020 17:49	WG1576904
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	11/15/2020 17:49	WG1576904
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	11/15/2020 17:49	WG1576904
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	11/15/2020 17:49	WG1576904
Vinyl chloride	13.5		0.0273	0.100	1	11/17/2020 05:26	WG1577289
Xylenes, Total	U		0.191	0.260	1	11/15/2020 17:49	WG1576904
Ethyl Ether	U		0.0170	0.100	1	11/15/2020 17:49	WG1576904
Tetrahydrofuran	U UJ	C3	0.0900	0.500	1	11/15/2020 17:49	WG1576904
Iodomethane	U		0.242	0.500	1	11/15/2020 17:49	WG1576904
Allyl chloride	U		0.580	1.00	1	11/15/2020 17:49	WG1576904
Trans-1,4-Dichloro-2-butene	U UJ	C3	0.0560	0.200	1	11/15/2020 17:49	WG1576904
(S) Toluene-d8	*104*			*75.0-131*		*11/15/2020 17:49*	WG1576904
(S) Toluene-d8	*104*			*75.0-131*		*11/17/2020 05:26*	WG1577289
(S) 4-Bromofluorobenzene	*106*			*67.0-138*		*11/15/2020 17:49*	WG1576904
(S) 4-Bromofluorobenzene	*98.1*			*67.0-138*		*11/17/2020 05:26*	WG1577289
(S) 1,2-Dichloroethane-d4	*107*			*70.0-130*		*11/15/2020 17:49*	WG1576904
(S) 1,2-Dichloroethane-d4	*90.3*			*70.0-130*		*11/17/2020 05:26*	WG1577289

JC 12/8/2020

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Wet Chemistry by Method 9056A

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Sulfate	U		594	5000	1	11/16/2020 11:59	WG1576516

Wet Chemistry by Method 9060A

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
TOC (Total Organic Carbon)	144000		510	5000	5	11/18/2020 00:14	WG1577908

Metals (ICPMS) by Method 6020B

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Iron	39000		1400	5000	50	11/13/2020 13:11	WG1574947
Manganese	5900		35.2	250	50	11/13/2020 13:11	WG1574947

Volatile Organic Compounds (GC) by Method RSK175

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Methane	38900		2.87	6.78	10	11/14/2020 06:03	WG1576276
Ethane	89.6		0.296	1.29	1	11/14/2020 04:15	WG1576414
Ethene	8010		0.422	1.27	1	11/14/2020 04:15	WG1576414

Volatile Organic Compounds (GC/MS) by Method 8260D

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Acetone	211 J-	C3	27.4	50.0	50	11/15/2020 19:52	WG1576904
Acrylonitrile	U		3.80	25.0	50	11/15/2020 19:52	WG1576904
Benzene	U		0.800	2.00	50	11/15/2020 19:52	WG1576904
Bromobenzene	U		2.10	25.0	50	11/15/2020 19:52	WG1576904
Bromodichloromethane	U		1.58	5.00	50	11/15/2020 19:52	WG1576904
Bromoform	U		12.0	50.0	50	11/15/2020 19:52	WG1576904
Bromomethane	U	~~J4~~	7.40	25.0	50	11/15/2020 19:52	WG1576904
n-Butylbenzene	U		7.65	25.0	50	11/15/2020 19:52	WG1576904
sec-Butylbenzene	U		5.05	25.0	50	11/15/2020 19:52	WG1576904
tert-Butylbenzene	U		3.10	10.0	50	11/15/2020 19:52	WG1576904
Carbon tetrachloride	U		2.16	10.0	50	11/15/2020 19:52	WG1576904
Chlorobenzene	U		1.15	5.00	50	11/15/2020 19:52	WG1576904
Chlorodibromomethane	U		0.900	5.00	50	11/15/2020 19:52	WG1576904
Chloroethane	U	~~J4~~	2.16	10.0	50	11/15/2020 19:52	WG1576904
Chloroform	U		0.830	5.00	50	11/15/2020 19:52	WG1576904
Chloromethane	U		2.78	25.0	50	11/15/2020 19:52	WG1576904
2-Chlorotoluene	U		1.84	5.00	50	11/15/2020 19:52	WG1576904
4-Chlorotoluene	U		2.26	10.0	50	11/15/2020 19:52	WG1576904
1,2-Dibromo-3-Chloropropane	U		10.2	50.0	50	11/15/2020 19:52	WG1576904
1,2-Dibromoethane	U		1.05	5.00	50	11/15/2020 19:52	WG1576904
Dibromomethane	U		2.00	10.0	50	11/15/2020 19:52	WG1576904
1,2-Dichlorobenzene	U		2.90	10.0	50	11/15/2020 19:52	WG1576904
1,3-Dichlorobenzene	U		3.40	10.0	50	11/15/2020 19:52	WG1576904
1,4-Dichlorobenzene	U		3.94	10.0	50	11/15/2020 19:52	WG1576904
Dichlorodifluoromethane	U		1.64	5.00	50	11/15/2020 19:52	WG1576904
1,1-Dichloroethane	U		1.15	5.00	50	11/15/2020 19:52	WG1576904
1,2-Dichloroethane	U		0.950	5.00	50	11/15/2020 19:52	WG1576904
1,1-Dichloroethene	72.3		1.00	5.00	50	11/15/2020 19:52	WG1576904
cis-1,2-Dichloroethene	84900		138	500	5000	11/17/2020 07:39	WG1577289
trans-1,2-Dichloroethene	281		2.86	10.0	50	11/15/2020 19:52	WG1576904
1,2-Dichloropropane	U		2.54	10.0	50	11/15/2020 19:52	WG1576904

JC 12/8/2020

MW-182-110420

Collected date/time: 11/04/20 10:58

SAMPLE RESULTS - 05

L1283490

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,1-Dichloropropene	U		1.40	5.00	50	11/15/2020 19:52	WG1576904
1,3-Dichloropropane	U		3.50	10.0	50	11/15/2020 19:52	WG1576904
cis-1,3-Dichloropropene	U		1.36	5.00	50	11/15/2020 19:52	WG1576904
trans-1,3-Dichloropropene	U		3.06	10.0	50	11/15/2020 19:52	WG1576904
2,2-Dichloropropane	U		1.59	5.00	50	11/15/2020 19:52	WG1576904
Di-isopropyl ether	U		0.700	2.00	50	11/15/2020 19:52	WG1576904
Ethylbenzene	U		1.06	5.00	50	11/15/2020 19:52	WG1576904
Hexachloro-1,3-butadiene	U		25.4	50.0	50	11/15/2020 19:52	WG1576904
Isopropylbenzene	U		1.73	5.00	50	11/15/2020 19:52	WG1576904
p-Isopropyltoluene	U		4.66	10.0	50	11/15/2020 19:52	WG1576904
2-Butanone (MEK)	32.9	J	25.0	50.0	50	11/15/2020 19:52	WG1576904
Methylene Chloride	46.2	J	13.3	50.0	50	11/15/2020 19:52	WG1576904
4-Methyl-2-pentanone (MIBK)	U		20.0	50.0	50	11/15/2020 19:52	WG1576904
Methyl tert-butyl ether	U		0.590	2.00	50	11/15/2020 19:52	WG1576904
Naphthalene	U		6.20	25.0	50	11/15/2020 19:52	WG1576904
n-Propylbenzene	U		2.36	10.0	50	11/15/2020 19:52	WG1576904
Styrene	U		5.45	25.0	50	11/15/2020 19:52	WG1576904
1,1,1,2-Tetrachloroethane	U		1.00	5.00	50	11/15/2020 19:52	WG1576904
1,1,2,2-Tetrachloroethane	U		0.780	5.00	50	11/15/2020 19:52	WG1576904
1,1,2-Trichlorotrifluoroethane	U		1.35	5.00	50	11/15/2020 19:52	WG1576904
Tetrachloroethene	208		1.40	5.00	50	11/15/2020 19:52	WG1576904
Toluene	2.51	J	2.50	10.0	50	11/15/2020 19:52	WG1576904
1,2,3-Trichlorobenzene	U UJ	C4	1.25	25.0	50	11/15/2020 19:52	WG1576904
1,2,4-Trichlorobenzene	U		9.65	25.0	50	11/15/2020 19:52	WG1576904
1,1,1-Trichloroethane	U		0.550	5.00	50	11/15/2020 19:52	WG1576904
1,1,2-Trichloroethane	U		1.77	5.00	50	11/15/2020 19:52	WG1576904
Trichloroethene	226		0.800	2.00	50	11/15/2020 19:52	WG1576904
Trichlorofluoromethane	U		1.00	5.00	50	11/15/2020 19:52	WG1576904
1,2,3-Trichloropropane	U		10.2	25.0	50	11/15/2020 19:52	WG1576904
1,2,4-Trimethylbenzene	3.05 U	B J	2.32	10.0	50	11/15/2020 19:52	WG1576904
1,2,3-Trimethylbenzene	U		2.30	10.0	50	11/15/2020 19:52	WG1576904
1,3,5-Trimethylbenzene	U		2.16	10.0	50	11/15/2020 19:52	WG1576904
Vinyl chloride	18900		137	500	5000	11/17/2020 07:39	WG1577289
Xylenes, Total	U		9.55	13.0	50	11/15/2020 19:52	WG1576904
Ethyl Ether	6.70		0.850	5.00	50	11/15/2020 19:52	WG1576904
Tetrahydrofuran	U UJ	C3	4.50	25.0	50	11/15/2020 19:52	WG1576904
Iodomethane	U		12.1	25.0	50	11/15/2020 19:52	WG1576904
Allyl chloride	U		29.0	50.0	50	11/15/2020 19:52	WG1576904
Trans-1,4-Dichloro-2-butene	U UJ	C3	2.80	10.0	50	11/15/2020 19:52	WG1576904
(S) Toluene-d8	*105*			*75.0-131*		*11/15/2020 19:52*	WG1576904
(S) Toluene-d8	*99.6*			*75.0-131*		*11/17/2020 07:39*	WG1577289
(S) 4-Bromofluorobenzene	*109*			*67.0-138*		*11/15/2020 19:52*	WG1576904
(S) 4-Bromofluorobenzene	*107*			*67.0-138*		*11/17/2020 07:39*	WG1577289
(S) 1,2-Dichloroethane-d4	*109*			*70.0-130*		*11/15/2020 19:52*	WG1576904
(S) 1,2-Dichloroethane-d4	*97.8*			*70.0-130*		*11/17/2020 07:39*	WG1577289

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

JC 12/8/2020

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Sulfate	28500		594	5000	1	11/16/2020 05:57	WG1576516

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	3920		102	1000	1	11/16/2020 06:35	WG1576993

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	2890		562	2000	20	11/13/2020 13:14	WG1574947
Manganese	2280		14.1	100	20	11/13/2020 13:14	WG1574947

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	4380		0.287	0.678	1	11/14/2020 04:25	WG1576414
Ethane	U		0.296	1.29	1	11/14/2020 04:25	WG1576414
Ethene	U		0.422	1.27	1	11/14/2020 04:25	WG1576414

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	39.9 J-	C3	5.48	10.0	10	11/15/2020 20:12	WG1576904
Acrylonitrile	U		0.760	5.00	10	11/15/2020 20:12	WG1576904
Benzene	U		0.160	0.400	10	11/15/2020 20:12	WG1576904
Bromobenzene	U		0.420	5.00	10	11/15/2020 20:12	WG1576904
Bromodichloromethane	U		0.315	1.00	10	11/15/2020 20:12	WG1576904
Bromoform	U		2.39	10.0	10	11/15/2020 20:12	WG1576904
Bromomethane	U	~~J4~~	1.48	5.00	10	11/15/2020 20:12	WG1576904
n-Butylbenzene	U		1.53	5.00	10	11/15/2020 20:12	WG1576904
sec-Butylbenzene	U		1.01	5.00	10	11/15/2020 20:12	WG1576904
tert-Butylbenzene	U		0.620	2.00	10	11/15/2020 20:12	WG1576904
Carbon tetrachloride	U		0.432	2.00	10	11/15/2020 20:12	WG1576904
Chlorobenzene	U		0.229	1.00	10	11/15/2020 20:12	WG1576904
Chlorodibromomethane	U		0.180	1.00	10	11/15/2020 20:12	WG1576904
Chloroethane	9.41		0.432	2.00	10	11/17/2020 07:57	WG1577289
Chloroform	U		0.166	1.00	10	11/15/2020 20:12	WG1576904
Chloromethane	U		0.556	5.00	10	11/15/2020 20:12	WG1576904
2-Chlorotoluene	U		0.368	1.00	10	11/15/2020 20:12	WG1576904
4-Chlorotoluene	U		0.452	2.00	10	11/15/2020 20:12	WG1576904
1,2-Dibromo-3-Chloropropane	U		2.04	10.0	10	11/15/2020 20:12	WG1576904
1,2-Dibromoethane	U		0.210	1.00	10	11/15/2020 20:12	WG1576904
Dibromomethane	U		0.400	2.00	10	11/15/2020 20:12	WG1576904
1,2-Dichlorobenzene	U		0.580	2.00	10	11/15/2020 20:12	WG1576904
1,3-Dichlorobenzene	U		0.680	2.00	10	11/15/2020 20:12	WG1576904
1,4-Dichlorobenzene	U		0.788	2.00	10	11/15/2020 20:12	WG1576904
Dichlorodifluoromethane	U		0.327	1.00	10	11/15/2020 20:12	WG1576904
1,1-Dichloroethane	U		0.230	1.00	10	11/15/2020 20:12	WG1576904
1,2-Dichloroethane	U		0.190	1.00	10	11/15/2020 20:12	WG1576904
1,1-Dichloroethene	3.77		0.200	1.00	10	11/15/2020 20:12	WG1576904
cis-1,2-Dichloroethene	134		0.276	1.00	10	11/15/2020 20:12	WG1576904
trans-1,2-Dichloroethene	1.52	J	0.572	2.00	10	11/15/2020 20:12	WG1576904
1,2-Dichloropropane	U		0.508	2.00	10	11/15/2020 20:12	WG1576904

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Volatile Organic Compounds (GC/MS) by Method 8260D

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
1,1-Dichloropropene	U		0.280	1.00	10	11/15/2020 20:12	WG1576904
1,3-Dichloropropane	U		0.700	2.00	10	11/15/2020 20:12	WG1576904
cis-1,3-Dichloropropene	U		0.271	1.00	10	11/15/2020 20:12	WG1576904
trans-1,3-Dichloropropene	U		0.612	2.00	10	11/15/2020 20:12	WG1576904
2,2-Dichloropropane	U		0.317	1.00	10	11/15/2020 20:12	WG1576904
Di-isopropyl ether	U		0.140	0.400	10	11/15/2020 20:12	WG1576904
Ethylbenzene	U		0.212	1.00	10	11/15/2020 20:12	WG1576904
Hexachloro-1,3-butadiene	U		5.08	10.0	10	11/15/2020 20:12	WG1576904
Isopropylbenzene	U		0.345	1.00	10	11/15/2020 20:12	WG1576904
p-Isopropyltoluene	U		0.932	2.00	10	11/15/2020 20:12	WG1576904
2-Butanone (MEK)	U		5.00	10.0	10	11/15/2020 20:12	WG1576904
Methylene Chloride	9.02	J	2.65	10.0	10	11/15/2020 20:12	WG1576904
4-Methyl-2-pentanone (MIBK)	U		4.00	10.0	10	11/15/2020 20:12	WG1576904
Methyl tert-butyl ether	U		0.118	0.400	10	11/15/2020 20:12	WG1576904
Naphthalene	U		1.24	5.00	10	11/15/2020 20:12	WG1576904
n-Propylbenzene	U		0.472	2.00	10	11/15/2020 20:12	WG1576904
Styrene	U		1.09	5.00	10	11/15/2020 20:12	WG1576904
1,1,1,2-Tetrachloroethane	U		0.200	1.00	10	11/15/2020 20:12	WG1576904
1,1,2,2-Tetrachloroethane	U		0.156	1.00	10	11/15/2020 20:12	WG1576904
1,1,2-Trichlorotrifluoroethane	U		0.270	1.00	10	11/15/2020 20:12	WG1576904
Tetrachloroethene	162		0.280	1.00	10	11/15/2020 20:12	WG1576904
Toluene	U		0.500	2.00	10	11/15/2020 20:12	WG1576904
1,2,3-Trichlorobenzene	U UJ	C4	0.250	5.00	10	11/15/2020 20:12	WG1576904
1,2,4-Trichlorobenzene	U		1.93	5.00	10	11/15/2020 20:12	WG1576904
1,1,1-Trichloroethane	U		0.110	1.00	10	11/15/2020 20:12	WG1576904
1,1,2-Trichloroethane	U		0.353	1.00	10	11/15/2020 20:12	WG1576904
Trichloroethene	102		0.160	0.400	10	11/15/2020 20:12	WG1576904
Trichlorofluoromethane	U		0.200	1.00	10	11/15/2020 20:12	WG1576904
1,2,3-Trichloropropane	U		2.04	5.00	10	11/15/2020 20:12	WG1576904
1,2,4-Trimethylbenzene	U		0.464	2.00	10	11/15/2020 20:12	WG1576904
1,2,3-Trimethylbenzene	U		0.460	2.00	10	11/15/2020 20:12	WG1576904
1,3,5-Trimethylbenzene	U		0.432	2.00	10	11/15/2020 20:12	WG1576904
Vinyl chloride	3.97		0.273	1.00	10	11/17/2020 07:57	WG1577289
Xylenes, Total	U		1.91	2.60	10	11/15/2020 20:12	WG1576904
Ethyl Ether	1.36		0.170	1.00	10	11/15/2020 20:12	WG1576904
Tetrahydrofuran	U UJ	C3	0.900	5.00	10	11/15/2020 20:12	WG1576904
Iodomethane	U		2.42	5.00	10	11/15/2020 20:12	WG1576904
Allyl chloride	U		5.80	10.0	10	11/15/2020 20:12	WG1576904
Trans-1,4-Dichloro-2-butene	U UJ	C3	0.560	2.00	10	11/15/2020 20:12	WG1576904
(S) Toluene-d8	*104*			*75.0-131*		*11/15/2020 20:12*	WG1576904
(S) Toluene-d8	*101*			*75.0-131*		*11/17/2020 07:57*	WG1577289
(S) 4-Bromofluorobenzene	*107*			*67.0-138*		*11/15/2020 20:12*	WG1576904
(S) 4-Bromofluorobenzene	*102*			*67.0-138*		*11/17/2020 07:57*	WG1577289
(S) 1,2-Dichloroethane-d4	*107*			*70.0-130*		*11/15/2020 20:12*	WG1576904
(S) 1,2-Dichloroethane-d4	*92.3*			*70.0-130*		*11/17/2020 07:57*	WG1577289

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Wet Chemistry by Method 9056A

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Sulfate	16600		594	5000	1	11/16/2020 06:13	WG1576516

Wet Chemistry by Method 9060A

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
TOC (Total Organic Carbon)	5710		102	1000	1	11/16/2020 07:16	WG1576993

Metals (ICPMS) by Method 6020B

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Iron	18300		28.1	100	1	11/13/2020 00:08	WG1574947
Manganese	2620		0.704	5.00	1	11/13/2020 00:08	WG1574947

Volatile Organic Compounds (GC) by Method RSK175

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Methane	8660		2.87	6.78	10	11/14/2020 06:07	WG1576276
Ethane	119		0.296	1.29	1	11/14/2020 04:30	WG1576414
Ethene	50.1		0.422	1.27	1	11/14/2020 04:30	WG1576414

Volatile Organic Compounds (GC/MS) by Method 8260D

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Acetone	98.4	J- C3	13.7	25.0	25	11/15/2020 20:32	WG1576904
Acrylonitrile	U		1.90	12.5	25	11/15/2020 20:32	WG1576904
Benzene	46.6		0.400	1.00	25	11/15/2020 20:32	WG1576904
Bromobenzene	U		1.05	12.5	25	11/15/2020 20:32	WG1576904
Bromodichloromethane	U		0.788	2.50	25	11/15/2020 20:32	WG1576904
Bromoform	U		5.98	25.0	25	11/15/2020 20:32	WG1576904
Bromomethane	U	~~J4~~	3.70	12.5	25	11/15/2020 20:32	WG1576904
n-Butylbenzene	U		3.83	12.5	25	11/15/2020 20:32	WG1576904
sec-Butylbenzene	U		2.53	12.5	25	11/15/2020 20:32	WG1576904
tert-Butylbenzene	U		1.55	5.00	25	11/15/2020 20:32	WG1576904
Carbon tetrachloride	U		1.08	5.00	25	11/15/2020 20:32	WG1576904
Chlorobenzene	U		0.573	2.50	25	11/15/2020 20:32	WG1576904
Chlorodibromomethane	U		0.450	2.50	25	11/15/2020 20:32	WG1576904
Chloroethane	U	~~J4~~	1.08	5.00	25	11/15/2020 20:32	WG1576904
Chloroform	U		0.415	2.50	25	11/15/2020 20:32	WG1576904
Chloromethane	U		1.39	12.5	25	11/15/2020 20:32	WG1576904
2-Chlorotoluene	U		0.920	2.50	25	11/15/2020 20:32	WG1576904
4-Chlorotoluene	U		1.13	5.00	25	11/15/2020 20:32	WG1576904
1,2-Dibromo-3-Chloropropane	U		5.10	25.0	25	11/15/2020 20:32	WG1576904
1,2-Dibromoethane	U		0.525	2.50	25	11/15/2020 20:32	WG1576904
Dibromomethane	U		1.00	5.00	25	11/15/2020 20:32	WG1576904
1,2-Dichlorobenzene	U		1.45	5.00	25	11/15/2020 20:32	WG1576904
1,3-Dichlorobenzene	U		1.70	5.00	25	11/15/2020 20:32	WG1576904
1,4-Dichlorobenzene	U		1.97	5.00	25	11/15/2020 20:32	WG1576904
Dichlorodifluoromethane	U		0.818	2.50	25	11/15/2020 20:32	WG1576904
1,1-Dichloroethane	U		0.575	2.50	25	11/15/2020 20:32	WG1576904
1,2-Dichloroethane	U		0.475	2.50	25	11/15/2020 20:32	WG1576904
1,1-Dichloroethene	U		0.500	2.50	25	11/15/2020 20:32	WG1576904
cis-1,2-Dichloroethene	413		0.690	2.50	25	11/15/2020 20:32	WG1576904
trans-1,2-Dichloroethene	U		1.43	5.00	25	11/15/2020 20:32	WG1576904
1,2-Dichloropropane	U		1.27	5.00	25	11/15/2020 20:32	WG1576904

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MW108-110420
Collected date/time: 11/04/20 11:25

SAMPLE RESULTS - 07

L1283490

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,1-Dichloropropene	U		0.700	2.50	25	11/15/2020 20:32	WG1576904
1,3-Dichloropropane	U		1.75	5.00	25	11/15/2020 20:32	WG1576904
cis-1,3-Dichloropropene	U		0.678	2.50	25	11/15/2020 20:32	WG1576904
trans-1,3-Dichloropropene	U		1.53	5.00	25	11/15/2020 20:32	WG1576904
2,2-Dichloropropane	U		0.793	2.50	25	11/15/2020 20:32	WG1576904
Di-isopropyl ether	U		0.350	1.00	25	11/15/2020 20:32	WG1576904
Ethylbenzene	U		0.530	2.50	25	11/15/2020 20:32	WG1576904
Hexachloro-1,3-butadiene	U		12.7	25.0	25	11/15/2020 20:32	WG1576904
Isopropylbenzene	U		0.863	2.50	25	11/15/2020 20:32	WG1576904
p-Isopropyltoluene	U		2.33	5.00	25	11/15/2020 20:32	WG1576904
2-Butanone (MEK)	U		12.5	25.0	25	11/15/2020 20:32	WG1576904
Methylene Chloride	23.3	J	6.63	25.0	25	11/15/2020 20:32	WG1576904
4-Methyl-2-pentanone (MIBK)	U		10.0	25.0	25	11/15/2020 20:32	WG1576904
Methyl tert-butyl ether	U		0.295	1.00	25	11/15/2020 20:32	WG1576904
Naphthalene	U		3.10	12.5	25	11/15/2020 20:32	WG1576904
n-Propylbenzene	U		1.18	5.00	25	11/15/2020 20:32	WG1576904
Styrene	U		2.73	12.5	25	11/15/2020 20:32	WG1576904
1,1,1,2-Tetrachloroethane	U		0.500	2.50	25	11/15/2020 20:32	WG1576904
1,1,2,2-Tetrachloroethane	U		0.390	2.50	25	11/15/2020 20:32	WG1576904
1,1,2-Trichlorotrifluoroethane	U		0.675	2.50	25	11/15/2020 20:32	WG1576904
Tetrachloroethene	10.2		0.700	2.50	25	11/15/2020 20:32	WG1576904
Toluene	2.12	J	1.25	5.00	25	11/15/2020 20:32	WG1576904
1,2,3-Trichlorobenzene	U UJ	C4	0.625	12.5	25	11/15/2020 20:32	WG1576904
1,2,4-Trichlorobenzene	U		4.83	12.5	25	11/15/2020 20:32	WG1576904
1,1,1-Trichloroethane	U		0.275	2.50	25	11/15/2020 20:32	WG1576904
1,1,2-Trichloroethane	U		0.883	2.50	25	11/15/2020 20:32	WG1576904
Trichloroethene	32.6		0.400	1.00	25	11/15/2020 20:32	WG1576904
Trichlorofluoromethane	U		0.500	2.50	25	11/15/2020 20:32	WG1576904
1,2,3-Trichloropropane	U		5.10	12.5	25	11/15/2020 20:32	WG1576904
1,2,4-Trimethylbenzene	U		1.16	5.00	25	11/15/2020 20:32	WG1576904
1,2,3-Trimethylbenzene	U		1.15	5.00	25	11/15/2020 20:32	WG1576904
1,3,5-Trimethylbenzene	U		1.08	5.00	25	11/15/2020 20:32	WG1576904
Vinyl chloride	107		0.682	2.50	25	11/17/2020 08:16	WG1577289
Xylenes, Total	6.15	J	4.78	6.50	25	11/15/2020 20:32	WG1576904
Ethyl Ether	U		0.425	2.50	25	11/15/2020 20:32	WG1576904
Tetrahydrofuran	U UJ	C3	2.25	12.5	25	11/15/2020 20:32	WG1576904
Iodomethane	U		6.05	12.5	25	11/15/2020 20:32	WG1576904
Allyl chloride	U		14.5	25.0	25	11/15/2020 20:32	WG1576904
Trans-1,4-Dichloro-2-butene	U UJ	C3	1.40	5.00	25	11/15/2020 20:32	WG1576904
(S) Toluene-d8	*103*			*75.0-131*		*11/15/2020 20:32*	WG1576904
(S) Toluene-d8	*105*			*75.0-131*		*11/17/2020 08:16*	WG1577289
(S) 4-Bromofluorobenzene	*108*			*67.0-138*		*11/15/2020 20:32*	WG1576904
(S) 4-Bromofluorobenzene	*104*			*67.0-138*		*11/17/2020 08:16*	WG1577289
(S) 1,2-Dichloroethane-d4	*108*			*70.0-130*		*11/15/2020 20:32*	WG1576904
(S) 1,2-Dichloroethane-d4	*88.4*			*70.0-130*		*11/17/2020 08:16*	WG1577289

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Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	0.702 J	C3 J	0.548	1.00	1	11/15/2020 18:10	WG1576904
Acrylonitrile	U		0.0760	0.500	1	11/15/2020 18:10	WG1576904
Benzene	0.0161	J	0.0160	0.0400	1	11/15/2020 18:10	WG1576904
Bromobenzene	U		0.0420	0.500	1	11/15/2020 18:10	WG1576904
Bromodichloromethane	U		0.0315	0.100	1	11/15/2020 18:10	WG1576904
Bromoform	U		0.239	1.00	1	11/15/2020 18:10	WG1576904
Bromomethane	U	~~J4~~	0.148	0.500	1	11/15/2020 18:10	WG1576904
n-Butylbenzene	U		0.153	0.500	1	11/15/2020 18:10	WG1576904
sec-Butylbenzene	U		0.101	0.500	1	11/15/2020 18:10	WG1576904
tert-Butylbenzene	U		0.0620	0.200	1	11/15/2020 18:10	WG1576904
Carbon tetrachloride	U		0.0432	0.200	1	11/15/2020 18:10	WG1576904
Chlorobenzene	U		0.0229	0.100	1	11/15/2020 18:10	WG1576904
Chlorodibromomethane	U		0.0180	0.100	1	11/15/2020 18:10	WG1576904
Chloroethane	U	~~J4~~	0.0432	0.200	1	11/15/2020 18:10	WG1576904
Chloroform	U		0.0166	0.100	1	11/15/2020 18:10	WG1576904
Chloromethane	U		0.0556	0.500	1	11/15/2020 18:10	WG1576904
2-Chlorotoluene	U		0.0368	0.100	1	11/15/2020 18:10	WG1576904
4-Chlorotoluene	U		0.0452	0.200	1	11/15/2020 18:10	WG1576904
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	11/15/2020 18:10	WG1576904
1,2-Dibromoethane	U		0.0210	0.100	1	11/15/2020 18:10	WG1576904
Dibromomethane	U		0.0400	0.200	1	11/15/2020 18:10	WG1576904
1,2-Dichlorobenzene	U		0.0580	0.200	1	11/15/2020 18:10	WG1576904
1,3-Dichlorobenzene	U		0.0680	0.200	1	11/15/2020 18:10	WG1576904
1,4-Dichlorobenzene	U		0.0788	0.200	1	11/15/2020 18:10	WG1576904
Dichlorodifluoromethane	U		0.0327	0.100	1	11/15/2020 18:10	WG1576904
1,1-Dichloroethane	U		0.0230	0.100	1	11/15/2020 18:10	WG1576904
1,2-Dichloroethane	U		0.0190	0.100	1	11/15/2020 18:10	WG1576904
1,1-Dichloroethene	U		0.0200	0.100	1	11/15/2020 18:10	WG1576904
cis-1,2-Dichloroethene	0.220		0.0276	0.100	1	11/17/2020 05:45	WG1577289
trans-1,2-Dichloroethene	U		0.0572	0.200	1	11/15/2020 18:10	WG1576904
1,2-Dichloropropane	U		0.0508	0.200	1	11/15/2020 18:10	WG1576904
1,1-Dichloropropene	U		0.0280	0.100	1	11/15/2020 18:10	WG1576904
1,3-Dichloropropane	U		0.0700	0.200	1	11/15/2020 18:10	WG1576904
cis-1,3-Dichloropropene	U		0.0271	0.100	1	11/15/2020 18:10	WG1576904
trans-1,3-Dichloropropene	U		0.0612	0.200	1	11/15/2020 18:10	WG1576904
2,2-Dichloropropane	U		0.0317	0.100	1	11/15/2020 18:10	WG1576904
Di-isopropyl ether	U		0.0140	0.0400	1	11/15/2020 18:10	WG1576904
Ethylbenzene	U		0.0212	0.100	1	11/15/2020 18:10	WG1576904
Hexachloro-1,3-butadiene	U		0.508	1.00	1	11/15/2020 18:10	WG1576904
Isopropylbenzene	U		0.0345	0.100	1	11/15/2020 18:10	WG1576904
p-Isopropyltoluene	U		0.0932	0.200	1	11/15/2020 18:10	WG1576904
2-Butanone (MEK)	U		0.500	1.00	1	11/15/2020 18:10	WG1576904
Methylene Chloride	U		0.265	1.00	1	11/15/2020 18:10	WG1576904
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	11/15/2020 18:10	WG1576904
Methyl tert-butyl ether	U		0.0118	0.0400	1	11/15/2020 18:10	WG1576904
Naphthalene	U		0.124	0.500	1	11/15/2020 18:10	WG1576904
n-Propylbenzene	U		0.0472	0.200	1	11/15/2020 18:10	WG1576904
Styrene	U		0.109	0.500	1	11/15/2020 18:10	WG1576904
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	11/15/2020 18:10	WG1576904
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	11/15/2020 18:10	WG1576904
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	11/15/2020 18:10	WG1576904
Tetrachloroethene	U		0.0280	0.100	1	11/15/2020 18:10	WG1576904
Toluene	0.149	J	0.0500	0.200	1	11/15/2020 18:10	WG1576904
1,2,3-Trichlorobenzene	U UJ	C4	0.0250	0.500	1	11/15/2020 18:10	WG1576904
1,2,4-Trichlorobenzene	U		0.193	0.500	1	11/15/2020 18:10	WG1576904
1,1,1-Trichloroethane	U		0.0110	0.100	1	11/15/2020 18:10	WG1576904

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Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,1,2-Trichloroethane	U		0.0353	0.100	1	11/15/2020 18:10	WG1576904
Trichloroethene	U		0.0160	0.0400	1	11/15/2020 18:10	WG1576904
Trichlorofluoromethane	U		0.0200	0.100	1	11/15/2020 18:10	WG1576904
1,2,3-Trichloropropane	U		0.204	0.500	1	11/15/2020 18:10	WG1576904
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	11/15/2020 18:10	WG1576904
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	11/15/2020 18:10	WG1576904
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	11/15/2020 18:10	WG1576904
Vinyl chloride	0.197		0.0273	0.100	1	11/17/2020 05:45	WG1577289
Xylenes, Total	0.224	J	0.191	0.260	1	11/15/2020 18:10	WG1576904
Ethyl Ether	U		0.0170	0.100	1	11/15/2020 18:10	WG1576904
Tetrahydrofuran	U	UJ C3	0.0900	0.500	1	11/15/2020 18:10	WG1576904
Iodomethane	U		0.242	0.500	1	11/15/2020 18:10	WG1576904
Allyl chloride	U		0.580	1.00	1	11/15/2020 18:10	WG1576904
Trans-1,4-Dichloro-2-butene	U	UJ C3	0.0560	0.200	1	11/15/2020 18:10	WG1576904
(S) Toluene-d8	*103*			*75.0-131*		*11/15/2020 18:10*	WG1576904
(S) Toluene-d8	*105*			*75.0-131*		*11/17/2020 05:45*	WG1577289
(S) 4-Bromofluorobenzene	*108*			*67.0-138*		*11/15/2020 18:10*	WG1576904
(S) 4-Bromofluorobenzene	*96.9*			*67.0-138*		*11/17/2020 05:45*	WG1577289
(S) 1,2-Dichloroethane-d4	*107*			*70.0-130*		*11/15/2020 18:10*	WG1576904
(S) 1,2-Dichloroethane-d4	*90.5*			*70.0-130*		*11/17/2020 05:45*	WG1577289

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

JC 12/8/2020

MW-314-110420

Collected date/time: 11/04/20 13:03

SAMPLE RESULTS - 09

L1283490

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	364 J-	C3	54.8	100	100	11/15/2020 20:53	WG1576904
Acrylonitrile	U		7.60	50.0	100	11/15/2020 20:53	WG1576904
Benzene	U		1.60	4.00	100	11/15/2020 20:53	WG1576904
Bromobenzene	U		4.20	50.0	100	11/15/2020 20:53	WG1576904
Bromodichloromethane	U		3.15	10.0	100	11/15/2020 20:53	WG1576904
Bromoform	U		23.9	100	100	11/15/2020 20:53	WG1576904
Bromomethane	U	~~J4~~	14.8	50.0	100	11/15/2020 20:53	WG1576904
n-Butylbenzene	U		15.3	50.0	100	11/15/2020 20:53	WG1576904
sec-Butylbenzene	U		10.1	50.0	100	11/15/2020 20:53	WG1576904
tert-Butylbenzene	U		6.20	20.0	100	11/15/2020 20:53	WG1576904
Carbon tetrachloride	U		4.32	20.0	100	11/15/2020 20:53	WG1576904
Chlorobenzene	U		2.29	10.0	100	11/15/2020 20:53	WG1576904
Chlorodibromomethane	U		1.80	10.0	100	11/15/2020 20:53	WG1576904
Chloroethane	U	~~J4~~	4.32	20.0	100	11/15/2020 20:53	WG1576904
Chloroform	U		1.66	10.0	100	11/15/2020 20:53	WG1576904
Chloromethane	U		5.56	50.0	100	11/15/2020 20:53	WG1576904
2-Chlorotoluene	U		3.68	10.0	100	11/15/2020 20:53	WG1576904
4-Chlorotoluene	U		4.52	20.0	100	11/15/2020 20:53	WG1576904
1,2-Dibromo-3-Chloropropane	U		20.4	100	100	11/15/2020 20:53	WG1576904
1,2-Dibromoethane	U		2.10	10.0	100	11/15/2020 20:53	WG1576904
Dibromomethane	U		4.00	20.0	100	11/15/2020 20:53	WG1576904
1,2-Dichlorobenzene	U		5.80	20.0	100	11/15/2020 20:53	WG1576904
1,3-Dichlorobenzene	U		6.80	20.0	100	11/15/2020 20:53	WG1576904
1,4-Dichlorobenzene	U		7.88	20.0	100	11/15/2020 20:53	WG1576904
Dichlorodifluoromethane	U		3.27	10.0	100	11/15/2020 20:53	WG1576904
1,1-Dichloroethane	U		2.30	10.0	100	11/15/2020 20:53	WG1576904
1,2-Dichloroethane	U		1.90	10.0	100	11/15/2020 20:53	WG1576904
1,1-Dichloroethene	13.6		2.00	10.0	100	11/15/2020 20:53	WG1576904
cis-1,2-Dichloroethene	4240		2.76	10.0	100	11/15/2020 20:53	WG1576904
trans-1,2-Dichloroethene	16.4	J	5.72	20.0	100	11/15/2020 20:53	WG1576904
1,2-Dichloropropane	U		5.08	20.0	100	11/15/2020 20:53	WG1576904
1,1-Dichloropropene	U		2.80	10.0	100	11/15/2020 20:53	WG1576904
1,3-Dichloropropane	U		7.00	20.0	100	11/15/2020 20:53	WG1576904
cis-1,3-Dichloropropene	U		2.71	10.0	100	11/15/2020 20:53	WG1576904
trans-1,3-Dichloropropene	U		6.12	20.0	100	11/15/2020 20:53	WG1576904
2,2-Dichloropropane	U		3.17	10.0	100	11/15/2020 20:53	WG1576904
Di-isopropyl ether	U		1.40	4.00	100	11/15/2020 20:53	WG1576904
Ethylbenzene	U		2.12	10.0	100	11/15/2020 20:53	WG1576904
Hexachloro-1,3-butadiene	U		50.8	100	100	11/15/2020 20:53	WG1576904
Isopropylbenzene	U		3.45	10.0	100	11/15/2020 20:53	WG1576904
p-Isopropyltoluene	U		9.32	20.0	100	11/15/2020 20:53	WG1576904
2-Butanone (MEK)	U		50.0	100	100	11/15/2020 20:53	WG1576904
Methylene Chloride	89.3	J	26.5	100	100	11/15/2020 20:53	WG1576904
4-Methyl-2-pentanone (MIBK)	U		40.0	100	100	11/15/2020 20:53	WG1576904
Methyl tert-butyl ether	U		1.18	4.00	100	11/15/2020 20:53	WG1576904
Naphthalene	U		12.4	50.0	100	11/15/2020 20:53	WG1576904
n-Propylbenzene	U		4.72	20.0	100	11/15/2020 20:53	WG1576904
Styrene	U		10.9	50.0	100	11/15/2020 20:53	WG1576904
1,1,1,2-Tetrachloroethane	U		2.00	10.0	100	11/15/2020 20:53	WG1576904
1,1,2,2-Tetrachloroethane	U		1.56	10.0	100	11/15/2020 20:53	WG1576904
1,1,2-Trichlorotrifluoroethane	U		2.70	10.0	100	11/15/2020 20:53	WG1576904
Tetrachloroethene	13.2		2.80	10.0	100	11/15/2020 20:53	WG1576904
Toluene	U		5.00	20.0	100	11/15/2020 20:53	WG1576904
1,2,3-Trichlorobenzene	U UJ	C4	2.50	50.0	100	11/15/2020 20:53	WG1576904
1,2,4-Trichlorobenzene	U		19.3	50.0	100	11/15/2020 20:53	WG1576904
1,1,1-Trichloroethane	U		1.10	10.0	100	11/15/2020 20:53	WG1576904

JC 12/8/2020

MW-314-110420

Collected date/time: 11/04/20 13:03

SAMPLE RESULTS - 09

L1283490

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,1,2-Trichloroethane	U		3.53	10.0	100	11/15/2020 20:53	WG1576904
Trichloroethene	807		1.60	4.00	100	11/15/2020 20:53	WG1576904
Trichlorofluoromethane	U		2.00	10.0	100	11/15/2020 20:53	WG1576904
1,2,3-Trichloropropane	U		20.4	50.0	100	11/15/2020 20:53	WG1576904
1,2,4-Trimethylbenzene	U		4.64	20.0	100	11/15/2020 20:53	WG1576904
1,2,3-Trimethylbenzene	U		4.60	20.0	100	11/15/2020 20:53	WG1576904
1,3,5-Trimethylbenzene	U		4.32	20.0	100	11/15/2020 20:53	WG1576904
Vinyl chloride	360		2.73	10.0	100	11/17/2020 08:35	WG1577289
Xylenes, Total	U		19.1	26.0	100	11/15/2020 20:53	WG1576904
Ethyl Ether	16.1		1.70	10.0	100	11/15/2020 20:53	WG1576904
Tetrahydrofuran	U UJ	C3	9.00	50.0	100	11/15/2020 20:53	WG1576904
Iodomethane	U		24.2	50.0	100	11/15/2020 20:53	WG1576904
Allyl chloride	U		58.0	100	100	11/15/2020 20:53	WG1576904
Trans-1,4-Dichloro-2-butene	U UJ	C3	5.60	20.0	100	11/15/2020 20:53	WG1576904
(S) Toluene-d8	*103*			*75.0-131*		*11/15/2020 20:53*	WG1576904
(S) Toluene-d8	*103*			*75.0-131*		*11/17/2020 08:35*	WG1577289
(S) 4-Bromofluorobenzene	*108*			*67.0-138*		*11/15/2020 20:53*	WG1576904
(S) 4-Bromofluorobenzene	*101*			*67.0-138*		*11/17/2020 08:35*	WG1577289
(S) 1,2-Dichloroethane-d4	*109*			*70.0-130*		*11/15/2020 20:53*	WG1576904
(S) 1,2-Dichloroethane-d4	*86.7*			*70.0-130*		*11/17/2020 08:35*	WG1577289

JC 12/8/2020

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l		Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	0.816	J	C3 J	0.548	1.00	1	11/15/2020 18:31	WG1576904
Acrylonitrile	U			0.0760	0.500	1	11/15/2020 18:31	WG1576904
Benzene	0.0379		J	0.0160	0.0400	1	11/15/2020 18:31	WG1576904
Bromobenzene	U			0.0420	0.500	1	11/15/2020 18:31	WG1576904
Bromodichloromethane	U			0.0315	0.100	1	11/15/2020 18:31	WG1576904
Bromoform	U			0.239	1.00	1	11/15/2020 18:31	WG1576904
Bromomethane	U		~~J4~~	0.148	0.500	1	11/15/2020 18:31	WG1576904
n-Butylbenzene	U			0.153	0.500	1	11/15/2020 18:31	WG1576904
sec-Butylbenzene	U			0.101	0.500	1	11/15/2020 18:31	WG1576904
tert-Butylbenzene	U			0.0620	0.200	1	11/15/2020 18:31	WG1576904
Carbon tetrachloride	U			0.0432	0.200	1	11/15/2020 18:31	WG1576904
Chlorobenzene	U			0.0229	0.100	1	11/15/2020 18:31	WG1576904
Chlorodibromomethane	U			0.0180	0.100	1	11/15/2020 18:31	WG1576904
Chloroethane	U		~~J4~~	0.0432	0.200	1	11/15/2020 18:31	WG1576904
Chloroform	U			0.0166	0.100	1	11/15/2020 18:31	WG1576904
Chloromethane	U			0.0556	0.500	1	11/15/2020 18:31	WG1576904
2-Chlorotoluene	U			0.0368	0.100	1	11/15/2020 18:31	WG1576904
4-Chlorotoluene	U			0.0452	0.200	1	11/15/2020 18:31	WG1576904
1,2-Dibromo-3-Chloropropane	U			0.204	1.00	1	11/15/2020 18:31	WG1576904
1,2-Dibromoethane	U			0.0210	0.100	1	11/15/2020 18:31	WG1576904
Dibromomethane	U			0.0400	0.200	1	11/15/2020 18:31	WG1576904
1,2-Dichlorobenzene	U			0.0580	0.200	1	11/15/2020 18:31	WG1576904
1,3-Dichlorobenzene	U			0.0680	0.200	1	11/15/2020 18:31	WG1576904
1,4-Dichlorobenzene	U			0.0788	0.200	1	11/15/2020 18:31	WG1576904
Dichlorodifluoromethane	U			0.0327	0.100	1	11/15/2020 18:31	WG1576904
1,1-Dichloroethane	U			0.0230	0.100	1	11/15/2020 18:31	WG1576904
1,2-Dichloroethane	U			0.0190	0.100	1	11/15/2020 18:31	WG1576904
1,1-Dichloroethene	U			0.0200	0.100	1	11/15/2020 18:31	WG1576904
cis-1,2-Dichloroethene	0.552			0.0276	0.100	1	11/15/2020 18:31	WG1576904
trans-1,2-Dichloroethene	1.06			0.0572	0.200	1	11/15/2020 18:31	WG1576904
1,2-Dichloropropane	U			0.0508	0.200	1	11/15/2020 18:31	WG1576904
1,1-Dichloropropene	U			0.0280	0.100	1	11/15/2020 18:31	WG1576904
1,3-Dichloropropane	U			0.0700	0.200	1	11/15/2020 18:31	WG1576904
cis-1,3-Dichloropropene	U			0.0271	0.100	1	11/15/2020 18:31	WG1576904
trans-1,3-Dichloropropene	U			0.0612	0.200	1	11/15/2020 18:31	WG1576904
2,2-Dichloropropane	U			0.0317	0.100	1	11/15/2020 18:31	WG1576904
Di-isopropyl ether	U			0.0140	0.0400	1	11/15/2020 18:31	WG1576904
Ethylbenzene	U			0.0212	0.100	1	11/15/2020 18:31	WG1576904
Hexachloro-1,3-butadiene	U			0.508	1.00	1	11/15/2020 18:31	WG1576904
Isopropylbenzene	U			0.0345	0.100	1	11/15/2020 18:31	WG1576904
p-Isopropyltoluene	U			0.0932	0.200	1	11/15/2020 18:31	WG1576904
2-Butanone (MEK)	U			0.500	1.00	1	11/15/2020 18:31	WG1576904
Methylene Chloride	U			0.265	1.00	1	11/15/2020 18:31	WG1576904
4-Methyl-2-pentanone (MIBK)	U			0.400	1.00	1	11/15/2020 18:31	WG1576904
Methyl tert-butyl ether	U			0.0118	0.0400	1	11/15/2020 18:31	WG1576904
Naphthalene	U			0.124	0.500	1	11/15/2020 18:31	WG1576904
n-Propylbenzene	U			0.0472	0.200	1	11/15/2020 18:31	WG1576904
Styrene	U			0.109	0.500	1	11/15/2020 18:31	WG1576904
1,1,1,2-Tetrachloroethane	U			0.0200	0.100	1	11/15/2020 18:31	WG1576904
1,1,2,2-Tetrachloroethane	U			0.0156	0.100	1	11/15/2020 18:31	WG1576904
1,1,2-Trichlorotrifluoroethane	U			0.0270	0.100	1	11/15/2020 18:31	WG1576904
Tetrachloroethene	U			0.0280	0.100	1	11/15/2020 18:31	WG1576904
Toluene	0.112		J	0.0500	0.200	1	11/15/2020 18:31	WG1576904
1,2,3-Trichlorobenzene	U	UJ	C4	0.0250	0.500	1	11/15/2020 18:31	WG1576904
1,2,4-Trichlorobenzene	U			0.193	0.500	1	11/15/2020 18:31	WG1576904
1,1,1-Trichloroethane	U			0.0110	0.100	1	11/15/2020 18:31	WG1576904

JC 12/8/2020

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,1,2-Trichloroethane	U		0.0353	0.100	1	11/15/2020 18:31	WG1576904
Trichloroethene	0.177		0.0160	0.0400	1	11/15/2020 18:31	WG1576904
Trichlorofluoromethane	U		0.0200	0.100	1	11/15/2020 18:31	WG1576904
1,2,3-Trichloropropane	U		0.204	0.500	1	11/15/2020 18:31	WG1576904
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	11/15/2020 18:31	WG1576904
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	11/15/2020 18:31	WG1576904
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	11/15/2020 18:31	WG1576904
Vinyl chloride	2.26		0.0273	0.100	1	11/17/2020 06:04	WG1577289
Xylenes, Total	U		0.191	0.260	1	11/15/2020 18:31	WG1576904
Ethyl Ether	U		0.0170	0.100	1	11/15/2020 18:31	WG1576904
Tetrahydrofuran	0.574	J- C3	0.0900	0.500	1	11/15/2020 18:31	WG1576904
Iodomethane	U		0.242	0.500	1	11/15/2020 18:31	WG1576904
Allyl chloride	U		0.580	1.00	1	11/15/2020 18:31	WG1576904
Trans-1,4-Dichloro-2-butene	U	UJ C3	0.0560	0.200	1	11/15/2020 18:31	WG1576904
(S) Toluene-d8	*103*			*75.0-131*		*11/15/2020 18:31*	WG1576904
(S) Toluene-d8	*105*			*75.0-131*		*11/17/2020 06:04*	WG1577289
(S) 4-Bromofluorobenzene	*106*			*67.0-138*		*11/15/2020 18:31*	WG1576904
(S) 4-Bromofluorobenzene	*96.8*			*67.0-138*		*11/17/2020 06:04*	WG1577289
(S) 1,2-Dichloroethane-d4	*109*			*70.0-130*		*11/15/2020 18:31*	WG1576904
(S) 1,2-Dichloroethane-d4	*90.1*			*70.0-130*		*11/17/2020 06:04*	WG1577289

JC
12/8/2020

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	1.10 J-	C3	0.548	1.00	1	11/15/2020 18:51	WG1576904
Acrylonitrile	U		0.0760	0.500	1	11/15/2020 18:51	WG1576904
Benzene	U		0.0160	0.0400	1	11/15/2020 18:51	WG1576904
Bromobenzene	U		0.0420	0.500	1	11/15/2020 18:51	WG1576904
Bromodichloromethane	U		0.0315	0.100	1	11/15/2020 18:51	WG1576904
Bromoform	U		0.239	1.00	1	11/15/2020 18:51	WG1576904
Bromomethane	U	~~J4~~	0.148	0.500	1	11/15/2020 18:51	WG1576904
n-Butylbenzene	U		0.153	0.500	1	11/15/2020 18:51	WG1576904
sec-Butylbenzene	U		0.101	0.500	1	11/15/2020 18:51	WG1576904
tert-Butylbenzene	U		0.0620	0.200	1	11/15/2020 18:51	WG1576904
Carbon tetrachloride	U		0.0432	0.200	1	11/15/2020 18:51	WG1576904
Chlorobenzene	U		0.0229	0.100	1	11/15/2020 18:51	WG1576904
Chlorodibromomethane	U		0.0180	0.100	1	11/15/2020 18:51	WG1576904
Chloroethane	0.111	J ~~J4~~	0.0432	0.200	1	11/15/2020 18:51	WG1576904
Chloroform	U		0.0166	0.100	1	11/15/2020 18:51	WG1576904
Chloromethane	U		0.0556	0.500	1	11/15/2020 18:51	WG1576904
2-Chlorotoluene	U		0.0368	0.100	1	11/15/2020 18:51	WG1576904
4-Chlorotoluene	U		0.0452	0.200	1	11/15/2020 18:51	WG1576904
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	11/15/2020 18:51	WG1576904
1,2-Dibromoethane	U		0.0210	0.100	1	11/15/2020 18:51	WG1576904
Dibromomethane	U		0.0400	0.200	1	11/15/2020 18:51	WG1576904
1,2-Dichlorobenzene	U		0.0580	0.200	1	11/15/2020 18:51	WG1576904
1,3-Dichlorobenzene	U		0.0680	0.200	1	11/15/2020 18:51	WG1576904
1,4-Dichlorobenzene	U		0.0788	0.200	1	11/15/2020 18:51	WG1576904
Dichlorodifluoromethane	U		0.0327	0.100	1	11/15/2020 18:51	WG1576904
1,1-Dichloroethane	U		0.0230	0.100	1	11/15/2020 18:51	WG1576904
1,2-Dichloroethane	U		0.0190	0.100	1	11/15/2020 18:51	WG1576904
1,1-Dichloroethene	U		0.0200	0.100	1	11/15/2020 18:51	WG1576904
cis-1,2-Dichloroethene	0.631		0.0276	0.100	1	11/15/2020 18:51	WG1576904
trans-1,2-Dichloroethene	U		0.0572	0.200	1	11/15/2020 18:51	WG1576904
1,2-Dichloropropane	U		0.0508	0.200	1	11/15/2020 18:51	WG1576904
1,1-Dichloropropene	U		0.0280	0.100	1	11/15/2020 18:51	WG1576904
1,3-Dichloropropane	U		0.0700	0.200	1	11/15/2020 18:51	WG1576904
cis-1,3-Dichloropropene	U		0.0271	0.100	1	11/15/2020 18:51	WG1576904
trans-1,3-Dichloropropene	U		0.0612	0.200	1	11/15/2020 18:51	WG1576904
2,2-Dichloropropane	U		0.0317	0.100	1	11/15/2020 18:51	WG1576904
Di-isopropyl ether	U		0.0140	0.0400	1	11/15/2020 18:51	WG1576904
Ethylbenzene	0.0250	J	0.0212	0.100	1	11/15/2020 18:51	WG1576904
Hexachloro-1,3-butadiene	U		0.508	1.00	1	11/15/2020 18:51	WG1576904
Isopropylbenzene	U		0.0345	0.100	1	11/15/2020 18:51	WG1576904
p-Isopropyltoluene	U		0.0932	0.200	1	11/15/2020 18:51	WG1576904
2-Butanone (MEK)	U		0.500	1.00	1	11/15/2020 18:51	WG1576904
Methylene Chloride	U		0.265	1.00	1	11/15/2020 18:51	WG1576904
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	11/15/2020 18:51	WG1576904
Methyl tert-butyl ether	U		0.0118	0.0400	1	11/15/2020 18:51	WG1576904
Naphthalene	U		0.124	0.500	1	11/15/2020 18:51	WG1576904
n-Propylbenzene	U		0.0472	0.200	1	11/15/2020 18:51	WG1576904
Styrene	U		0.109	0.500	1	11/15/2020 18:51	WG1576904
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	11/15/2020 18:51	WG1576904
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	11/15/2020 18:51	WG1576904
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	11/15/2020 18:51	WG1576904
Tetrachloroethene	U		0.0280	0.100	1	11/15/2020 18:51	WG1576904
Toluene	0.298		0.0500	0.200	1	11/15/2020 18:51	WG1576904
1,2,3-Trichlorobenzene	U UJ	C4	0.0250	0.500	1	11/15/2020 18:51	WG1576904
1,2,4-Trichlorobenzene	U		0.193	0.500	1	11/15/2020 18:51	WG1576904
1,1,1-Trichloroethane	U		0.0110	0.100	1	11/15/2020 18:51	WG1576904

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Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l		Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,1,2-Trichloroethane	U			0.0353	0.100	1	11/15/2020 18:51	WG1576904
Trichloroethene	U			0.0160	0.0400	1	11/15/2020 18:51	WG1576904
Trichlorofluoromethane	U			0.0200	0.100	1	11/15/2020 18:51	WG1576904
1,2,3-Trichloropropane	U			0.204	0.500	1	11/15/2020 18:51	WG1576904
1,2,4-Trimethylbenzene	0.0516	U	B J	0.0464	0.200	1	11/15/2020 18:51	WG1576904
1,2,3-Trimethylbenzene	U			0.0460	0.200	1	11/15/2020 18:51	WG1576904
1,3,5-Trimethylbenzene	U			0.0432	0.200	1	11/15/2020 18:51	WG1576904
Vinyl chloride	0.519			0.0273	0.100	1	11/17/2020 06:23	WG1577289
Xylenes, Total	0.213		J	0.191	0.260	1	11/15/2020 18:51	WG1576904
Ethyl Ether	U			0.0170	0.100	1	11/15/2020 18:51	WG1576904
Tetrahydrofuran	U	UJ	C3	0.0900	0.500	1	11/15/2020 18:51	WG1576904
Iodomethane	U			0.242	0.500	1	11/15/2020 18:51	WG1576904
Allyl chloride	U			0.580	1.00	1	11/15/2020 18:51	WG1576904
Trans-1,4-Dichloro-2-butene	U	UJ	C3	0.0560	0.200	1	11/15/2020 18:51	WG1576904
(S) Toluene-d8	*103*				*75.0-131*		*11/15/2020 18:51*	WG1576904
(S) Toluene-d8	*106*				*75.0-131*		*11/17/2020 06:23*	WG1577289
(S) 4-Bromofluorobenzene	*109*				*67.0-138*		*11/15/2020 18:51*	WG1576904
(S) 4-Bromofluorobenzene	*97.9*				*67.0-138*		*11/17/2020 06:23*	WG1577289
(S) 1,2-Dichloroethane-d4	*108*				*70.0-130*		*11/15/2020 18:51*	WG1576904
(S) 1,2-Dichloroethane-d4	*88.8*				*70.0-130*		*11/17/2020 06:23*	WG1577289

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1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	0.922 J	C3 J	0.548	1.00	1	11/15/2020 19:11	WG1576904
Acrylonitrile	U		0.0760	0.500	1	11/15/2020 19:11	WG1576904
Benzene	0.148		0.0160	0.0400	1	11/15/2020 19:11	WG1576904
Bromobenzene	U		0.0420	0.500	1	11/15/2020 19:11	WG1576904
Bromodichloromethane	U		0.0315	0.100	1	11/15/2020 19:11	WG1576904
Bromoform	U		0.239	1.00	1	11/15/2020 19:11	WG1576904
Bromomethane	U	~~J4~~	0.148	0.500	1	11/15/2020 19:11	WG1576904
n-Butylbenzene	U		0.153	0.500	1	11/15/2020 19:11	WG1576904
sec-Butylbenzene	U		0.101	0.500	1	11/15/2020 19:11	WG1576904
tert-Butylbenzene	U		0.0620	0.200	1	11/15/2020 19:11	WG1576904
Carbon tetrachloride	U		0.0432	0.200	1	11/15/2020 19:11	WG1576904
Chlorobenzene	U		0.0229	0.100	1	11/15/2020 19:11	WG1576904
Chlorodibromomethane	U		0.0180	0.100	1	11/15/2020 19:11	WG1576904
Chloroethane	0.422		0.0432	0.200	1	11/17/2020 06:42	WG1577289
Chloroform	U		0.0166	0.100	1	11/15/2020 19:11	WG1576904
Chloromethane	U		0.0556	0.500	1	11/15/2020 19:11	WG1576904
2-Chlorotoluene	U		0.0368	0.100	1	11/15/2020 19:11	WG1576904
4-Chlorotoluene	U		0.0452	0.200	1	11/15/2020 19:11	WG1576904
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	11/15/2020 19:11	WG1576904
1,2-Dibromoethane	U		0.0210	0.100	1	11/15/2020 19:11	WG1576904
Dibromomethane	U		0.0400	0.200	1	11/15/2020 19:11	WG1576904
1,2-Dichlorobenzene	U		0.0580	0.200	1	11/15/2020 19:11	WG1576904
1,3-Dichlorobenzene	U		0.0680	0.200	1	11/15/2020 19:11	WG1576904
1,4-Dichlorobenzene	U		0.0788	0.200	1	11/15/2020 19:11	WG1576904
Dichlorodifluoromethane	U		0.0327	0.100	1	11/15/2020 19:11	WG1576904
1,1-Dichloroethane	U		0.0230	0.100	1	11/15/2020 19:11	WG1576904
1,2-Dichloroethane	U		0.0190	0.100	1	11/15/2020 19:11	WG1576904
1,1-Dichloroethene	U		0.0200	0.100	1	11/15/2020 19:11	WG1576904
cis-1,2-Dichloroethene	0.351		0.0276	0.100	1	11/15/2020 19:11	WG1576904
trans-1,2-Dichloroethene	0.0586	J	0.0572	0.200	1	11/15/2020 19:11	WG1576904
1,2-Dichloropropane	U		0.0508	0.200	1	11/15/2020 19:11	WG1576904
1,1-Dichloropropene	U		0.0280	0.100	1	11/15/2020 19:11	WG1576904
1,3-Dichloropropane	U		0.0700	0.200	1	11/15/2020 19:11	WG1576904
cis-1,3-Dichloropropene	U		0.0271	0.100	1	11/15/2020 19:11	WG1576904
trans-1,3-Dichloropropene	U		0.0612	0.200	1	11/15/2020 19:11	WG1576904
2,2-Dichloropropane	U		0.0317	0.100	1	11/15/2020 19:11	WG1576904
Di-isopropyl ether	U		0.0140	0.0400	1	11/15/2020 19:11	WG1576904
Ethylbenzene	U		0.0212	0.100	1	11/15/2020 19:11	WG1576904
Hexachloro-1,3-butadiene	U		0.508	1.00	1	11/15/2020 19:11	WG1576904
Isopropylbenzene	U		0.0345	0.100	1	11/15/2020 19:11	WG1576904
p-Isopropyltoluene	U		0.0932	0.200	1	11/15/2020 19:11	WG1576904
2-Butanone (MEK)	U		0.500	1.00	1	11/15/2020 19:11	WG1576904
Methylene Chloride	U		0.265	1.00	1	11/15/2020 19:11	WG1576904
4-Methyl-2-pentanone (MIBK)	0.426	J	0.400	1.00	1	11/15/2020 19:11	WG1576904
Methyl tert-butyl ether	U		0.0118	0.0400	1	11/15/2020 19:11	WG1576904
Naphthalene	U		0.124	0.500	1	11/15/2020 19:11	WG1576904
n-Propylbenzene	U		0.0472	0.200	1	11/15/2020 19:11	WG1576904
Styrene	U		0.109	0.500	1	11/15/2020 19:11	WG1576904
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	11/15/2020 19:11	WG1576904
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	11/15/2020 19:11	WG1576904
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	11/15/2020 19:11	WG1576904
Tetrachloroethene	0.0313	J	0.0280	0.100	1	11/15/2020 19:11	WG1576904
Toluene	0.0656	J	0.0500	0.200	1	11/15/2020 19:11	WG1576904
1,2,3-Trichlorobenzene	U UJ	C4	0.0250	0.500	1	11/15/2020 19:11	WG1576904
1,2,4-Trichlorobenzene	U		0.193	0.500	1	11/15/2020 19:11	WG1576904
1,1,1-Trichloroethane	U		0.0110	0.100	1	11/15/2020 19:11	WG1576904

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Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,1,2-Trichloroethane	U		0.0353	0.100	1	11/15/2020 19:11	WG1576904
Trichloroethene	0.0895		0.0160	0.0400	1	11/15/2020 19:11	WG1576904
Trichlorofluoromethane	U		0.0200	0.100	1	11/15/2020 19:11	WG1576904
1,2,3-Trichloropropane	U		0.204	0.500	1	11/15/2020 19:11	WG1576904
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	11/15/2020 19:11	WG1576904
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	11/15/2020 19:11	WG1576904
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	11/15/2020 19:11	WG1576904
Vinyl chloride	0.900		0.0273	0.100	1	11/17/2020 06:42	WG1577289
Xylenes, Total	U		0.191	0.260	1	11/15/2020 19:11	WG1576904
Ethyl Ether	U		0.0170	0.100	1	11/15/2020 19:11	WG1576904
Tetrahydrofuran	6.76	J C3	0.0900	0.500	1	11/15/2020 19:11	WG1576904
Iodomethane	U		0.242	0.500	1	11/15/2020 19:11	WG1576904
Allyl chloride	U		0.580	1.00	1	11/15/2020 19:11	WG1576904
Trans-1,4-Dichloro-2-butene	U	UJ C3	0.0560	0.200	1	11/15/2020 19:11	WG1576904
(S) Toluene-d8	*104*			*75.0-131*		*11/15/2020 19:11*	WG1576904
(S) Toluene-d8	*101*			*75.0-131*		*11/17/2020 06:42*	WG1577289
(S) 4-Bromofluorobenzene	*109*			*67.0-138*		*11/15/2020 19:11*	WG1576904
(S) 4-Bromofluorobenzene	*107*			*67.0-138*		*11/17/2020 06:42*	WG1577289
(S) 1,2-Dichloroethane-d4	*107*			*70.0-130*		*11/15/2020 19:11*	WG1576904
(S) 1,2-Dichloroethane-d4	*95.1*			*70.0-130*		*11/17/2020 06:42*	WG1577289

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Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Sulfate	106000		2970	25000	5	11/16/2020 06:29	WG1576516

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	3590		102	1000	1	11/16/2020 08:06	WG1576993

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	1530		28.1	100	1	11/13/2020 22:38	WG1574211
Manganese	1930		7.04	50.0	10	11/13/2020 22:51	WG1574211

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	2040		0.287	0.678	1	11/14/2020 04:32	WG1576414
Ethane	U		0.296	1.29	1	11/14/2020 04:32	WG1576414
Ethene	U		0.422	1.27	1	11/14/2020 04:32	WG1576414

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	179 J-	C3	27.4	50.0	50	11/15/2020 21:13	WG1576904
Acrylonitrile	U		3.80	25.0	50	11/15/2020 21:13	WG1576904
Benzene	U		0.800	2.00	50	11/15/2020 21:13	WG1576904
Bromobenzene	U		2.10	25.0	50	11/15/2020 21:13	WG1576904
Bromodichloromethane	U		1.58	5.00	50	11/15/2020 21:13	WG1576904
Bromoform	U		12.0	50.0	50	11/15/2020 21:13	WG1576904
Bromomethane	U	~~J4~~	7.40	25.0	50	11/15/2020 21:13	WG1576904
n-Butylbenzene	U		7.65	25.0	50	11/15/2020 21:13	WG1576904
sec-Butylbenzene	U		5.05	25.0	50	11/15/2020 21:13	WG1576904
tert-Butylbenzene	U		3.10	10.0	50	11/15/2020 21:13	WG1576904
Carbon tetrachloride	U		2.16	10.0	50	11/15/2020 21:13	WG1576904
Chlorobenzene	U		1.15	5.00	50	11/15/2020 21:13	WG1576904
Chlorodibromomethane	U		0.900	5.00	50	11/15/2020 21:13	WG1576904
Chloroethane	U	~~J4~~	2.16	10.0	50	11/15/2020 21:13	WG1576904
Chloroform	1.39	J	0.830	5.00	50	11/15/2020 21:13	WG1576904
Chloromethane	U		2.78	25.0	50	11/15/2020 21:13	WG1576904
2-Chlorotoluene	U		1.84	5.00	50	11/15/2020 21:13	WG1576904
4-Chlorotoluene	U		2.26	10.0	50	11/15/2020 21:13	WG1576904
1,2-Dibromo-3-Chloropropane	U		10.2	50.0	50	11/15/2020 21:13	WG1576904
1,2-Dibromoethane	U		1.05	5.00	50	11/15/2020 21:13	WG1576904
Dibromomethane	U		2.00	10.0	50	11/15/2020 21:13	WG1576904
1,2-Dichlorobenzene	U		2.90	10.0	50	11/15/2020 21:13	WG1576904
1,3-Dichlorobenzene	U		3.40	10.0	50	11/15/2020 21:13	WG1576904
1,4-Dichlorobenzene	U		3.94	10.0	50	11/15/2020 21:13	WG1576904
Dichlorodifluoromethane	U		1.64	5.00	50	11/15/2020 21:13	WG1576904
1,1-Dichloroethane	U		1.15	5.00	50	11/15/2020 21:13	WG1576904
1,2-Dichloroethane	U		0.950	5.00	50	11/15/2020 21:13	WG1576904
1,1-Dichloroethene	5.82		1.00	5.00	50	11/15/2020 21:13	WG1576904
cis-1,2-Dichloroethene	894		1.38	5.00	50	11/15/2020 21:13	WG1576904
trans-1,2-Dichloroethene	2.96	J	2.86	10.0	50	11/15/2020 21:13	WG1576904
1,2-Dichloropropane	U		2.54	10.0	50	11/15/2020 21:13	WG1576904

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MW110-110420
Collected date/time: 11/04/20 14:05

SAMPLE RESULTS - 13

L1283490

Volatile Organic Compounds (GC/MS) by Method 8260D

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,1-Dichloropropene	U		1.40	5.00	50	11/15/2020 21:13	WG1576904
1,3-Dichloropropane	U		3.50	10.0	50	11/15/2020 21:13	WG1576904
cis-1,3-Dichloropropene	U		1.36	5.00	50	11/15/2020 21:13	WG1576904
trans-1,3-Dichloropropene	U		3.06	10.0	50	11/15/2020 21:13	WG1576904
2,2-Dichloropropane	U		1.59	5.00	50	11/15/2020 21:13	WG1576904
Di-isopropyl ether	U		0.700	2.00	50	11/15/2020 21:13	WG1576904
Ethylbenzene	U		1.06	5.00	50	11/15/2020 21:13	WG1576904
Hexachloro-1,3-butadiene	U		25.4	50.0	50	11/15/2020 21:13	WG1576904
Isopropylbenzene	U		1.73	5.00	50	11/15/2020 21:13	WG1576904
p-Isopropyltoluene	U		4.66	10.0	50	11/15/2020 21:13	WG1576904
2-Butanone (MEK)	U		25.0	50.0	50	11/15/2020 21:13	WG1576904
Methylene Chloride	46.0	J	13.3	50.0	50	11/15/2020 21:13	WG1576904
4-Methyl-2-pentanone (MIBK)	U		20.0	50.0	50	11/15/2020 21:13	WG1576904
Methyl tert-butyl ether	U		0.590	2.00	50	11/15/2020 21:13	WG1576904
Naphthalene	U		6.20	25.0	50	11/15/2020 21:13	WG1576904
n-Propylbenzene	U		2.36	10.0	50	11/15/2020 21:13	WG1576904
Styrene	U		5.45	25.0	50	11/15/2020 21:13	WG1576904
1,1,1,2-Tetrachloroethane	U		1.00	5.00	50	11/15/2020 21:13	WG1576904
1,1,2,2-Tetrachloroethane	U		0.780	5.00	50	11/15/2020 21:13	WG1576904
1,1,2-Trichlorotrifluoroethane	U		1.35	5.00	50	11/15/2020 21:13	WG1576904
Tetrachloroethene	640		1.40	5.00	50	11/15/2020 21:13	WG1576904
Toluene	U		2.50	10.0	50	11/15/2020 21:13	WG1576904
1,2,3-Trichlorobenzene	U	UJ C4	1.25	25.0	50	11/15/2020 21:13	WG1576904
1,2,4-Trichlorobenzene	U		9.65	25.0	50	11/15/2020 21:13	WG1576904
1,1,1-Trichloroethane	U		0.550	5.00	50	11/15/2020 21:13	WG1576904
1,1,2-Trichloroethane	U		1.77	5.00	50	11/15/2020 21:13	WG1576904
Trichloroethene	343		0.800	2.00	50	11/15/2020 21:13	WG1576904
Trichlorofluoromethane	U		1.00	5.00	50	11/15/2020 21:13	WG1576904
1,2,3-Trichloropropane	U		10.2	25.0	50	11/15/2020 21:13	WG1576904
1,2,4-Trimethylbenzene	U		2.32	10.0	50	11/15/2020 21:13	WG1576904
1,2,3-Trimethylbenzene	U		2.30	10.0	50	11/15/2020 21:13	WG1576904
1,3,5-Trimethylbenzene	U		2.16	10.0	50	11/15/2020 21:13	WG1576904
Vinyl chloride	29.6		1.36	5.00	50	11/17/2020 08:54	WG1577289
Xylenes, Total	U		9.55	13.0	50	11/15/2020 21:13	WG1576904
Ethyl Ether	7.07		0.850	5.00	50	11/15/2020 21:13	WG1576904
Tetrahydrofuran	U	UJ C3	4.50	25.0	50	11/15/2020 21:13	WG1576904
Iodomethane	U		12.1	25.0	50	11/15/2020 21:13	WG1576904
Allyl chloride	U		29.0	50.0	50	11/15/2020 21:13	WG1576904
Trans-1,4-Dichloro-2-butene	U	UJ C3	2.80	10.0	50	11/15/2020 21:13	WG1576904
(S) Toluene-d8	*102*			*75.0-131*		*11/15/2020 21:13*	WG1576904
(S) Toluene-d8	*107*			*75.0-131*		*11/17/2020 08:54*	WG1577289
(S) 4-Bromofluorobenzene	*107*			*67.0-138*		*11/15/2020 21:13*	WG1576904
(S) 4-Bromofluorobenzene	*97.1*			*67.0-138*		*11/17/2020 08:54*	WG1577289
(S) 1,2-Dichloroethane-d4	*106*			*70.0-130*		*11/15/2020 21:13*	WG1576904
(S) 1,2-Dichloroethane-d4	*90.5*			*70.0-130*		*11/17/2020 08:54*	WG1577289

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Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U	UJ C3	0.548	1.00	1	11/15/2020 19:32	WG1576904
Acrylonitrile	U		0.0760	0.500	1	11/15/2020 19:32	WG1576904
Benzene	U		0.0160	0.0400	1	11/15/2020 19:32	WG1576904
Bromobenzene	U		0.0420	0.500	1	11/15/2020 19:32	WG1576904
Bromodichloromethane	U		0.0315	0.100	1	11/15/2020 19:32	WG1576904
Bromoform	U		0.239	1.00	1	11/15/2020 19:32	WG1576904
Bromomethane	U	~~J4~~	0.148	0.500	1	11/15/2020 19:32	WG1576904
n-Butylbenzene	U		0.153	0.500	1	11/15/2020 19:32	WG1576904
sec-Butylbenzene	U		0.101	0.500	1	11/15/2020 19:32	WG1576904
tert-Butylbenzene	U		0.0620	0.200	1	11/15/2020 19:32	WG1576904
Carbon tetrachloride	U		0.0432	0.200	1	11/15/2020 19:32	WG1576904
Chlorobenzene	U		0.0229	0.100	1	11/15/2020 19:32	WG1576904
Chlorodibromomethane	U		0.0180	0.100	1	11/15/2020 19:32	WG1576904
Chloroethane	U	~~J4~~	0.0432	0.200	1	11/15/2020 19:32	WG1576904
Chloroform	U		0.0166	0.100	1	11/15/2020 19:32	WG1576904
Chloromethane	U		0.0556	0.500	1	11/15/2020 19:32	WG1576904
2-Chlorotoluene	U		0.0368	0.100	1	11/15/2020 19:32	WG1576904
4-Chlorotoluene	U		0.0452	0.200	1	11/15/2020 19:32	WG1576904
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	11/15/2020 19:32	WG1576904
1,2-Dibromoethane	U		0.0210	0.100	1	11/15/2020 19:32	WG1576904
Dibromomethane	U		0.0400	0.200	1	11/15/2020 19:32	WG1576904
1,2-Dichlorobenzene	U		0.0580	0.200	1	11/15/2020 19:32	WG1576904
1,3-Dichlorobenzene	U		0.0680	0.200	1	11/15/2020 19:32	WG1576904
1,4-Dichlorobenzene	U		0.0788	0.200	1	11/15/2020 19:32	WG1576904
Dichlorodifluoromethane	U		0.0327	0.100	1	11/15/2020 19:32	WG1576904
1,1-Dichloroethane	U		0.0230	0.100	1	11/15/2020 19:32	WG1576904
1,2-Dichloroethane	U		0.0190	0.100	1	11/15/2020 19:32	WG1576904
1,1-Dichloroethene	U		0.0200	0.100	1	11/15/2020 19:32	WG1576904
cis-1,2-Dichloroethene	0.0977	J	0.0276	0.100	1	11/15/2020 19:32	WG1576904
trans-1,2-Dichloroethene	U		0.0572	0.200	1	11/15/2020 19:32	WG1576904
1,2-Dichloropropane	U		0.0508	0.200	1	11/15/2020 19:32	WG1576904
1,1-Dichloropropene	U		0.0280	0.100	1	11/15/2020 19:32	WG1576904
1,3-Dichloropropane	U		0.0700	0.200	1	11/15/2020 19:32	WG1576904
cis-1,3-Dichloropropene	U		0.0271	0.100	1	11/15/2020 19:32	WG1576904
trans-1,3-Dichloropropene	U		0.0612	0.200	1	11/15/2020 19:32	WG1576904
2,2-Dichloropropane	U		0.0317	0.100	1	11/15/2020 19:32	WG1576904
Di-isopropyl ether	U		0.0140	0.0400	1	11/15/2020 19:32	WG1576904
Ethylbenzene	U		0.0212	0.100	1	11/15/2020 19:32	WG1576904
Hexachloro-1,3-butadiene	U		0.508	1.00	1	11/15/2020 19:32	WG1576904
Isopropylbenzene	U		0.0345	0.100	1	11/15/2020 19:32	WG1576904
p-Isopropyltoluene	U		0.0932	0.200	1	11/15/2020 19:32	WG1576904
2-Butanone (MEK)	U		0.500	1.00	1	11/15/2020 19:32	WG1576904
Methylene Chloride	U		0.265	1.00	1	11/15/2020 19:32	WG1576904
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	11/15/2020 19:32	WG1576904
Methyl tert-butyl ether	U		0.0118	0.0400	1	11/15/2020 19:32	WG1576904
Naphthalene	U		0.124	0.500	1	11/15/2020 19:32	WG1576904
n-Propylbenzene	U		0.0472	0.200	1	11/15/2020 19:32	WG1576904
Styrene	U		0.109	0.500	1	11/15/2020 19:32	WG1576904
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	11/15/2020 19:32	WG1576904
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	11/15/2020 19:32	WG1576904
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	11/15/2020 19:32	WG1576904
Tetrachloroethene	U		0.0280	0.100	1	11/15/2020 19:32	WG1576904
Toluene	0.179	J	0.0500	0.200	1	11/15/2020 19:32	WG1576904
1,2,3-Trichlorobenzene	U	UJ C4	0.0250	0.500	1	11/15/2020 19:32	WG1576904
1,2,4-Trichlorobenzene	U		0.193	0.500	1	11/15/2020 19:32	WG1576904
1,1,1-Trichloroethane	U		0.0110	0.100	1	11/15/2020 19:32	WG1576904

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Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
1,1,2-Trichloroethane	U		0.0353	0.100	1	11/15/2020 19:32	WG1576904
Trichloroethene	U		0.0160	0.0400	1	11/15/2020 19:32	WG1576904
Trichlorofluoromethane	U		0.0200	0.100	1	11/15/2020 19:32	WG1576904
1,2,3-Trichloropropane	U		0.204	0.500	1	11/15/2020 19:32	WG1576904
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	11/15/2020 19:32	WG1576904
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	11/15/2020 19:32	WG1576904
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	11/15/2020 19:32	WG1576904
Vinyl chloride	U		0.0273	0.100	1	11/18/2020 13:46	WG1578207
Xylenes, Total	U		0.191	0.260	1	11/15/2020 19:32	WG1576904
Ethyl Ether	U		0.0170	0.100	1	11/15/2020 19:32	WG1576904
Tetrahydrofuran	U	UJ C3	0.0900	0.500	1	11/15/2020 19:32	WG1576904
Iodomethane	U		0.242	0.500	1	11/15/2020 19:32	WG1576904
Allyl chloride	U		0.580	1.00	1	11/15/2020 19:32	WG1576904
Trans-1,4-Dichloro-2-butene	U	UJ C3	0.0560	0.200	1	11/15/2020 19:32	WG1576904
(S) Toluene-d8	*104*			*75.0-131*		*11/15/2020 19:32*	WG1576904
(S) Toluene-d8	*109*			*75.0-131*		*11/18/2020 13:46*	WG1578207
(S) 4-Bromofluorobenzene	*111*			*67.0-138*		*11/15/2020 19:32*	WG1576904
(S) 4-Bromofluorobenzene	*98.9*			*67.0-138*		*11/18/2020 13:46*	WG1578207
(S) 1,2-Dichloroethane-d4	*109*			*70.0-130*		*11/15/2020 19:32*	WG1576904
(S) 1,2-Dichloroethane-d4	*113*			*70.0-130*		*11/18/2020 13:46*	WG1578207

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Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U		0.548	1.00	1	11/18/2020 16:55	WG1578255
Acrylonitrile	U		0.0760	0.500	1	11/18/2020 16:55	WG1578255
Benzene	0.862		0.0160	0.0400	1	11/18/2020 16:55	WG1578255
Bromobenzene	U		0.0420	0.500	1	11/18/2020 16:55	WG1578255
Bromodichloromethane	U		0.0315	0.100	1	11/18/2020 16:55	WG1578255
Bromoform	U		0.239	1.00	1	11/18/2020 16:55	WG1578255
Bromomethane	U		0.148	0.500	1	11/18/2020 16:55	WG1578255
n-Butylbenzene	U		0.153	0.500	1	11/18/2020 16:55	WG1578255
sec-Butylbenzene	U		0.101	0.500	1	11/18/2020 16:55	WG1578255
tert-Butylbenzene	U		0.0620	0.200	1	11/18/2020 16:55	WG1578255
Carbon tetrachloride	U		0.0432	0.200	1	11/18/2020 16:55	WG1578255
Chlorobenzene	U		0.0229	0.100	1	11/18/2020 16:55	WG1578255
Chlorodibromomethane	U		0.0180	0.100	1	11/18/2020 16:55	WG1578255
Chloroethane	U	~~J4~~	0.0432	0.200	1	11/18/2020 16:55	WG1578255
Chloroform	U		0.0166	0.100	1	11/18/2020 16:55	WG1578255
Chloromethane	U		0.0556	0.500	1	11/18/2020 16:55	WG1578255
2-Chlorotoluene	U		0.0368	0.100	1	11/18/2020 16:55	WG1578255
4-Chlorotoluene	U		0.0452	0.200	1	11/18/2020 16:55	WG1578255
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	11/18/2020 16:55	WG1578255
1,2-Dibromoethane	U		0.0210	0.100	1	11/18/2020 16:55	WG1578255
Dibromomethane	U		0.0400	0.200	1	11/18/2020 16:55	WG1578255
1,2-Dichlorobenzene	U		0.0580	0.200	1	11/18/2020 16:55	WG1578255
1,3-Dichlorobenzene	U		0.0680	0.200	1	11/18/2020 16:55	WG1578255
1,4-Dichlorobenzene	U		0.0788	0.200	1	11/18/2020 16:55	WG1578255
Dichlorodifluoromethane	U		0.0327	0.100	1	11/18/2020 16:55	WG1578255
1,1-Dichloroethane	U		0.0230	0.100	1	11/18/2020 16:55	WG1578255
1,2-Dichloroethane	U		0.0190	0.100	1	11/18/2020 16:55	WG1578255
1,1-Dichloroethene	0.0440	J	0.0200	0.100	1	11/18/2020 16:55	WG1578255
cis-1,2-Dichloroethene	21.0		0.0276	0.100	1	11/18/2020 16:55	WG1578255
trans-1,2-Dichloroethene	U		0.0572	0.200	1	11/18/2020 16:55	WG1578255
1,2-Dichloropropane	U		0.0508	0.200	1	11/18/2020 16:55	WG1578255
1,1-Dichloropropene	U		0.0280	0.100	1	11/18/2020 16:55	WG1578255
1,3-Dichloropropane	U		0.0700	0.200	1	11/18/2020 16:55	WG1578255
cis-1,3-Dichloropropene	U		0.0271	0.100	1	11/18/2020 16:55	WG1578255
trans-1,3-Dichloropropene	U		0.0612	0.200	1	11/18/2020 16:55	WG1578255
2,2-Dichloropropane	U		0.0317	0.100	1	11/18/2020 16:55	WG1578255
Di-isopropyl ether	0.174		0.0140	0.0400	1	11/18/2020 16:55	WG1578255
Ethylbenzene	U		0.0212	0.100	1	11/18/2020 16:55	WG1578255
Hexachloro-1,3-butadiene	U		0.508	1.00	1	11/18/2020 16:55	WG1578255
Isopropylbenzene	U		0.0345	0.100	1	11/18/2020 16:55	WG1578255
p-Isopropyltoluene	U		0.0932	0.200	1	11/18/2020 16:55	WG1578255
2-Butanone (MEK)	U		0.500	1.00	1	11/18/2020 16:55	WG1578255
Methylene Chloride	U		0.265	1.00	1	11/18/2020 16:55	WG1578255
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	11/18/2020 16:55	WG1578255
Methyl tert-butyl ether	U		0.0118	0.0400	1	11/18/2020 16:55	WG1578255
Naphthalene	U		0.124	0.500	1	11/18/2020 16:55	WG1578255
n-Propylbenzene	U		0.0472	0.200	1	11/18/2020 16:55	WG1578255
Styrene	U		0.109	0.500	1	11/18/2020 16:55	WG1578255
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	11/18/2020 16:55	WG1578255
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	11/18/2020 16:55	WG1578255
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	11/18/2020 16:55	WG1578255
Tetrachloroethene	U		0.0280	0.100	1	11/18/2020 16:55	WG1578255
Toluene	0.106	J	0.0500	0.200	1	11/18/2020 16:55	WG1578255
1,2,3-Trichlorobenzene	U UJ	C4	0.0250	0.500	1	11/18/2020 16:55	WG1578255
1,2,4-Trichlorobenzene	U		0.193	0.500	1	11/18/2020 16:55	WG1578255
1,1,1-Trichloroethane	U		0.0110	0.100	1	11/18/2020 16:55	WG1578255

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Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,1,2-Trichloroethane	U		0.0353	0.100	1	11/18/2020 16:55	WG1578255
Trichloroethene	U		0.0160	0.0400	1	11/18/2020 16:55	WG1578255
Trichlorofluoromethane	U		0.0200	0.100	1	11/18/2020 16:55	WG1578255
1,2,3-Trichloropropane	U		0.204	0.500	1	11/18/2020 16:55	WG1578255
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	11/18/2020 16:55	WG1578255
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	11/18/2020 16:55	WG1578255
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	11/18/2020 16:55	WG1578255
Vinyl chloride	23.0		0.0273	0.100	1	11/18/2020 16:55	WG1578255
Xylenes, Total	U		0.191	0.260	1	11/18/2020 16:55	WG1578255
Ethyl Ether	0.139		0.0170	0.100	1	11/18/2020 16:55	WG1578255
Tetrahydrofuran	U		0.0900	0.500	1	11/18/2020 16:55	WG1578255
Iodomethane	U		0.242	0.500	1	11/18/2020 16:55	WG1578255
Allyl chloride	U		0.580	1.00	1	11/18/2020 16:55	WG1578255
Trans-1,4-Dichloro-2-butene	0.116	J	0.0560	0.200	1	11/18/2020 16:55	WG1578255
(S) Toluene-d8	*109*			*75.0-131*		*11/18/2020 16:55*	WG1578255
(S) 4-Bromofluorobenzene	*93.8*			*67.0-138*		*11/18/2020 16:55*	WG1578255
(S) 1,2-Dichloroethane-d4	*118*			*70.0-130*		*11/18/2020 16:55*	WG1578255

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1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Wet Chemistry by Method 2320 B-2011

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Alkalinity	197000		8450	20000	1	11/19/2020 05:34	WG1578247

Sample Narrative:

L1284447-02 WG1578247: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 9056A

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Sulfate	4850	J	594	5000	1	11/20/2020 04:22	WG1579481

Wet Chemistry by Method 9060A

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
TOC (Total Organic Carbon)	3420		102	1000	1	11/17/2020 19:58	WG1577659

Metals (ICPMS) by Method 6020B

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Iron	117		28.1	100	1	11/18/2020 11:34	WG1577444
Manganese	254		0.704	5.00	1	11/18/2020 11:34	WG1577444

Volatile Organic Compounds (GC) by Method RSK175

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Methane	213		0.287	0.678	1	11/18/2020 10:54	WG1577557
Ethane	U		0.296	1.29	1	11/18/2020 10:54	WG1577557
Ethene	U		0.422	1.27	1	11/18/2020 10:54	WG1577557

Volatile Organic Compounds (GC/MS) by Method 8260D

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Acetone	U		0.548	1.00	1	11/18/2020 17:14	WG1578255
Acrylonitrile	U		0.0760	0.500	1	11/18/2020 17:14	WG1578255
Benzene	0.0210	J	0.0160	0.0400	1	11/18/2020 17:14	WG1578255
Bromobenzene	U		0.0420	0.500	1	11/18/2020 17:14	WG1578255
Bromodichloromethane	U		0.0315	0.100	1	11/18/2020 17:14	WG1578255
Bromoform	U		0.239	1.00	1	11/18/2020 17:14	WG1578255
Bromomethane	U		0.148	0.500	1	11/18/2020 17:14	WG1578255
n-Butylbenzene	U		0.153	0.500	1	11/18/2020 17:14	WG1578255
sec-Butylbenzene	U		0.101	0.500	1	11/18/2020 17:14	WG1578255
tert-Butylbenzene	U		0.0620	0.200	1	11/18/2020 17:14	WG1578255
Carbon tetrachloride	U		0.0432	0.200	1	11/18/2020 17:14	WG1578255
Chlorobenzene	U		0.0229	0.100	1	11/18/2020 17:14	WG1578255
Chlorodibromomethane	U		0.0180	0.100	1	11/18/2020 17:14	WG1578255
Chloroethane	U	~~J4~~	0.0432	0.200	1	11/18/2020 17:14	WG1578255
Chloroform	U		0.0166	0.100	1	11/18/2020 17:14	WG1578255
Chloromethane	U		0.0556	0.500	1	11/18/2020 17:14	WG1578255
2-Chlorotoluene	U		0.0368	0.100	1	11/18/2020 17:14	WG1578255
4-Chlorotoluene	U		0.0452	0.200	1	11/18/2020 17:14	WG1578255
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	11/18/2020 17:14	WG1578255
1,2-Dibromoethane	U		0.0210	0.100	1	11/18/2020 17:14	WG1578255
Dibromomethane	U		0.0400	0.200	1	11/18/2020 17:14	WG1578255
1,2-Dichlorobenzene	U		0.0580	0.200	1	11/18/2020 17:14	WG1578255

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Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,3-Dichlorobenzene	U		0.0680	0.200	1	11/18/2020 17:14	WG1578255
1,4-Dichlorobenzene	U		0.0788	0.200	1	11/18/2020 17:14	WG1578255
Dichlorodifluoromethane	U		0.0327	0.100	1	11/18/2020 17:14	WG1578255
1,1-Dichloroethane	U		0.0230	0.100	1	11/18/2020 17:14	WG1578255
1,2-Dichloroethane	U		0.0190	0.100	1	11/18/2020 17:14	WG1578255
1,1-Dichloroethene	U		0.0200	0.100	1	11/18/2020 17:14	WG1578255
cis-1,2-Dichloroethene	U		0.0276	0.100	1	11/18/2020 17:14	WG1578255
trans-1,2-Dichloroethene	U		0.0572	0.200	1	11/18/2020 17:14	WG1578255
1,2-Dichloropropane	U		0.0508	0.200	1	11/18/2020 17:14	WG1578255
1,1-Dichloropropene	U		0.0280	0.100	1	11/18/2020 17:14	WG1578255
1,3-Dichloropropane	U		0.0700	0.200	1	11/18/2020 17:14	WG1578255
cis-1,3-Dichloropropene	U		0.0271	0.100	1	11/18/2020 17:14	WG1578255
trans-1,3-Dichloropropene	U		0.0612	0.200	1	11/18/2020 17:14	WG1578255
2,2-Dichloropropane	U		0.0317	0.100	1	11/18/2020 17:14	WG1578255
Di-isopropyl ether	U		0.0140	0.0400	1	11/18/2020 17:14	WG1578255
Ethylbenzene	U		0.0212	0.100	1	11/18/2020 17:14	WG1578255
Hexachloro-1,3-butadiene	U		0.508	1.00	1	11/18/2020 17:14	WG1578255
Isopropylbenzene	U		0.0345	0.100	1	11/18/2020 17:14	WG1578255
p-Isopropyltoluene	U		0.0932	0.200	1	11/18/2020 17:14	WG1578255
2-Butanone (MEK)	U		0.500	1.00	1	11/18/2020 17:14	WG1578255
Methylene Chloride	U		0.265	1.00	1	11/18/2020 17:14	WG1578255
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	11/18/2020 17:14	WG1578255
Methyl tert-butyl ether	U		0.0118	0.0400	1	11/18/2020 17:14	WG1578255
Naphthalene	U		0.124	0.500	1	11/18/2020 17:14	WG1578255
n-Propylbenzene	U		0.0472	0.200	1	11/18/2020 17:14	WG1578255
Styrene	U		0.109	0.500	1	11/18/2020 17:14	WG1578255
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	11/18/2020 17:14	WG1578255
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	11/18/2020 17:14	WG1578255
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	11/18/2020 17:14	WG1578255
Tetrachloroethene	U		0.0280	0.100	1	11/18/2020 17:14	WG1578255
Toluene	U		0.0500	0.200	1	11/18/2020 17:14	WG1578255
1,2,3-Trichlorobenzene	U UJ	C4	0.0250	0.500	1	11/18/2020 17:14	WG1578255
1,2,4-Trichlorobenzene	U		0.193	0.500	1	11/18/2020 17:14	WG1578255
1,1,1-Trichloroethane	U		0.0110	0.100	1	11/18/2020 17:14	WG1578255
1,1,2-Trichloroethane	U		0.0353	0.100	1	11/18/2020 17:14	WG1578255
Trichloroethene	U		0.0160	0.0400	1	11/18/2020 17:14	WG1578255
Trichlorofluoromethane	U		0.0200	0.100	1	11/18/2020 17:14	WG1578255
1,2,3-Trichloropropane	U		0.204	0.500	1	11/18/2020 17:14	WG1578255
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	11/18/2020 17:14	WG1578255
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	11/18/2020 17:14	WG1578255
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	11/18/2020 17:14	WG1578255
Vinyl chloride	U		0.0273	0.100	1	11/18/2020 17:14	WG1578255
Xylenes, Total	U		0.191	0.260	1	11/18/2020 17:14	WG1578255
Ethyl Ether	U		0.0170	0.100	1	11/18/2020 17:14	WG1578255
Tetrahydrofuran	U		0.0900	0.500	1	11/18/2020 17:14	WG1578255
Iodomethane	U		0.242	0.500	1	11/18/2020 17:14	WG1578255
Allyl chloride	U		0.580	1.00	1	11/18/2020 17:14	WG1578255
Trans-1,4-Dichloro-2-butene	U		0.0560	0.200	1	11/18/2020 17:14	WG1578255
(S) Toluene-d8	*103*			*75.0-131*		*11/18/2020 17:14*	WG1578255
(S) 4-Bromofluorobenzene	*100*			*67.0-138*		*11/18/2020 17:14*	WG1578255
(S) 1,2-Dichloroethane-d4	*117*			*70.0-130*		*11/18/2020 17:14*	WG1578255

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Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U		0.548	1.00	1	11/18/2020 17:34	WG1578255
Acrylonitrile	U		0.0760	0.500	1	11/18/2020 17:34	WG1578255
Benzene	17.0		0.0160	0.0400	1	11/18/2020 17:34	WG1578255
Bromobenzene	U		0.0420	0.500	1	11/18/2020 17:34	WG1578255
Bromodichloromethane	U		0.0315	0.100	1	11/18/2020 17:34	WG1578255
Bromoform	U		0.239	1.00	1	11/18/2020 17:34	WG1578255
Bromomethane	U		0.148	0.500	1	11/18/2020 17:34	WG1578255
n-Butylbenzene	U		0.153	0.500	1	11/18/2020 17:34	WG1578255
sec-Butylbenzene	U		0.101	0.500	1	11/18/2020 17:34	WG1578255
tert-Butylbenzene	U		0.0620	0.200	1	11/18/2020 17:34	WG1578255
Carbon tetrachloride	U		0.0432	0.200	1	11/18/2020 17:34	WG1578255
Chlorobenzene	U		0.0229	0.100	1	11/18/2020 17:34	WG1578255
Chlorodibromomethane	U		0.0180	0.100	1	11/18/2020 17:34	WG1578255
Chloroethane	U	~~J4~~	0.0432	0.200	1	11/18/2020 17:34	WG1578255
Chloroform	U		0.0166	0.100	1	11/18/2020 17:34	WG1578255
Chloromethane	U		0.0556	0.500	1	11/18/2020 17:34	WG1578255
2-Chlorotoluene	U		0.0368	0.100	1	11/18/2020 17:34	WG1578255
4-Chlorotoluene	U		0.0452	0.200	1	11/18/2020 17:34	WG1578255
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	11/18/2020 17:34	WG1578255
1,2-Dibromoethane	U		0.0210	0.100	1	11/18/2020 17:34	WG1578255
Dibromomethane	U		0.0400	0.200	1	11/18/2020 17:34	WG1578255
1,2-Dichlorobenzene	U		0.0580	0.200	1	11/18/2020 17:34	WG1578255
1,3-Dichlorobenzene	U		0.0680	0.200	1	11/18/2020 17:34	WG1578255
1,4-Dichlorobenzene	U		0.0788	0.200	1	11/18/2020 17:34	WG1578255
Dichlorodifluoromethane	U		0.0327	0.100	1	11/18/2020 17:34	WG1578255
1,1-Dichloroethane	0.0570	J	0.0230	0.100	1	11/18/2020 17:34	WG1578255
1,2-Dichloroethane	U		0.0190	0.100	1	11/18/2020 17:34	WG1578255
1,1-Dichloroethene	U		0.0200	0.100	1	11/18/2020 17:34	WG1578255
cis-1,2-Dichloroethene	0.671		0.0276	0.100	1	11/18/2020 17:34	WG1578255
trans-1,2-Dichloroethene	U		0.0572	0.200	1	11/18/2020 17:34	WG1578255
1,2-Dichloropropane	U		0.0508	0.200	1	11/18/2020 17:34	WG1578255
1,1-Dichloropropene	U		0.0280	0.100	1	11/18/2020 17:34	WG1578255
1,3-Dichloropropane	U		0.0700	0.200	1	11/18/2020 17:34	WG1578255
cis-1,3-Dichloropropene	U		0.0271	0.100	1	11/18/2020 17:34	WG1578255
trans-1,3-Dichloropropene	U		0.0612	0.200	1	11/18/2020 17:34	WG1578255
2,2-Dichloropropane	U		0.0317	0.100	1	11/18/2020 17:34	WG1578255
Di-isopropyl ether	0.127		0.0140	0.0400	1	11/18/2020 17:34	WG1578255
Ethylbenzene	U		0.0212	0.100	1	11/18/2020 17:34	WG1578255
Hexachloro-1,3-butadiene	U		0.508	1.00	1	11/18/2020 17:34	WG1578255
Isopropylbenzene	U		0.0345	0.100	1	11/18/2020 17:34	WG1578255
p-Isopropyltoluene	U		0.0932	0.200	1	11/18/2020 17:34	WG1578255
2-Butanone (MEK)	U		0.500	1.00	1	11/18/2020 17:34	WG1578255
Methylene Chloride	U		0.265	1.00	1	11/18/2020 17:34	WG1578255
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	11/18/2020 17:34	WG1578255
Methyl tert-butyl ether	U		0.0118	0.0400	1	11/18/2020 17:34	WG1578255
Naphthalene	U		0.124	0.500	1	11/18/2020 17:34	WG1578255
n-Propylbenzene	U		0.0472	0.200	1	11/18/2020 17:34	WG1578255
Styrene	U		0.109	0.500	1	11/18/2020 17:34	WG1578255
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	11/18/2020 17:34	WG1578255
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	11/18/2020 17:34	WG1578255
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	11/18/2020 17:34	WG1578255
Tetrachloroethene	U		0.0280	0.100	1	11/18/2020 17:34	WG1578255
Toluene	0.132	J	0.0500	0.200	1	11/18/2020 17:34	WG1578255
1,2,3-Trichlorobenzene	U	UJ C4	0.0250	0.500	1	11/18/2020 17:34	WG1578255
1,2,4-Trichlorobenzene	U		0.193	0.500	1	11/18/2020 17:34	WG1578255
1,1,1-Trichloroethane	U		0.0110	0.100	1	11/18/2020 17:34	WG1578255

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Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,1,2-Trichloroethane	U		0.0353	0.100	1	11/18/2020 17:34	WG1578255
Trichloroethene	U		0.0160	0.0400	1	11/18/2020 17:34	WG1578255
Trichlorofluoromethane	U		0.0200	0.100	1	11/18/2020 17:34	WG1578255
1,2,3-Trichloropropane	U		0.204	0.500	1	11/18/2020 17:34	WG1578255
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	11/18/2020 17:34	WG1578255
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	11/18/2020 17:34	WG1578255
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	11/18/2020 17:34	WG1578255
Vinyl chloride	56.1		0.0273	0.100	1	11/18/2020 17:34	WG1578255
Xylenes, Total	U		0.191	0.260	1	11/18/2020 17:34	WG1578255
Ethyl Ether	0.0810	J	0.0170	0.100	1	11/18/2020 17:34	WG1578255
Tetrahydrofuran	U		0.0900	0.500	1	11/18/2020 17:34	WG1578255
Iodomethane	U		0.242	0.500	1	11/18/2020 17:34	WG1578255
Allyl chloride	U		0.580	1.00	1	11/18/2020 17:34	WG1578255
Trans-1,4-Dichloro-2-butene	U		0.0560	0.200	1	11/18/2020 17:34	WG1578255
(S) Toluene-d8	*105*			*75.0-131*		*11/18/2020 17:34*	WG1578255
(S) 4-Bromofluorobenzene	*102*			*67.0-138*		*11/18/2020 17:34*	WG1578255
(S) 1,2-Dichloroethane-d4	*119*			*70.0-130*		*11/18/2020 17:34*	WG1578255

JC 12/8/2020

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U		0.548	1.00	1	11/18/2020 17:53	WG1578255
Acrylonitrile	U		0.0760	0.500	1	11/18/2020 17:53	WG1578255
Benzene	0.0200	J	0.0160	0.0400	1	11/18/2020 17:53	WG1578255
Bromobenzene	U		0.0420	0.500	1	11/18/2020 17:53	WG1578255
Bromodichloromethane	U		0.0315	0.100	1	11/18/2020 17:53	WG1578255
Bromoform	U		0.239	1.00	1	11/18/2020 17:53	WG1578255
Bromomethane	U		0.148	0.500	1	11/18/2020 17:53	WG1578255
n-Butylbenzene	U		0.153	0.500	1	11/18/2020 17:53	WG1578255
sec-Butylbenzene	U		0.101	0.500	1	11/18/2020 17:53	WG1578255
tert-Butylbenzene	U		0.0620	0.200	1	11/18/2020 17:53	WG1578255
Carbon tetrachloride	U		0.0432	0.200	1	11/18/2020 17:53	WG1578255
Chlorobenzene	U		0.0229	0.100	1	11/18/2020 17:53	WG1578255
Chlorodibromomethane	U		0.0180	0.100	1	11/18/2020 17:53	WG1578255
Chloroethane	U	~~J4~~	0.0432	0.200	1	11/18/2020 17:53	WG1578255
Chloroform	U		0.0166	0.100	1	11/18/2020 17:53	WG1578255
Chloromethane	U		0.0556	0.500	1	11/18/2020 17:53	WG1578255
2-Chlorotoluene	U		0.0368	0.100	1	11/18/2020 17:53	WG1578255
4-Chlorotoluene	U		0.0452	0.200	1	11/18/2020 17:53	WG1578255
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	11/18/2020 17:53	WG1578255
1,2-Dibromoethane	U		0.0210	0.100	1	11/18/2020 17:53	WG1578255
Dibromomethane	U		0.0400	0.200	1	11/18/2020 17:53	WG1578255
1,2-Dichlorobenzene	U		0.0580	0.200	1	11/18/2020 17:53	WG1578255
1,3-Dichlorobenzene	U		0.0680	0.200	1	11/18/2020 17:53	WG1578255
1,4-Dichlorobenzene	U		0.0788	0.200	1	11/18/2020 17:53	WG1578255
Dichlorodifluoromethane	U		0.0327	0.100	1	11/18/2020 17:53	WG1578255
1,1-Dichloroethane	U		0.0230	0.100	1	11/18/2020 17:53	WG1578255
1,2-Dichloroethane	U		0.0190	0.100	1	11/18/2020 17:53	WG1578255
1,1-Dichloroethene	U		0.0200	0.100	1	11/18/2020 17:53	WG1578255
cis-1,2-Dichloroethene	U		0.0276	0.100	1	11/18/2020 17:53	WG1578255
trans-1,2-Dichloroethene	U		0.0572	0.200	1	11/18/2020 17:53	WG1578255
1,2-Dichloropropane	U		0.0508	0.200	1	11/18/2020 17:53	WG1578255
1,1-Dichloropropene	U		0.0280	0.100	1	11/18/2020 17:53	WG1578255
1,3-Dichloropropane	U		0.0700	0.200	1	11/18/2020 17:53	WG1578255
cis-1,3-Dichloropropene	U		0.0271	0.100	1	11/18/2020 17:53	WG1578255
trans-1,3-Dichloropropene	U		0.0612	0.200	1	11/18/2020 17:53	WG1578255
2,2-Dichloropropane	U		0.0317	0.100	1	11/18/2020 17:53	WG1578255
Di-isopropyl ether	U		0.0140	0.0400	1	11/18/2020 17:53	WG1578255
Ethylbenzene	0.0340	J	0.0212	0.100	1	11/18/2020 17:53	WG1578255
Hexachloro-1,3-butadiene	U		0.508	1.00	1	11/18/2020 17:53	WG1578255
Isopropylbenzene	U		0.0345	0.100	1	11/18/2020 17:53	WG1578255
p-Isopropyltoluene	U		0.0932	0.200	1	11/18/2020 17:53	WG1578255
2-Butanone (MEK)	U		0.500	1.00	1	11/18/2020 17:53	WG1578255
Methylene Chloride	U		0.265	1.00	1	11/18/2020 17:53	WG1578255
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	11/18/2020 17:53	WG1578255
Methyl tert-butyl ether	U		0.0118	0.0400	1	11/18/2020 17:53	WG1578255
Naphthalene	U		0.124	0.500	1	11/18/2020 17:53	WG1578255
n-Propylbenzene	U		0.0472	0.200	1	11/18/2020 17:53	WG1578255
Styrene	U		0.109	0.500	1	11/18/2020 17:53	WG1578255
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	11/18/2020 17:53	WG1578255
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	11/18/2020 17:53	WG1578255
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	11/18/2020 17:53	WG1578255
Tetrachloroethene	U		0.0280	0.100	1	11/18/2020 17:53	WG1578255
Toluene	0.173	J	0.0500	0.200	1	11/18/2020 17:53	WG1578255
1,2,3-Trichlorobenzene	U	UJ C4	0.0250	0.500	1	11/18/2020 17:53	WG1578255
1,2,4-Trichlorobenzene	U		0.193	0.500	1	11/18/2020 17:53	WG1578255
1,1,1-Trichloroethane	U		0.0110	0.100	1	11/18/2020 17:53	WG1578255

JC 12/8/2020

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,1,2-Trichloroethane	U		0.0353	0.100	1	11/18/2020 17:53	WG1578255
Trichloroethene	U		0.0160	0.0400	1	11/18/2020 17:53	WG1578255
Trichlorofluoromethane	U		0.0200	0.100	1	11/18/2020 17:53	WG1578255
1,2,3-Trichloropropane	U		0.204	0.500	1	11/18/2020 17:53	WG1578255
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	11/18/2020 17:53	WG1578255
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	11/18/2020 17:53	WG1578255
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	11/18/2020 17:53	WG1578255
Vinyl chloride	U		0.0273	0.100	1	11/18/2020 17:53	WG1578255
Xylenes, Total	0.219	J	0.191	0.260	1	11/18/2020 17:53	WG1578255
Ethyl Ether	U		0.0170	0.100	1	11/18/2020 17:53	WG1578255
Tetrahydrofuran	U		0.0900	0.500	1	11/18/2020 17:53	WG1578255
Iodomethane	U		0.242	0.500	1	11/18/2020 17:53	WG1578255
Allyl chloride	U		0.580	1.00	1	11/18/2020 17:53	WG1578255
Trans-1,4-Dichloro-2-butene	U		0.0560	0.200	1	11/18/2020 17:53	WG1578255
(S) Toluene-d8	*104*			*75.0-131*		*11/18/2020 17:53*	WG1578255
(S) 4-Bromofluorobenzene	*101*			*67.0-138*		*11/18/2020 17:53*	WG1578255
(S) 1,2-Dichloroethane-d4	*118*			*70.0-130*		*11/18/2020 17:53*	WG1578255

JC 12/8/2020

MW-328-110920

Collected date/time: 11/09/20 13:05

SAMPLE RESULTS - 05

L1284447

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U		0.548	1.00	1	11/18/2020 18:12	WG1578255
Acrylonitrile	U		0.0760	0.500	1	11/18/2020 18:12	WG1578255
Benzene	0.630		0.0160	0.0400	1	11/18/2020 18:12	WG1578255
Bromobenzene	U		0.0420	0.500	1	11/18/2020 18:12	WG1578255
Bromodichloromethane	U		0.0315	0.100	1	11/18/2020 18:12	WG1578255
Bromoform	U		0.239	1.00	1	11/18/2020 18:12	WG1578255
Bromomethane	U		0.148	0.500	1	11/18/2020 18:12	WG1578255
n-Butylbenzene	U		0.153	0.500	1	11/18/2020 18:12	WG1578255
sec-Butylbenzene	U		0.101	0.500	1	11/18/2020 18:12	WG1578255
tert-Butylbenzene	U		0.0620	0.200	1	11/18/2020 18:12	WG1578255
Carbon tetrachloride	U		0.0432	0.200	1	11/18/2020 18:12	WG1578255
Chlorobenzene	U		0.0229	0.100	1	11/18/2020 18:12	WG1578255
Chlorodibromomethane	U		0.0180	0.100	1	11/18/2020 18:12	WG1578255
Chloroethane	U	~~J4~~	0.0432	0.200	1	11/18/2020 18:12	WG1578255
Chloroform	U		0.0166	0.100	1	11/18/2020 18:12	WG1578255
Chloromethane	U		0.0556	0.500	1	11/18/2020 18:12	WG1578255
2-Chlorotoluene	U		0.0368	0.100	1	11/18/2020 18:12	WG1578255
4-Chlorotoluene	U		0.0452	0.200	1	11/18/2020 18:12	WG1578255
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	11/18/2020 18:12	WG1578255
1,2-Dibromoethane	U		0.0210	0.100	1	11/18/2020 18:12	WG1578255
Dibromomethane	U		0.0400	0.200	1	11/18/2020 18:12	WG1578255
1,2-Dichlorobenzene	U		0.0580	0.200	1	11/18/2020 18:12	WG1578255
1,3-Dichlorobenzene	U		0.0680	0.200	1	11/18/2020 18:12	WG1578255
1,4-Dichlorobenzene	U		0.0788	0.200	1	11/18/2020 18:12	WG1578255
Dichlorodifluoromethane	U		0.0327	0.100	1	11/18/2020 18:12	WG1578255
1,1-Dichloroethane	U		0.0230	0.100	1	11/18/2020 18:12	WG1578255
1,2-Dichloroethane	U		0.0190	0.100	1	11/18/2020 18:12	WG1578255
1,1-Dichloroethene	U		0.0200	0.100	1	11/18/2020 18:12	WG1578255
cis-1,2-Dichloroethene	0.607		0.0276	0.100	1	11/18/2020 18:12	WG1578255
trans-1,2-Dichloroethene	U		0.0572	0.200	1	11/18/2020 18:12	WG1578255
1,2-Dichloropropane	U		0.0508	0.200	1	11/18/2020 18:12	WG1578255
1,1-Dichloropropene	U		0.0280	0.100	1	11/18/2020 18:12	WG1578255
1,3-Dichloropropane	U		0.0700	0.200	1	11/18/2020 18:12	WG1578255
cis-1,3-Dichloropropene	U		0.0271	0.100	1	11/18/2020 18:12	WG1578255
trans-1,3-Dichloropropene	U		0.0612	0.200	1	11/18/2020 18:12	WG1578255
2,2-Dichloropropane	U		0.0317	0.100	1	11/18/2020 18:12	WG1578255
Di-isopropyl ether	U		0.0140	0.0400	1	11/18/2020 18:12	WG1578255
Ethylbenzene	U		0.0212	0.100	1	11/18/2020 18:12	WG1578255
Hexachloro-1,3-butadiene	U		0.508	1.00	1	11/18/2020 18:12	WG1578255
Isopropylbenzene	U		0.0345	0.100	1	11/18/2020 18:12	WG1578255
p-Isopropyltoluene	U		0.0932	0.200	1	11/18/2020 18:12	WG1578255
2-Butanone (MEK)	U		0.500	1.00	1	11/18/2020 18:12	WG1578255
Methylene Chloride	U		0.265	1.00	1	11/18/2020 18:12	WG1578255
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	11/18/2020 18:12	WG1578255
Methyl tert-butyl ether	U		0.0118	0.0400	1	11/18/2020 18:12	WG1578255
Naphthalene	U		0.124	0.500	1	11/18/2020 18:12	WG1578255
n-Propylbenzene	U		0.0472	0.200	1	11/18/2020 18:12	WG1578255
Styrene	U		0.109	0.500	1	11/18/2020 18:12	WG1578255
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	11/18/2020 18:12	WG1578255
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	11/18/2020 18:12	WG1578255
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	11/18/2020 18:12	WG1578255
Tetrachloroethene	U		0.0280	0.100	1	11/18/2020 18:12	WG1578255
Toluene	U		0.0500	0.200	1	11/18/2020 18:12	WG1578255
1,2,3-Trichlorobenzene	U	UJ C4	0.0250	0.500	1	11/18/2020 18:12	WG1578255
1,2,4-Trichlorobenzene	U		0.193	0.500	1	11/18/2020 18:12	WG1578255
1,1,1-Trichloroethane	U		0.0110	0.100	1	11/18/2020 18:12	WG1578255

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Volatile Organic Compounds (GC/MS) by Method 8260D

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
1,1,2-Trichloroethane	U		0.0353	0.100	1	11/18/2020 18:12	WG1578255
Trichloroethene	U		0.0160	0.0400	1	11/18/2020 18:12	WG1578255
Trichlorofluoromethane	U		0.0200	0.100	1	11/18/2020 18:12	WG1578255
1,2,3-Trichloropropane	U		0.204	0.500	1	11/18/2020 18:12	WG1578255
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	11/18/2020 18:12	WG1578255
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	11/18/2020 18:12	WG1578255
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	11/18/2020 18:12	WG1578255
Vinyl chloride	7.99		0.0273	0.100	1	11/18/2020 18:12	WG1578255
Xylenes, Total	U		0.191	0.260	1	11/18/2020 18:12	WG1578255
Ethyl Ether	U		0.0170	0.100	1	11/18/2020 18:12	WG1578255
Tetrahydrofuran	U		0.0900	0.500	1	11/18/2020 18:12	WG1578255
Iodomethane	U		0.242	0.500	1	11/18/2020 18:12	WG1578255
Allyl chloride	U		0.580	1.00	1	11/18/2020 18:12	WG1578255
Trans-1,4-Dichloro-2-butene	U		0.0560	0.200	1	11/18/2020 18:12	WG1578255
(S) Toluene-d8	*105*			*75.0-131*		*11/18/2020 18:12*	WG1578255
(S) 4-Bromofluorobenzene	*98.2*			*67.0-138*		*11/18/2020 18:12*	WG1578255
(S) 1,2-Dichloroethane-d4	*117*			*70.0-130*		*11/18/2020 18:12*	WG1578255

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Wet Chemistry by Method 2320 B-2011

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Alkalinity	152000		8450	20000	1	11/19/2020 05:49	WG1578247

Sample Narrative:

L1284447-06 WG1578247: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 9056A

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Sulfate	75800		594	5000	1	11/20/2020 04:38	WG1579481

Wet Chemistry by Method 9060A

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
TOC (Total Organic Carbon)	1240	~~B~~	102	1000	1	11/17/2020 20:24	WG1577659

Metals (ICPMS) by Method 6020B

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Iron	440		28.1	100	1	11/18/2020 11:38	WG1577444
Manganese	49.4		0.704	5.00	1	11/18/2020 11:38	WG1577444

Volatile Organic Compounds (GC) by Method RSK175

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Methane	U		0.287	0.678	1	11/18/2020 10:57	WG1577557
Ethane	U		0.296	1.29	1	11/18/2020 10:57	WG1577557
Ethene	U		0.422	1.27	1	11/18/2020 10:57	WG1577557

Volatile Organic Compounds (GC/MS) by Method 8260D

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Acetone	U		0.548	1.00	1	11/18/2020 18:31	WG1578255
Acrylonitrile	U		0.0760	0.500	1	11/18/2020 18:31	WG1578255
Benzene	0.0230	J	0.0160	0.0400	1	11/18/2020 18:31	WG1578255
Bromobenzene	U		0.0420	0.500	1	11/18/2020 18:31	WG1578255
Bromodichloromethane	U		0.0315	0.100	1	11/18/2020 18:31	WG1578255
Bromoform	U		0.239	1.00	1	11/18/2020 18:31	WG1578255
Bromomethane	U		0.148	0.500	1	11/18/2020 18:31	WG1578255
n-Butylbenzene	U		0.153	0.500	1	11/18/2020 18:31	WG1578255
sec-Butylbenzene	U		0.101	0.500	1	11/18/2020 18:31	WG1578255
tert-Butylbenzene	U		0.0620	0.200	1	11/18/2020 18:31	WG1578255
Carbon tetrachloride	U		0.0432	0.200	1	11/18/2020 18:31	WG1578255
Chlorobenzene	U		0.0229	0.100	1	11/18/2020 18:31	WG1578255
Chlorodibromomethane	U		0.0180	0.100	1	11/18/2020 18:31	WG1578255
Chloroethane	U	~~J4~~	0.0432	0.200	1	11/18/2020 18:31	WG1578255
Chloroform	0.117		0.0166	0.100	1	11/18/2020 18:31	WG1578255
Chloromethane	U		0.0556	0.500	1	11/18/2020 18:31	WG1578255
2-Chlorotoluene	U		0.0368	0.100	1	11/18/2020 18:31	WG1578255
4-Chlorotoluene	U		0.0452	0.200	1	11/18/2020 18:31	WG1578255
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	11/18/2020 18:31	WG1578255
1,2-Dibromoethane	U		0.0210	0.100	1	11/18/2020 18:31	WG1578255
Dibromomethane	U		0.0400	0.200	1	11/18/2020 18:31	WG1578255
1,2-Dichlorobenzene	U		0.0580	0.200	1	11/18/2020 18:31	WG1578255

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MW-154-110920

Collected date/time: 11/09/20 13:55

SAMPLE RESULTS - 06

L1284447

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,3-Dichlorobenzene	U		0.0680	0.200	1	11/18/2020 18:31	WG1578255
1,4-Dichlorobenzene	U		0.0788	0.200	1	11/18/2020 18:31	WG1578255
Dichlorodifluoromethane	U		0.0327	0.100	1	11/18/2020 18:31	WG1578255
1,1-Dichloroethane	U		0.0230	0.100	1	11/18/2020 18:31	WG1578255
1,2-Dichloroethane	U		0.0190	0.100	1	11/18/2020 18:31	WG1578255
1,1-Dichloroethene	U		0.0200	0.100	1	11/18/2020 18:31	WG1578255
cis-1,2-Dichloroethene	1.77		0.0276	0.100	1	11/18/2020 18:31	WG1578255
trans-1,2-Dichloroethene	U		0.0572	0.200	1	11/18/2020 18:31	WG1578255
1,2-Dichloropropane	U		0.0508	0.200	1	11/18/2020 18:31	WG1578255
1,1-Dichloropropene	U		0.0280	0.100	1	11/18/2020 18:31	WG1578255
1,3-Dichloropropane	U		0.0700	0.200	1	11/18/2020 18:31	WG1578255
cis-1,3-Dichloropropene	U		0.0271	0.100	1	11/18/2020 18:31	WG1578255
trans-1,3-Dichloropropene	U		0.0612	0.200	1	11/18/2020 18:31	WG1578255
2,2-Dichloropropane	U		0.0317	0.100	1	11/18/2020 18:31	WG1578255
Di-isopropyl ether	U		0.0140	0.0400	1	11/18/2020 18:31	WG1578255
Ethylbenzene	U		0.0212	0.100	1	11/18/2020 18:31	WG1578255
Hexachloro-1,3-butadiene	U		0.508	1.00	1	11/18/2020 18:31	WG1578255
Isopropylbenzene	U		0.0345	0.100	1	11/18/2020 18:31	WG1578255
p-Isopropyltoluene	U		0.0932	0.200	1	11/18/2020 18:31	WG1578255
2-Butanone (MEK)	U		0.500	1.00	1	11/18/2020 18:31	WG1578255
Methylene Chloride	U		0.265	1.00	1	11/18/2020 18:31	WG1578255
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	11/18/2020 18:31	WG1578255
Methyl tert-butyl ether	U		0.0118	0.0400	1	11/18/2020 18:31	WG1578255
Naphthalene	U		0.124	0.500	1	11/18/2020 18:31	WG1578255
n-Propylbenzene	U		0.0472	0.200	1	11/18/2020 18:31	WG1578255
Styrene	U		0.109	0.500	1	11/18/2020 18:31	WG1578255
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	11/18/2020 18:31	WG1578255
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	11/18/2020 18:31	WG1578255
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	11/18/2020 18:31	WG1578255
Tetrachloroethene	73.9		0.0280	0.100	1	11/18/2020 18:31	WG1578255
Toluene	0.317		0.0500	0.200	1	11/18/2020 18:31	WG1578255
1,2,3-Trichlorobenzene	U UJ	C4	0.0250	0.500	1	11/18/2020 18:31	WG1578255
1,2,4-Trichlorobenzene	U		0.193	0.500	1	11/18/2020 18:31	WG1578255
1,1,1-Trichloroethane	U		0.0110	0.100	1	11/18/2020 18:31	WG1578255
1,1,2-Trichloroethane	U		0.0353	0.100	1	11/18/2020 18:31	WG1578255
Trichloroethene	6.84		0.0160	0.0400	1	11/18/2020 18:31	WG1578255
Trichlorofluoromethane	U		0.0200	0.100	1	11/18/2020 18:31	WG1578255
1,2,3-Trichloropropane	U		0.204	0.500	1	11/18/2020 18:31	WG1578255
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	11/18/2020 18:31	WG1578255
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	11/18/2020 18:31	WG1578255
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	11/18/2020 18:31	WG1578255
Vinyl chloride	U		0.0273	0.100	1	11/18/2020 18:31	WG1578255
Xylenes, Total	U		0.191	0.260	1	11/18/2020 18:31	WG1578255
Ethyl Ether	U		0.0170	0.100	1	11/18/2020 18:31	WG1578255
Tetrahydrofuran	U		0.0900	0.500	1	11/18/2020 18:31	WG1578255
Iodomethane	U		0.242	0.500	1	11/18/2020 18:31	WG1578255
Allyl chloride	U		0.580	1.00	1	11/18/2020 18:31	WG1578255
Trans-1,4-Dichloro-2-butene	0.121	J	0.0560	0.200	1	11/18/2020 18:31	WG1578255
(S) Toluene-d8	*107*			*75.0-131*		*11/18/2020 18:31*	WG1578255
(S) 4-Bromofluorobenzene	*102*			*67.0-138*		*11/18/2020 18:31*	WG1578255
(S) 1,2-Dichloroethane-d4	*121*			*70.0-130*		*11/18/2020 18:31*	WG1578255

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Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	2.51		0.548	1.00	1	11/18/2020 18:50	WG1578255
Acrylonitrile	U		0.0760	0.500	1	11/18/2020 18:50	WG1578255
Benzene	9.87		0.0160	0.0400	1	11/18/2020 18:50	WG1578255
Bromobenzene	U		0.0420	0.500	1	11/18/2020 18:50	WG1578255
Bromodichloromethane	U		0.0315	0.100	1	11/18/2020 18:50	WG1578255
Bromoform	U		0.239	1.00	1	11/18/2020 18:50	WG1578255
Bromomethane	U		0.148	0.500	1	11/18/2020 18:50	WG1578255
n-Butylbenzene	U		0.153	0.500	1	11/18/2020 18:50	WG1578255
sec-Butylbenzene	U		0.101	0.500	1	11/18/2020 18:50	WG1578255
tert-Butylbenzene	U		0.0620	0.200	1	11/18/2020 18:50	WG1578255
Carbon tetrachloride	U		0.0432	0.200	1	11/18/2020 18:50	WG1578255
Chlorobenzene	U		0.0229	0.100	1	11/18/2020 18:50	WG1578255
Chlorodibromomethane	U		0.0180	0.100	1	11/18/2020 18:50	WG1578255
Chloroethane	U	~~J4~~	0.0432	0.200	1	11/18/2020 18:50	WG1578255
Chloroform	U		0.0166	0.100	1	11/18/2020 18:50	WG1578255
Chloromethane	U		0.0556	0.500	1	11/18/2020 18:50	WG1578255
2-Chlorotoluene	U		0.0368	0.100	1	11/18/2020 18:50	WG1578255
4-Chlorotoluene	U		0.0452	0.200	1	11/18/2020 18:50	WG1578255
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	11/18/2020 18:50	WG1578255
1,2-Dibromoethane	U		0.0210	0.100	1	11/18/2020 18:50	WG1578255
Dibromomethane	U		0.0400	0.200	1	11/18/2020 18:50	WG1578255
1,2-Dichlorobenzene	U		0.0580	0.200	1	11/18/2020 18:50	WG1578255
1,3-Dichlorobenzene	U		0.0680	0.200	1	11/18/2020 18:50	WG1578255
1,4-Dichlorobenzene	U		0.0788	0.200	1	11/18/2020 18:50	WG1578255
Dichlorodifluoromethane	U		0.0327	0.100	1	11/18/2020 18:50	WG1578255
1,1-Dichloroethane	U		0.0230	0.100	1	11/18/2020 18:50	WG1578255
1,2-Dichloroethane	U		0.0190	0.100	1	11/18/2020 18:50	WG1578255
1,1-Dichloroethene	0.0440	J	0.0200	0.100	1	11/18/2020 18:50	WG1578255
cis-1,2-Dichloroethene	25.1		0.0276	0.100	1	11/18/2020 18:50	WG1578255
trans-1,2-Dichloroethene	U		0.0572	0.200	1	11/18/2020 18:50	WG1578255
1,2-Dichloropropane	U		0.0508	0.200	1	11/18/2020 18:50	WG1578255
1,1-Dichloropropene	U		0.0280	0.100	1	11/18/2020 18:50	WG1578255
1,3-Dichloropropane	U		0.0700	0.200	1	11/18/2020 18:50	WG1578255
cis-1,3-Dichloropropene	U		0.0271	0.100	1	11/18/2020 18:50	WG1578255
trans-1,3-Dichloropropene	U		0.0612	0.200	1	11/18/2020 18:50	WG1578255
2,2-Dichloropropane	U		0.0317	0.100	1	11/18/2020 18:50	WG1578255
Di-isopropyl ether	0.127		0.0140	0.0400	1	11/18/2020 18:50	WG1578255
Ethylbenzene	U		0.0212	0.100	1	11/18/2020 18:50	WG1578255
Hexachloro-1,3-butadiene	U		0.508	1.00	1	11/18/2020 18:50	WG1578255
Isopropylbenzene	U		0.0345	0.100	1	11/18/2020 18:50	WG1578255
p-Isopropyltoluene	U		0.0932	0.200	1	11/18/2020 18:50	WG1578255
2-Butanone (MEK)	U		0.500	1.00	1	11/18/2020 18:50	WG1578255
Methylene Chloride	U		0.265	1.00	1	11/18/2020 18:50	WG1578255
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	11/18/2020 18:50	WG1578255
Methyl tert-butyl ether	U		0.0118	0.0400	1	11/18/2020 18:50	WG1578255
Naphthalene	U		0.124	0.500	1	11/18/2020 18:50	WG1578255
n-Propylbenzene	U		0.0472	0.200	1	11/18/2020 18:50	WG1578255
Styrene	U		0.109	0.500	1	11/18/2020 18:50	WG1578255
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	11/18/2020 18:50	WG1578255
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	11/18/2020 18:50	WG1578255
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	11/18/2020 18:50	WG1578255
Tetrachloroethene	0.0740	J	0.0280	0.100	1	11/18/2020 18:50	WG1578255
Toluene	0.167	J	0.0500	0.200	1	11/18/2020 18:50	WG1578255
1,2,3-Trichlorobenzene	U	UJ C4	0.0250	0.500	1	11/18/2020 18:50	WG1578255
1,2,4-Trichlorobenzene	U		0.193	0.500	1	11/18/2020 18:50	WG1578255
1,1,1-Trichloroethane	U		0.0110	0.100	1	11/18/2020 18:50	WG1578255

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Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,1,2-Trichloroethane	U		0.0353	0.100	1	11/18/2020 18:50	WG1578255
Trichloroethene	0.102		0.0160	0.0400	1	11/18/2020 18:50	WG1578255
Trichlorofluoromethane	U		0.0200	0.100	1	11/18/2020 18:50	WG1578255
1,2,3-Trichloropropane	U		0.204	0.500	1	11/18/2020 18:50	WG1578255
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	11/18/2020 18:50	WG1578255
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	11/18/2020 18:50	WG1578255
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	11/18/2020 18:50	WG1578255
Vinyl chloride	5.99		0.0273	0.100	1	11/18/2020 18:50	WG1578255
Xylenes, Total	U		0.191	0.260	1	11/18/2020 18:50	WG1578255
Ethyl Ether	0.0510	J	0.0170	0.100	1	11/18/2020 18:50	WG1578255
Tetrahydrofuran	U		0.0900	0.500	1	11/18/2020 18:50	WG1578255
Iodomethane	U		0.242	0.500	1	11/18/2020 18:50	WG1578255
Allyl chloride	U		0.580	1.00	1	11/18/2020 18:50	WG1578255
Trans-1,4-Dichloro-2-butene	U		0.0560	0.200	1	11/18/2020 18:50	WG1578255
(S) Toluene-d8	*106*			*75.0-131*		*11/18/2020 18:50*	WG1578255
(S) 4-Bromofluorobenzene	*99.7*			*67.0-138*		*11/18/2020 18:50*	WG1578255
(S) 1,2-Dichloroethane-d4	*119*			*70.0-130*		*11/18/2020 18:50*	WG1578255

JC 12/8/2020

MW-339-110920
Collected date/time: 11/09/20 14:48

SAMPLE RESULTS - 08

L1284447

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U		0.548	1.00	1	11/18/2020 19:09	WG1578255
Acrylonitrile	U		0.0760	0.500	1	11/18/2020 19:09	WG1578255
Benzene	0.0190	J	0.0160	0.0400	1	11/18/2020 19:09	WG1578255
Bromobenzene	U		0.0420	0.500	1	11/18/2020 19:09	WG1578255
Bromodichloromethane	U		0.0315	0.100	1	11/18/2020 19:09	WG1578255
Bromoform	U		0.239	1.00	1	11/18/2020 19:09	WG1578255
Bromomethane	U		0.148	0.500	1	11/18/2020 19:09	WG1578255
n-Butylbenzene	U		0.153	0.500	1	11/18/2020 19:09	WG1578255
sec-Butylbenzene	U		0.101	0.500	1	11/18/2020 19:09	WG1578255
tert-Butylbenzene	U		0.0620	0.200	1	11/18/2020 19:09	WG1578255
Carbon tetrachloride	U		0.0432	0.200	1	11/18/2020 19:09	WG1578255
Chlorobenzene	U		0.0229	0.100	1	11/18/2020 19:09	WG1578255
Chlorodibromomethane	U		0.0180	0.100	1	11/18/2020 19:09	WG1578255
Chloroethane	U	~~J4~~	0.0432	0.200	1	11/18/2020 19:09	WG1578255
Chloroform	U		0.0166	0.100	1	11/18/2020 19:09	WG1578255
Chloromethane	U		0.0556	0.500	1	11/18/2020 19:09	WG1578255
2-Chlorotoluene	U		0.0368	0.100	1	11/18/2020 19:09	WG1578255
4-Chlorotoluene	U		0.0452	0.200	1	11/18/2020 19:09	WG1578255
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	11/18/2020 19:09	WG1578255
1,2-Dibromoethane	U		0.0210	0.100	1	11/18/2020 19:09	WG1578255
Dibromomethane	U		0.0400	0.200	1	11/18/2020 19:09	WG1578255
1,2-Dichlorobenzene	U		0.0580	0.200	1	11/18/2020 19:09	WG1578255
1,3-Dichlorobenzene	U		0.0680	0.200	1	11/18/2020 19:09	WG1578255
1,4-Dichlorobenzene	U		0.0788	0.200	1	11/18/2020 19:09	WG1578255
Dichlorodifluoromethane	U		0.0327	0.100	1	11/18/2020 19:09	WG1578255
1,1-Dichloroethane	U		0.0230	0.100	1	11/18/2020 19:09	WG1578255
1,2-Dichloroethane	U		0.0190	0.100	1	11/18/2020 19:09	WG1578255
1,1-Dichloroethene	U		0.0200	0.100	1	11/18/2020 19:09	WG1578255
cis-1,2-Dichloroethene	0.238		0.0276	0.100	1	11/18/2020 19:09	WG1578255
trans-1,2-Dichloroethene	U		0.0572	0.200	1	11/18/2020 19:09	WG1578255
1,2-Dichloropropane	U		0.0508	0.200	1	11/18/2020 19:09	WG1578255
1,1-Dichloropropene	U		0.0280	0.100	1	11/18/2020 19:09	WG1578255
1,3-Dichloropropane	U		0.0700	0.200	1	11/18/2020 19:09	WG1578255
cis-1,3-Dichloropropene	U		0.0271	0.100	1	11/18/2020 19:09	WG1578255
trans-1,3-Dichloropropene	U		0.0612	0.200	1	11/18/2020 19:09	WG1578255
2,2-Dichloropropane	U		0.0317	0.100	1	11/18/2020 19:09	WG1578255
Di-isopropyl ether	U		0.0140	0.0400	1	11/18/2020 19:09	WG1578255
Ethylbenzene	U		0.0212	0.100	1	11/18/2020 19:09	WG1578255
Hexachloro-1,3-butadiene	U		0.508	1.00	1	11/18/2020 19:09	WG1578255
Isopropylbenzene	U		0.0345	0.100	1	11/18/2020 19:09	WG1578255
p-Isopropyltoluene	U		0.0932	0.200	1	11/18/2020 19:09	WG1578255
2-Butanone (MEK)	U		0.500	1.00	1	11/18/2020 19:09	WG1578255
Methylene Chloride	U		0.265	1.00	1	11/18/2020 19:09	WG1578255
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	11/18/2020 19:09	WG1578255
Methyl tert-butyl ether	U		0.0118	0.0400	1	11/18/2020 19:09	WG1578255
Naphthalene	U		0.124	0.500	1	11/18/2020 19:09	WG1578255
n-Propylbenzene	U		0.0472	0.200	1	11/18/2020 19:09	WG1578255
Styrene	U		0.109	0.500	1	11/18/2020 19:09	WG1578255
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	11/18/2020 19:09	WG1578255
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	11/18/2020 19:09	WG1578255
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	11/18/2020 19:09	WG1578255
Tetrachloroethene	U		0.0280	0.100	1	11/18/2020 19:09	WG1578255
Toluene	U		0.0500	0.200	1	11/18/2020 19:09	WG1578255
1,2,3-Trichlorobenzene	U	UJ C4	0.0250	0.500	1	11/18/2020 19:09	WG1578255
1,2,4-Trichlorobenzene	U		0.193	0.500	1	11/18/2020 19:09	WG1578255
1,1,1-Trichloroethane	U		0.0110	0.100	1	11/18/2020 19:09	WG1578255

JC 12/8/2020

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,1,2-Trichloroethane	U		0.0353	0.100	1	11/18/2020 19:09	WG1578255
Trichloroethene	U		0.0160	0.0400	1	11/18/2020 19:09	WG1578255
Trichlorofluoromethane	U		0.0200	0.100	1	11/18/2020 19:09	WG1578255
1,2,3-Trichloropropane	U		0.204	0.500	1	11/18/2020 19:09	WG1578255
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	11/18/2020 19:09	WG1578255
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	11/18/2020 19:09	WG1578255
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	11/18/2020 19:09	WG1578255
Vinyl chloride	U		0.0273	0.100	1	11/18/2020 19:09	WG1578255
Xylenes, Total	U		0.191	0.260	1	11/18/2020 19:09	WG1578255
Ethyl Ether	U		0.0170	0.100	1	11/18/2020 19:09	WG1578255
Tetrahydrofuran	U		0.0900	0.500	1	11/18/2020 19:09	WG1578255
Iodomethane	U		0.242	0.500	1	11/18/2020 19:09	WG1578255
Allyl chloride	U		0.580	1.00	1	11/18/2020 19:09	WG1578255
Trans-1,4-Dichloro-2-butene	0.116	J	0.0560	0.200	1	11/18/2020 19:09	WG1578255
(S) Toluene-d8	*104*			*75.0-131*		*11/18/2020 19:09*	WG1578255
(S) 4-Bromofluorobenzene	*99.9*			*67.0-138*		*11/18/2020 19:09*	WG1578255
(S) 1,2-Dichloroethane-d4	*117*			*70.0-130*		*11/18/2020 19:09*	WG1578255

JC 12/8/2020

Wet Chemistry by Method 2320 B-2011

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Alkalinity	142000		8450	20000	1	11/19/2020 05:56	WG1578247

Sample Narrative:

L1284447-09 WG1578247: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 9056A

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Sulfate	11200		594	5000	1	11/20/2020 05:12	WG1579481

Wet Chemistry by Method 9060A

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
TOC (Total Organic Carbon)	956	~~B~~ J	102	1000	1	11/17/2020 20:37	WG1577659

Metals (ICPMS) by Method 6020B

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Iron	2680		28.1	100	1	11/18/2020 11:41	WG1577444
Manganese	327		0.704	5.00	1	11/18/2020 11:41	WG1577444

Volatile Organic Compounds (GC) by Method RSK175

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Methane	32.7		0.287	0.678	1	11/18/2020 11:00	WG1577557
Ethane	U		0.296	1.29	1	11/18/2020 11:00	WG1577557
Ethene	U		0.422	1.27	1	11/18/2020 11:00	WG1577557

Volatile Organic Compounds (GC/MS) by Method 8260D

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Acetone	U		0.548	1.00	1	11/18/2020 19:28	WG1578255
Acrylonitrile	U		0.0760	0.500	1	11/18/2020 19:28	WG1578255
Benzene	U		0.0160	0.0400	1	11/18/2020 19:28	WG1578255
Bromobenzene	U		0.0420	0.500	1	11/18/2020 19:28	WG1578255
Bromodichloromethane	U		0.0315	0.100	1	11/18/2020 19:28	WG1578255
Bromoform	U		0.239	1.00	1	11/18/2020 19:28	WG1578255
Bromomethane	U		0.148	0.500	1	11/18/2020 19:28	WG1578255
n-Butylbenzene	U		0.153	0.500	1	11/18/2020 19:28	WG1578255
sec-Butylbenzene	U		0.101	0.500	1	11/18/2020 19:28	WG1578255
tert-Butylbenzene	U		0.0620	0.200	1	11/18/2020 19:28	WG1578255
Carbon tetrachloride	U		0.0432	0.200	1	11/18/2020 19:28	WG1578255
Chlorobenzene	U		0.0229	0.100	1	11/18/2020 19:28	WG1578255
Chlorodibromomethane	U		0.0180	0.100	1	11/18/2020 19:28	WG1578255
Chloroethane	U	~~J4~~	0.0432	0.200	1	11/18/2020 19:28	WG1578255
Chloroform	U		0.0166	0.100	1	11/18/2020 19:28	WG1578255
Chloromethane	U		0.0556	0.500	1	11/18/2020 19:28	WG1578255
2-Chlorotoluene	U		0.0368	0.100	1	11/18/2020 19:28	WG1578255
4-Chlorotoluene	U		0.0452	0.200	1	11/18/2020 19:28	WG1578255
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	11/18/2020 19:28	WG1578255
1,2-Dibromoethane	U		0.0210	0.100	1	11/18/2020 19:28	WG1578255
Dibromomethane	U		0.0400	0.200	1	11/18/2020 19:28	WG1578255
1,2-Dichlorobenzene	U		0.0580	0.200	1	11/18/2020 19:28	WG1578255

JC 12/8/2020

MW-153-110920

Collected date/time: 11/09/20 15:25

SAMPLE RESULTS - 09

L1284447

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,3-Dichlorobenzene	U		0.0680	0.200	1	11/18/2020 19:28	WG1578255
1,4-Dichlorobenzene	U		0.0788	0.200	1	11/18/2020 19:28	WG1578255
Dichlorodifluoromethane	U		0.0327	0.100	1	11/18/2020 19:28	WG1578255
1,1-Dichloroethane	U		0.0230	0.100	1	11/18/2020 19:28	WG1578255
1,2-Dichloroethane	U		0.0190	0.100	1	11/18/2020 19:28	WG1578255
1,1-Dichloroethene	U		0.0200	0.100	1	11/18/2020 19:28	WG1578255
cis-1,2-Dichloroethene	U		0.0276	0.100	1	11/18/2020 19:28	WG1578255
trans-1,2-Dichloroethene	U		0.0572	0.200	1	11/18/2020 19:28	WG1578255
1,2-Dichloropropane	U		0.0508	0.200	1	11/18/2020 19:28	WG1578255
1,1-Dichloropropene	U		0.0280	0.100	1	11/18/2020 19:28	WG1578255
1,3-Dichloropropane	U		0.0700	0.200	1	11/18/2020 19:28	WG1578255
cis-1,3-Dichloropropene	U		0.0271	0.100	1	11/18/2020 19:28	WG1578255
trans-1,3-Dichloropropene	U		0.0612	0.200	1	11/18/2020 19:28	WG1578255
2,2-Dichloropropane	U		0.0317	0.100	1	11/18/2020 19:28	WG1578255
Di-isopropyl ether	U		0.0140	0.0400	1	11/18/2020 19:28	WG1578255
Ethylbenzene	U		0.0212	0.100	1	11/18/2020 19:28	WG1578255
Hexachloro-1,3-butadiene	U		0.508	1.00	1	11/18/2020 19:28	WG1578255
Isopropylbenzene	U		0.0345	0.100	1	11/18/2020 19:28	WG1578255
p-Isopropyltoluene	U		0.0932	0.200	1	11/18/2020 19:28	WG1578255
2-Butanone (MEK)	U		0.500	1.00	1	11/18/2020 19:28	WG1578255
Methylene Chloride	U		0.265	1.00	1	11/18/2020 19:28	WG1578255
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	11/18/2020 19:28	WG1578255
Methyl tert-butyl ether	U		0.0118	0.0400	1	11/18/2020 19:28	WG1578255
Naphthalene	U		0.124	0.500	1	11/18/2020 19:28	WG1578255
n-Propylbenzene	U		0.0472	0.200	1	11/18/2020 19:28	WG1578255
Styrene	U		0.109	0.500	1	11/18/2020 19:28	WG1578255
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	11/18/2020 19:28	WG1578255
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	11/18/2020 19:28	WG1578255
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	11/18/2020 19:28	WG1578255
Tetrachloroethene	U		0.0280	0.100	1	11/18/2020 19:28	WG1578255
Toluene	0.314		0.0500	0.200	1	11/18/2020 19:28	WG1578255
1,2,3-Trichlorobenzene	U UJ	C4	0.0250	0.500	1	11/18/2020 19:28	WG1578255
1,2,4-Trichlorobenzene	U		0.193	0.500	1	11/18/2020 19:28	WG1578255
1,1,1-Trichloroethane	U		0.0110	0.100	1	11/18/2020 19:28	WG1578255
1,1,2-Trichloroethane	U		0.0353	0.100	1	11/18/2020 19:28	WG1578255
Trichloroethene	U		0.0160	0.0400	1	11/18/2020 19:28	WG1578255
Trichlorofluoromethane	U		0.0200	0.100	1	11/18/2020 19:28	WG1578255
1,2,3-Trichloropropane	U		0.204	0.500	1	11/18/2020 19:28	WG1578255
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	11/18/2020 19:28	WG1578255
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	11/18/2020 19:28	WG1578255
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	11/18/2020 19:28	WG1578255
Vinyl chloride	0.333		0.0273	0.100	1	11/18/2020 19:28	WG1578255
Xylenes, Total	U		0.191	0.260	1	11/18/2020 19:28	WG1578255
Ethyl Ether	U		0.0170	0.100	1	11/18/2020 19:28	WG1578255
Tetrahydrofuran	U		0.0900	0.500	1	11/18/2020 19:28	WG1578255
Iodomethane	U		0.242	0.500	1	11/18/2020 19:28	WG1578255
Allyl chloride	U		0.580	1.00	1	11/18/2020 19:28	WG1578255
Trans-1,4-Dichloro-2-butene	0.131	J	0.0560	0.200	1	11/18/2020 19:28	WG1578255
(S) Toluene-d8	*105*			*75.0-131*		*11/18/2020 19:28*	WG1578255
(S) 4-Bromofluorobenzene	*101*			*67.0-138*		*11/18/2020 19:28*	WG1578255
(S) 1,2-Dichloroethane-d4	*119*			*70.0-130*		*11/18/2020 19:28*	WG1578255

JC 12/8/2020

MW-340-110920

Collected date/time: 11/09/20 15:38

SAMPLE RESULTS - 10

L1284447

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U		0.548	1.00	1	11/18/2020 19:47	WG1578255
Acrylonitrile	U		0.0760	0.500	1	11/18/2020 19:47	WG1578255
Benzene	U		0.0160	0.0400	1	11/18/2020 19:47	WG1578255
Bromobenzene	U		0.0420	0.500	1	11/18/2020 19:47	WG1578255
Bromodichloromethane	U		0.0315	0.100	1	11/18/2020 19:47	WG1578255
Bromoform	U		0.239	1.00	1	11/18/2020 19:47	WG1578255
Bromomethane	U		0.148	0.500	1	11/18/2020 19:47	WG1578255
n-Butylbenzene	U		0.153	0.500	1	11/18/2020 19:47	WG1578255
sec-Butylbenzene	U		0.101	0.500	1	11/18/2020 19:47	WG1578255
tert-Butylbenzene	U		0.0620	0.200	1	11/18/2020 19:47	WG1578255
Carbon tetrachloride	U		0.0432	0.200	1	11/18/2020 19:47	WG1578255
Chlorobenzene	U		0.0229	0.100	1	11/18/2020 19:47	WG1578255
Chlorodibromomethane	U		0.0180	0.100	1	11/18/2020 19:47	WG1578255
Chloroethane	U	~~J4~~	0.0432	0.200	1	11/18/2020 19:47	WG1578255
Chloroform	0.0450	J	0.0166	0.100	1	11/18/2020 19:47	WG1578255
Chloromethane	U		0.0556	0.500	1	11/18/2020 19:47	WG1578255
2-Chlorotoluene	U		0.0368	0.100	1	11/18/2020 19:47	WG1578255
4-Chlorotoluene	U		0.0452	0.200	1	11/18/2020 19:47	WG1578255
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	11/18/2020 19:47	WG1578255
1,2-Dibromoethane	U		0.0210	0.100	1	11/18/2020 19:47	WG1578255
Dibromomethane	U		0.0400	0.200	1	11/18/2020 19:47	WG1578255
1,2-Dichlorobenzene	U		0.0580	0.200	1	11/18/2020 19:47	WG1578255
1,3-Dichlorobenzene	U		0.0680	0.200	1	11/18/2020 19:47	WG1578255
1,4-Dichlorobenzene	U		0.0788	0.200	1	11/18/2020 19:47	WG1578255
Dichlorodifluoromethane	U		0.0327	0.100	1	11/18/2020 19:47	WG1578255
1,1-Dichloroethane	U		0.0230	0.100	1	11/18/2020 19:47	WG1578255
1,2-Dichloroethane	U		0.0190	0.100	1	11/18/2020 19:47	WG1578255
1,1-Dichloroethene	U		0.0200	0.100	1	11/18/2020 19:47	WG1578255
cis-1,2-Dichloroethene	U		0.0276	0.100	1	11/18/2020 19:47	WG1578255
trans-1,2-Dichloroethene	U		0.0572	0.200	1	11/18/2020 19:47	WG1578255
1,2-Dichloropropane	U		0.0508	0.200	1	11/18/2020 19:47	WG1578255
1,1-Dichloropropene	U		0.0280	0.100	1	11/18/2020 19:47	WG1578255
1,3-Dichloropropane	U		0.0700	0.200	1	11/18/2020 19:47	WG1578255
cis-1,3-Dichloropropene	U		0.0271	0.100	1	11/18/2020 19:47	WG1578255
trans-1,3-Dichloropropene	U		0.0612	0.200	1	11/18/2020 19:47	WG1578255
2,2-Dichloropropane	U		0.0317	0.100	1	11/18/2020 19:47	WG1578255
Di-isopropyl ether	U		0.0140	0.0400	1	11/18/2020 19:47	WG1578255
Ethylbenzene	U		0.0212	0.100	1	11/18/2020 19:47	WG1578255
Hexachloro-1,3-butadiene	U		0.508	1.00	1	11/18/2020 19:47	WG1578255
Isopropylbenzene	U		0.0345	0.100	1	11/18/2020 19:47	WG1578255
p-Isopropyltoluene	U		0.0932	0.200	1	11/18/2020 19:47	WG1578255
2-Butanone (MEK)	U		0.500	1.00	1	11/18/2020 19:47	WG1578255
Methylene Chloride	U		0.265	1.00	1	11/18/2020 19:47	WG1578255
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	11/18/2020 19:47	WG1578255
Methyl tert-butyl ether	U		0.0118	0.0400	1	11/18/2020 19:47	WG1578255
Naphthalene	U		0.124	0.500	1	11/18/2020 19:47	WG1578255
n-Propylbenzene	U		0.0472	0.200	1	11/18/2020 19:47	WG1578255
Styrene	U		0.109	0.500	1	11/18/2020 19:47	WG1578255
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	11/18/2020 19:47	WG1578255
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	11/18/2020 19:47	WG1578255
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	11/18/2020 19:47	WG1578255
Tetrachloroethene	U		0.0280	0.100	1	11/18/2020 19:47	WG1578255
Toluene	U		0.0500	0.200	1	11/18/2020 19:47	WG1578255
1,2,3-Trichlorobenzene	U	UJ C4	0.0250	0.500	1	11/18/2020 19:47	WG1578255
1,2,4-Trichlorobenzene	U		0.193	0.500	1	11/18/2020 19:47	WG1578255
1,1,1-Trichloroethane	U		0.0110	0.100	1	11/18/2020 19:47	WG1578255

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Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,1,2-Trichloroethane	U		0.0353	0.100	1	11/18/2020 19:47	WG1578255
Trichloroethene	U		0.0160	0.0400	1	11/18/2020 19:47	WG1578255
Trichlorofluoromethane	U		0.0200	0.100	1	11/18/2020 19:47	WG1578255
1,2,3-Trichloropropane	U		0.204	0.500	1	11/18/2020 19:47	WG1578255
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	11/18/2020 19:47	WG1578255
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	11/18/2020 19:47	WG1578255
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	11/18/2020 19:47	WG1578255
Vinyl chloride	U		0.0273	0.100	1	11/18/2020 19:47	WG1578255
Xylenes, Total	U		0.191	0.260	1	11/18/2020 19:47	WG1578255
Ethyl Ether	U		0.0170	0.100	1	11/18/2020 19:47	WG1578255
Tetrahydrofuran	U		0.0900	0.500	1	11/18/2020 19:47	WG1578255
Iodomethane	U		0.242	0.500	1	11/18/2020 19:47	WG1578255
Allyl chloride	U		0.580	1.00	1	11/18/2020 19:47	WG1578255
Trans-1,4-Dichloro-2-butene	0.115	J	0.0560	0.200	1	11/18/2020 19:47	WG1578255
(S) Toluene-d8	*103*			*75.0-131*		*11/18/2020 19:47*	WG1578255
(S) 4-Bromofluorobenzene	*102*			*67.0-138*		*11/18/2020 19:47*	WG1578255
(S) 1,2-Dichloroethane-d4	*121*			*70.0-130*		*11/18/2020 19:47*	WG1578255

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

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Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	343000		8450	20000	1	11/19/2020 06:03	WG1578247

Sample Narrative:

L1284447-11 WG1578247: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Sulfate	16600		594	5000	1	11/20/2020 06:03	WG1579481

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	3040		102	1000	1	11/17/2020 20:49	WG1577659

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	5850		28.1	100	1	11/18/2020 11:53	WG1577444
Manganese	890		0.704	5.00	1	11/18/2020 11:53	WG1577444

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	2930	Z, J+	31.6	100	1	11/15/2020 10:54	WG1576631
(S) a,a,a-Trifluorotoluene(FID)	*94.0*			*78.0-120*		*11/15/2020 10:54*	WG1576631

Sample Narrative:

L1284447-11 WG1576631: No discernable petroleum pattern

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	8350		2.87	6.78	10	11/18/2020 15:32	WG1578521
Ethane	3.95		0.296	1.29	1	11/18/2020 11:03	WG1577557
Ethene	552		0.422	1.27	1	11/18/2020 11:03	WG1577557

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U	UJ C3	54.8	100	100	11/20/2020 11:06	WG1579376
Acrylonitrile	U	UJ C3	7.60	50.0	100	11/20/2020 11:06	WG1579376
Benzene	U		1.60	4.00	100	11/20/2020 11:06	WG1579376
Bromobenzene	U		4.20	50.0	100	11/20/2020 11:06	WG1579376
Bromodichloromethane	U		3.15	10.0	100	11/20/2020 11:06	WG1579376
Bromoform	U		23.9	100	100	11/20/2020 11:06	WG1579376
Bromomethane	U		14.8	50.0	100	11/20/2020 11:06	WG1579376
n-Butylbenzene	U		15.3	50.0	100	11/20/2020 11:06	WG1579376
sec-Butylbenzene	U		10.1	50.0	100	11/20/2020 11:06	WG1579376
tert-Butylbenzene	U		6.20	20.0	100	11/20/2020 11:06	WG1579376
Carbon tetrachloride	U		4.32	20.0	100	11/20/2020 11:06	WG1579376
Chlorobenzene	U		2.29	10.0	100	11/20/2020 11:06	WG1579376

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Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chlorodibromomethane	U		1.80	10.0	100	11/20/2020 11:06	WG1579376
Chloroethane	U		4.32	20.0	100	11/20/2020 11:06	WG1579376
Chloroform	U		1.66	10.0	100	11/20/2020 11:06	WG1579376
Chloromethane	U	UJ C3	5.56	50.0	100	11/20/2020 11:06	WG1579376
2-Chlorotoluene	U		3.68	10.0	100	11/20/2020 11:06	WG1579376
4-Chlorotoluene	U		4.52	20.0	100	11/20/2020 11:06	WG1579376
1,2-Dibromo-3-Chloropropane	U		20.4	100	100	11/20/2020 11:06	WG1579376
1,2-Dibromoethane	U		2.10	10.0	100	11/20/2020 11:06	WG1579376
Dibromomethane	U		4.00	20.0	100	11/20/2020 11:06	WG1579376
1,2-Dichlorobenzene	U		5.80	20.0	100	11/20/2020 11:06	WG1579376
1,3-Dichlorobenzene	U		6.80	20.0	100	11/20/2020 11:06	WG1579376
1,4-Dichlorobenzene	U		7.88	20.0	100	11/20/2020 11:06	WG1579376
Dichlorodifluoromethane	U		3.27	10.0	100	11/20/2020 11:06	WG1579376
1,1-Dichloroethane	U		2.30	10.0	100	11/20/2020 11:06	WG1579376
1,2-Dichloroethane	U		1.90	10.0	100	11/20/2020 11:06	WG1579376
1,1-Dichloroethene	U	UJ C3	2.00	10.0	100	11/20/2020 11:06	WG1579376
cis-1,2-Dichloroethene	3740		2.76	10.0	100	11/20/2020 11:06	WG1579376
trans-1,2-Dichloroethene	9.23	J	5.72	20.0	100	11/20/2020 11:06	WG1579376
1,2-Dichloropropane	U		5.08	20.0	100	11/20/2020 11:06	WG1579376
1,1-Dichloropropene	U		2.80	10.0	100	11/20/2020 11:06	WG1579376
1,3-Dichloropropane	U		7.00	20.0	100	11/20/2020 11:06	WG1579376
cis-1,3-Dichloropropene	U		2.71	10.0	100	11/20/2020 11:06	WG1579376
trans-1,3-Dichloropropene	U		6.12	20.0	100	11/20/2020 11:06	WG1579376
2,2-Dichloropropane	U		3.17	10.0	100	11/20/2020 11:06	WG1579376
Di-isopropyl ether	U	UJ C4	1.40	4.00	100	11/20/2020 11:06	WG1579376
Ethylbenzene	U		2.12	10.0	100	11/20/2020 11:06	WG1579376
Hexachloro-1,3-butadiene	U		50.8	100	100	11/20/2020 11:06	WG1579376
Isopropylbenzene	U		3.45	10.0	100	11/20/2020 11:06	WG1579376
p-Isopropyltoluene	U		9.32	20.0	100	11/20/2020 11:06	WG1579376
2-Butanone (MEK)	U	UJ C3	50.0	100	100	11/20/2020 11:06	WG1579376
Methylene Chloride	U		26.5	100	100	11/20/2020 11:06	WG1579376
4-Methyl-2-pentanone (MIBK)	U	UJ C3	40.0	100	100	11/20/2020 11:06	WG1579376
Methyl tert-butyl ether	U		1.18	4.00	100	11/20/2020 11:06	WG1579376
Naphthalene	U		12.4	50.0	100	11/20/2020 11:06	WG1579376
n-Propylbenzene	U		4.72	20.0	100	11/20/2020 11:06	WG1579376
Styrene	U		10.9	50.0	100	11/20/2020 11:06	WG1579376
1,1,1,2-Tetrachloroethane	U		2.00	10.0	100	11/20/2020 11:06	WG1579376
1,1,2,2-Tetrachloroethane	U		1.56	10.0	100	11/20/2020 11:06	WG1579376
1,1,2-Trichlorotrifluoroethane	U		2.70	10.0	100	11/21/2020 09:28	WG1579872
Tetrachloroethene	U		2.80	10.0	100	11/20/2020 11:06	WG1579376
Toluene	U		5.00	20.0	100	11/20/2020 11:06	WG1579376
1,2,3-Trichlorobenzene	U		2.50	50.0	100	11/20/2020 11:06	WG1579376
1,2,4-Trichlorobenzene	U		19.3	50.0	100	11/20/2020 11:06	WG1579376
1,1,1-Trichloroethane	U		1.10	10.0	100	11/20/2020 11:06	WG1579376
1,1,2-Trichloroethane	U		3.53	10.0	100	11/20/2020 11:06	WG1579376
Trichloroethene	4.73		1.60	4.00	100	11/20/2020 11:06	WG1579376
Trichlorofluoromethane	U		2.00	10.0	100	11/20/2020 11:06	WG1579376
1,2,3-Trichloropropane	U		20.4	50.0	100	11/20/2020 11:06	WG1579376
1,2,4-Trimethylbenzene	U		4.64	20.0	100	11/20/2020 11:06	WG1579376
1,2,3-Trimethylbenzene	U		4.60	20.0	100	11/20/2020 11:06	WG1579376
1,3,5-Trimethylbenzene	U		4.32	20.0	100	11/20/2020 11:06	WG1579376
Vinyl chloride	7290		2.73	10.0	100	11/20/2020 11:06	WG1579376
Xylenes, Total	U		19.1	26.0	100	11/20/2020 11:06	WG1579376
Ethyl Ether	U	UJ C3	1.70	10.0	100	11/20/2020 11:06	WG1579376
Tetrahydrofuran	U	UJ C3	9.00	50.0	100	11/20/2020 11:06	WG1579376
Iodomethane	U		24.2	50.0	100	11/20/2020 11:06	WG1579376

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Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l		Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Allyl chloride	U			58.0	100	100	11/20/2020 11:06	WG1579376
Trans-1,4-Dichloro-2-butene	U	UJ	C3	5.60	20.0	100	11/20/2020 11:06	WG1579376
(S) Toluene-d8	*100*				*75.0-131*		*11/20/2020 11:06*	WG1579376
(S) Toluene-d8	*107*				*75.0-131*		*11/21/2020 09:28*	WG1579872
(S) 4-Bromofluorobenzene	*101*				*67.0-138*		*11/20/2020 11:06*	WG1579376
(S) 4-Bromofluorobenzene	*103*				*67.0-138*		*11/21/2020 09:28*	WG1579872
(S) 1,2-Dichloroethane-d4	*95.5*				*70.0-130*		*11/20/2020 11:06*	WG1579376
(S) 1,2-Dichloroethane-d4	*110*				*70.0-130*		*11/21/2020 09:28*	WG1579872

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Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U		0.548	1.00	1	11/18/2020 20:05	WG1578255
Acrylonitrile	U		0.0760	0.500	1	11/18/2020 20:05	WG1578255
Benzene	0.0190	J	0.0160	0.0400	1	11/18/2020 20:05	WG1578255
Bromobenzene	U		0.0420	0.500	1	11/18/2020 20:05	WG1578255
Bromodichloromethane	U		0.0315	0.100	1	11/18/2020 20:05	WG1578255
Bromoform	U		0.239	1.00	1	11/18/2020 20:05	WG1578255
Bromomethane	U		0.148	0.500	1	11/18/2020 20:05	WG1578255
n-Butylbenzene	U		0.153	0.500	1	11/18/2020 20:05	WG1578255
sec-Butylbenzene	U		0.101	0.500	1	11/18/2020 20:05	WG1578255
tert-Butylbenzene	U		0.0620	0.200	1	11/18/2020 20:05	WG1578255
Carbon tetrachloride	U		0.0432	0.200	1	11/18/2020 20:05	WG1578255
Chlorobenzene	U		0.0229	0.100	1	11/18/2020 20:05	WG1578255
Chlorodibromomethane	U		0.0180	0.100	1	11/18/2020 20:05	WG1578255
Chloroethane	U	~~J4~~	0.0432	0.200	1	11/18/2020 20:05	WG1578255
Chloroform	U		0.0166	0.100	1	11/18/2020 20:05	WG1578255
Chloromethane	U		0.0556	0.500	1	11/18/2020 20:05	WG1578255
2-Chlorotoluene	U		0.0368	0.100	1	11/18/2020 20:05	WG1578255
4-Chlorotoluene	U		0.0452	0.200	1	11/18/2020 20:05	WG1578255
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	11/18/2020 20:05	WG1578255
1,2-Dibromoethane	U		0.0210	0.100	1	11/18/2020 20:05	WG1578255
Dibromomethane	U		0.0400	0.200	1	11/18/2020 20:05	WG1578255
1,2-Dichlorobenzene	U		0.0580	0.200	1	11/18/2020 20:05	WG1578255
1,3-Dichlorobenzene	U		0.0680	0.200	1	11/18/2020 20:05	WG1578255
1,4-Dichlorobenzene	U		0.0788	0.200	1	11/18/2020 20:05	WG1578255
Dichlorodifluoromethane	U		0.0327	0.100	1	11/18/2020 20:05	WG1578255
1,1-Dichloroethane	U		0.0230	0.100	1	11/18/2020 20:05	WG1578255
1,2-Dichloroethane	0.0500	J	0.0190	0.100	1	11/18/2020 20:05	WG1578255
1,1-Dichloroethene	U		0.0200	0.100	1	11/18/2020 20:05	WG1578255
cis-1,2-Dichloroethene	0.0870	J	0.0276	0.100	1	11/18/2020 20:05	WG1578255
trans-1,2-Dichloroethene	U		0.0572	0.200	1	11/18/2020 20:05	WG1578255
1,2-Dichloropropane	U		0.0508	0.200	1	11/18/2020 20:05	WG1578255
1,1-Dichloropropene	U		0.0280	0.100	1	11/18/2020 20:05	WG1578255
1,3-Dichloropropane	U		0.0700	0.200	1	11/18/2020 20:05	WG1578255
cis-1,3-Dichloropropene	U		0.0271	0.100	1	11/18/2020 20:05	WG1578255
trans-1,3-Dichloropropene	U		0.0612	0.200	1	11/18/2020 20:05	WG1578255
2,2-Dichloropropane	U		0.0317	0.100	1	11/18/2020 20:05	WG1578255
Di-isopropyl ether	U		0.0140	0.0400	1	11/18/2020 20:05	WG1578255
Ethylbenzene	U		0.0212	0.100	1	11/18/2020 20:05	WG1578255
Hexachloro-1,3-butadiene	U		0.508	1.00	1	11/18/2020 20:05	WG1578255
Isopropylbenzene	U		0.0345	0.100	1	11/18/2020 20:05	WG1578255
p-Isopropyltoluene	U		0.0932	0.200	1	11/18/2020 20:05	WG1578255
2-Butanone (MEK)	U		0.500	1.00	1	11/18/2020 20:05	WG1578255
Methylene Chloride	U		0.265	1.00	1	11/18/2020 20:05	WG1578255
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	11/18/2020 20:05	WG1578255
Methyl tert-butyl ether	U		0.0118	0.0400	1	11/18/2020 20:05	WG1578255
Naphthalene	U		0.124	0.500	1	11/18/2020 20:05	WG1578255
n-Propylbenzene	U		0.0472	0.200	1	11/18/2020 20:05	WG1578255
Styrene	U		0.109	0.500	1	11/18/2020 20:05	WG1578255
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	11/18/2020 20:05	WG1578255
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	11/18/2020 20:05	WG1578255
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	11/18/2020 20:05	WG1578255
Tetrachloroethene	U		0.0280	0.100	1	11/18/2020 20:05	WG1578255
Toluene	U		0.0500	0.200	1	11/18/2020 20:05	WG1578255
1,2,3-Trichlorobenzene	U UJ	C4	0.0250	0.500	1	11/18/2020 20:05	WG1578255
1,2,4-Trichlorobenzene	U		0.193	0.500	1	11/18/2020 20:05	WG1578255
1,1,1-Trichloroethane	U		0.0110	0.100	1	11/18/2020 20:05	WG1578255

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Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,1,2-Trichloroethane	U		0.0353	0.100	1	11/18/2020 20:05	WG1578255
Trichloroethene	U		0.0160	0.0400	1	11/18/2020 20:05	WG1578255
Trichlorofluoromethane	U		0.0200	0.100	1	11/18/2020 20:05	WG1578255
1,2,3-Trichloropropane	U		0.204	0.500	1	11/18/2020 20:05	WG1578255
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	11/18/2020 20:05	WG1578255
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	11/18/2020 20:05	WG1578255
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	11/18/2020 20:05	WG1578255
Vinyl chloride	U		0.0273	0.100	1	11/18/2020 20:05	WG1578255
Xylenes, Total	U		0.191	0.260	1	11/18/2020 20:05	WG1578255
Ethyl Ether	0.0940	J	0.0170	0.100	1	11/18/2020 20:05	WG1578255
Tetrahydrofuran	0.360	J	0.0900	0.500	1	11/18/2020 20:05	WG1578255
Iodomethane	U		0.242	0.500	1	11/18/2020 20:05	WG1578255
Allyl chloride	U		0.580	1.00	1	11/18/2020 20:05	WG1578255
Trans-1,4-Dichloro-2-butene	0.122	J	0.0560	0.200	1	11/18/2020 20:05	WG1578255
(S) Toluene-d8	*109*			*75.0-131*		*11/18/2020 20:05*	WG1578255
(S) 4-Bromofluorobenzene	*99.6*			*67.0-138*		*11/18/2020 20:05*	WG1578255
(S) 1,2-Dichloroethane-d4	*120*			*70.0-130*		*11/18/2020 20:05*	WG1578255

JC 12/8/2020

MW-338-111020
Collected date/time: 11/10/20 10:45

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	1.31 J-	B C3	0.548	1.00	1	11/19/2020 10:02	WG1578897
Acrylonitrile	U		0.0760	0.500	1	11/19/2020 10:02	WG1578897
Benzene	U		0.0160	0.0400	1	11/19/2020 10:02	WG1578897
Bromobenzene	U		0.0420	0.500	1	11/19/2020 10:02	WG1578897
Bromodichloromethane	U		0.0315	0.100	1	11/19/2020 10:02	WG1578897
Bromoform	U		0.239	1.00	1	11/19/2020 10:02	WG1578897
Bromomethane	U		0.148	0.500	1	11/19/2020 10:02	WG1578897
n-Butylbenzene	U		0.153	0.500	1	11/19/2020 10:02	WG1578897
sec-Butylbenzene	U		0.101	0.500	1	11/19/2020 10:02	WG1578897
tert-Butylbenzene	U		0.0620	0.200	1	11/19/2020 10:02	WG1578897
Carbon tetrachloride	U	~~J4~~	0.0432	0.200	1	11/19/2020 10:02	WG1578897
Chlorobenzene	U		0.0229	0.100	1	11/19/2020 10:02	WG1578897
Chlorodibromomethane	U		0.0180	0.100	1	11/19/2020 10:02	WG1578897
Chloroethane	U	~~J4~~	0.0432	0.200	1	11/19/2020 10:02	WG1578897
Chloroform	U		0.0166	0.100	1	11/19/2020 10:02	WG1578897
Chloromethane	U		0.0556	0.500	1	11/19/2020 10:02	WG1578897
2-Chlorotoluene	U		0.0368	0.100	1	11/19/2020 10:02	WG1578897
4-Chlorotoluene	U		0.0452	0.200	1	11/19/2020 10:02	WG1578897
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	11/19/2020 10:02	WG1578897
1,2-Dibromoethane	U		0.0210	0.100	1	11/19/2020 10:02	WG1578897
Dibromomethane	U		0.0400	0.200	1	11/19/2020 10:02	WG1578897
1,2-Dichlorobenzene	U		0.0580	0.200	1	11/19/2020 10:02	WG1578897
1,3-Dichlorobenzene	U		0.0680	0.200	1	11/19/2020 10:02	WG1578897
1,4-Dichlorobenzene	U		0.0788	0.200	1	11/19/2020 10:02	WG1578897
Dichlorodifluoromethane	U		0.0327	0.100	1	11/19/2020 10:02	WG1578897
1,1-Dichloroethane	U		0.0230	0.100	1	11/19/2020 10:02	WG1578897
1,2-Dichloroethane	U		0.0190	0.100	1	11/19/2020 10:02	WG1578897
1,1-Dichloroethene	U		0.0200	0.100	1	11/19/2020 10:02	WG1578897
cis-1,2-Dichloroethene	U		0.0276	0.100	1	11/19/2020 10:02	WG1578897
trans-1,2-Dichloroethene	U		0.0572	0.200	1	11/19/2020 10:02	WG1578897
1,2-Dichloropropane	U		0.0508	0.200	1	11/19/2020 10:02	WG1578897
1,1-Dichloropropene	U		0.0280	0.100	1	11/19/2020 10:02	WG1578897
1,3-Dichloropropane	U		0.0700	0.200	1	11/19/2020 10:02	WG1578897
cis-1,3-Dichloropropene	U		0.0271	0.100	1	11/19/2020 10:02	WG1578897
trans-1,3-Dichloropropene	U		0.0612	0.200	1	11/19/2020 10:02	WG1578897
2,2-Dichloropropane	U		0.0317	0.100	1	11/19/2020 10:02	WG1578897
Di-isopropyl ether	U		0.0140	0.0400	1	11/19/2020 10:02	WG1578897
Ethylbenzene	U		0.0212	0.100	1	11/19/2020 10:02	WG1578897
Hexachloro-1,3-butadiene	U		0.508	1.00	1	11/19/2020 10:02	WG1578897
Isopropylbenzene	U		0.0345	0.100	1	11/19/2020 10:02	WG1578897
p-Isopropyltoluene	U		0.0932	0.200	1	11/19/2020 10:02	WG1578897
2-Butanone (MEK)	U		0.500	1.00	1	11/19/2020 10:02	WG1578897
Methylene Chloride	U		0.265	1.00	1	11/19/2020 10:02	WG1578897
4-Methyl-2-pentanone (MIBK)	U UJ	C3	0.400	1.00	1	11/19/2020 10:02	WG1578897
Methyl tert-butyl ether	U		0.0118	0.0400	1	11/19/2020 10:02	WG1578897
Naphthalene	U		0.124	0.500	1	11/19/2020 10:02	WG1578897
n-Propylbenzene	U		0.0472	0.200	1	11/19/2020 10:02	WG1578897
Styrene	U		0.109	0.500	1	11/19/2020 10:02	WG1578897
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	11/19/2020 10:02	WG1578897
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	11/19/2020 10:02	WG1578897
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	11/19/2020 10:02	WG1578897
Tetrachloroethene	U		0.0280	0.100	1	11/19/2020 10:02	WG1578897
Toluene	U UJ	C3	0.0500	0.200	1	11/19/2020 10:02	WG1578897
1,2,3-Trichlorobenzene	U		0.0250	0.500	1	11/19/2020 10:02	WG1578897
1,2,4-Trichlorobenzene	U		0.193	0.500	1	11/19/2020 10:02	WG1578897
1,1,1-Trichloroethane	U		0.0110	0.100	1	11/19/2020 10:02	WG1578897

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Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,1,2-Trichloroethane	U		0.0353	0.100	1	11/19/2020 10:02	WG1578897
Trichloroethene	U		0.0160	0.0400	1	11/19/2020 10:02	WG1578897
Trichlorofluoromethane	U		0.0200	0.100	1	11/19/2020 10:02	WG1578897
1,2,3-Trichloropropane	U		0.204	0.500	1	11/19/2020 10:02	WG1578897
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	11/19/2020 10:02	WG1578897
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	11/19/2020 10:02	WG1578897
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	11/19/2020 10:02	WG1578897
Vinyl chloride	U	~~J4~~	0.0273	0.100	1	11/19/2020 10:02	WG1578897
Xylenes, Total	U		0.191	0.260	1	11/19/2020 10:02	WG1578897
Ethyl Ether	U	~~J4~~	0.0170	0.100	1	11/19/2020 10:02	WG1578897
Tetrahydrofuran	U		0.0900	0.500	1	11/19/2020 10:02	WG1578897
Iodomethane	U		0.242	0.500	1	11/19/2020 10:02	WG1578897
Allyl chloride	U		0.580	1.00	1	11/19/2020 10:02	WG1578897
Trans-1,4-Dichloro-2-butene	U UJ	C3	0.0560	0.200	1	11/19/2020 10:02	WG1578897
(S) Toluene-d8	*102*			*75.0-131*		*11/19/2020 10:02*	WG1578897
(S) 4-Bromofluorobenzene	*132*			*67.0-138*		*11/19/2020 10:02*	WG1578897
(S) 1,2-Dichloroethane-d4	*111*			*70.0-130*		*11/19/2020 10:02*	WG1578897

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Wet Chemistry by Method 2320 B-2011

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Alkalinity	232000		8450	20000	1	11/19/2020 06:11	WG1578247

Sample Narrative:

L1284447-14 WG1578247: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 9056A

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Sulfate	17300		594	5000	1	11/20/2020 06:20	WG1579481

Wet Chemistry by Method 9060A

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
TOC (Total Organic Carbon)	1240	B	102	1000	1	11/17/2020 21:00	WG1577659

Metals (ICPMS) by Method 6020B

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Iron	4130		28.1	100	1	11/18/2020 11:56	WG1577444
Manganese	666		0.704	5.00	1	11/18/2020 11:56	WG1577444

Volatile Organic Compounds (GC) by Method RSK175

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Methane	24.3		0.287	0.678	1	11/18/2020 11:09	WG1577557
Ethane	U		0.296	1.29	1	11/18/2020 11:09	WG1577557
Ethene	U		0.422	1.27	1	11/18/2020 11:09	WG1577557

Volatile Organic Compounds (GC/MS) by Method 8260D

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Acetone	0.731 U	~~B C3 J~~	0.548	1.00	1	11/19/2020 10:22	WG1578897
Acrylonitrile	U		0.0760	0.500	1	11/19/2020 10:22	WG1578897
Benzene	U		0.0160	0.0400	1	11/19/2020 10:22	WG1578897
Bromobenzene	U		0.0420	0.500	1	11/19/2020 10:22	WG1578897
Bromodichloromethane	U		0.0315	0.100	1	11/19/2020 10:22	WG1578897
Bromoform	U		0.239	1.00	1	11/19/2020 10:22	WG1578897
Bromomethane	U		0.148	0.500	1	11/19/2020 10:22	WG1578897
n-Butylbenzene	U		0.153	0.500	1	11/19/2020 10:22	WG1578897
sec-Butylbenzene	U		0.101	0.500	1	11/19/2020 10:22	WG1578897
tert-Butylbenzene	U		0.0620	0.200	1	11/19/2020 10:22	WG1578897
Carbon tetrachloride	U	~~J4~~	0.0432	0.200	1	11/19/2020 10:22	WG1578897
Chlorobenzene	U		0.0229	0.100	1	11/19/2020 10:22	WG1578897
Chlorodibromomethane	U		0.0180	0.100	1	11/19/2020 10:22	WG1578897
Chloroethane	U	~~J4~~	0.0432	0.200	1	11/19/2020 10:22	WG1578897
Chloroform	U		0.0166	0.100	1	11/19/2020 10:22	WG1578897
Chloromethane	U		0.0556	0.500	1	11/19/2020 10:22	WG1578897
2-Chlorotoluene	U		0.0368	0.100	1	11/19/2020 10:22	WG1578897
4-Chlorotoluene	U		0.0452	0.200	1	11/19/2020 10:22	WG1578897
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	11/19/2020 10:22	WG1578897
1,2-Dibromoethane	U		0.0210	0.100	1	11/19/2020 10:22	WG1578897
Dibromomethane	U		0.0400	0.200	1	11/19/2020 10:22	WG1578897
1,2-Dichlorobenzene	U		0.0580	0.200	1	11/19/2020 10:22	WG1578897

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Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
1,3-Dichlorobenzene	U		0.0680	0.200	1	11/19/2020 10:22	WG1578897
1,4-Dichlorobenzene	U		0.0788	0.200	1	11/19/2020 10:22	WG1578897
Dichlorodifluoromethane	U		0.0327	0.100	1	11/19/2020 10:22	WG1578897
1,1-Dichloroethane	U		0.0230	0.100	1	11/19/2020 10:22	WG1578897
1,2-Dichloroethane	U		0.0190	0.100	1	11/19/2020 10:22	WG1578897
1,1-Dichloroethene	U		0.0200	0.100	1	11/19/2020 10:22	WG1578897
cis-1,2-Dichloroethene	U		0.0276	0.100	1	11/19/2020 10:22	WG1578897
trans-1,2-Dichloroethene	U		0.0572	0.200	1	11/19/2020 10:22	WG1578897
1,2-Dichloropropane	U		0.0508	0.200	1	11/19/2020 10:22	WG1578897
1,1-Dichloropropene	U		0.0280	0.100	1	11/19/2020 10:22	WG1578897
1,3-Dichloropropane	U		0.0700	0.200	1	11/19/2020 10:22	WG1578897
cis-1,3-Dichloropropene	U		0.0271	0.100	1	11/19/2020 10:22	WG1578897
trans-1,3-Dichloropropene	U		0.0612	0.200	1	11/19/2020 10:22	WG1578897
2,2-Dichloropropane	U		0.0317	0.100	1	11/19/2020 10:22	WG1578897
Di-isopropyl ether	U		0.0140	0.0400	1	11/19/2020 10:22	WG1578897
Ethylbenzene	U		0.0212	0.100	1	11/19/2020 10:22	WG1578897
Hexachloro-1,3-butadiene	U		0.508	1.00	1	11/19/2020 10:22	WG1578897
Isopropylbenzene	U		0.0345	0.100	1	11/19/2020 10:22	WG1578897
p-Isopropyltoluene	U		0.0932	0.200	1	11/19/2020 10:22	WG1578897
2-Butanone (MEK)	U		0.500	1.00	1	11/19/2020 10:22	WG1578897
Methylene Chloride	U		0.265	1.00	1	11/19/2020 10:22	WG1578897
4-Methyl-2-pentanone (MIBK)	U UJ	C3	0.400	1.00	1	11/19/2020 10:22	WG1578897
Methyl tert-butyl ether	U		0.0118	0.0400	1	11/19/2020 10:22	WG1578897
Naphthalene	U		0.124	0.500	1	11/19/2020 10:22	WG1578897
n-Propylbenzene	U		0.0472	0.200	1	11/19/2020 10:22	WG1578897
Styrene	U		0.109	0.500	1	11/19/2020 10:22	WG1578897
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	11/19/2020 10:22	WG1578897
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	11/19/2020 10:22	WG1578897
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	11/19/2020 10:22	WG1578897
Tetrachloroethene	U		0.0280	0.100	1	11/19/2020 10:22	WG1578897
Toluene	0.339 J-	C3	0.0500	0.200	1	11/19/2020 10:22	WG1578897
1,2,3-Trichlorobenzene	U		0.0250	0.500	1	11/19/2020 10:22	WG1578897
1,2,4-Trichlorobenzene	U		0.193	0.500	1	11/19/2020 10:22	WG1578897
1,1,1-Trichloroethane	U		0.0110	0.100	1	11/19/2020 10:22	WG1578897
1,1,2-Trichloroethane	U		0.0353	0.100	1	11/19/2020 10:22	WG1578897
Trichloroethene	U		0.0160	0.0400	1	11/19/2020 10:22	WG1578897
Trichlorofluoromethane	U		0.0200	0.100	1	11/19/2020 10:22	WG1578897
1,2,3-Trichloropropane	U		0.204	0.500	1	11/19/2020 10:22	WG1578897
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	11/19/2020 10:22	WG1578897
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	11/19/2020 10:22	WG1578897
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	11/19/2020 10:22	WG1578897
Vinyl chloride	U	~~J4~~	0.0273	0.100	1	11/19/2020 10:22	WG1578897
Xylenes, Total	0.216	J	0.191	0.260	1	11/19/2020 10:22	WG1578897
Ethyl Ether	U	~~J4~~	0.0170	0.100	1	11/19/2020 10:22	WG1578897
Tetrahydrofuran	U		0.0900	0.500	1	11/19/2020 10:22	WG1578897
Iodomethane	U		0.242	0.500	1	11/19/2020 10:22	WG1578897
Allyl chloride	U		0.580	1.00	1	11/19/2020 10:22	WG1578897
Trans-1,4-Dichloro-2-butene	U UJ	C3	0.0560	0.200	1	11/19/2020 10:22	WG1578897
(S) Toluene-d8	*103*			*75.0-131*		*11/19/2020 10:22*	WG1578897
(S) 4-Bromofluorobenzene	*109*			*67.0-138*		*11/19/2020 10:22*	WG1578897
(S) 1,2-Dichloroethane-d4	*111*			*70.0-130*		*11/19/2020 10:22*	WG1578897

JC 12/8/2020

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Wet Chemistry by Method 2320 B-2011

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Alkalinity	277000		8450	20000	1	11/19/2020 06:18	WG1578247

Sample Narrative:

L1284447-15 WG1578247: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 9056A

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Sulfate	31100		594	5000	1	11/20/2020 07:11	WG1579481

Wet Chemistry by Method 9060A

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
TOC (Total Organic Carbon)	2180		102	1000	1	11/17/2020 21:16	WG1577659

Metals (ICPMS) by Method 6020B

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Iron	2590		28.1	100	1	11/18/2020 11:59	WG1577444
Manganese	1070		0.704	5.00	1	11/18/2020 11:59	WG1577444

Volatile Organic Compounds (GC) by Method NWTPHGX

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Gasoline Range Organics-NWTPH	2850	Z, J+	31.6	100	1	11/15/2020 11:18	WG1576631
(S) a,a,a-Trifluorotoluene(FID)	*94.9*			*78.0-120*		*11/15/2020 11:18*	WG1576631

Sample Narrative:

L1284447-15 WG1576631: No discernable petroleum pattern

Volatile Organic Compounds (GC) by Method RSK175

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Methane	7340		2.87	6.78	10	11/18/2020 15:35	WG1578521
Ethane	2.67		0.296	1.29	1	11/18/2020 11:14	WG1577557
Ethene	315		0.422	1.27	1	11/18/2020 11:14	WG1577557

Volatile Organic Compounds (GC/MS) by Method 8260D

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Acetone	U UJ	C3	27.4	50.0	50	11/20/2020 10:45	WG1579425
Acrylonitrile	U UJ	C3	3.80	25.0	50	11/20/2020 10:45	WG1579425
Benzene	0.842	J	0.800	2.00	50	11/20/2020 10:45	WG1579425
Bromobenzene	U		2.10	25.0	50	11/20/2020 10:45	WG1579425
Bromodichloromethane	U		1.58	5.00	50	11/20/2020 10:45	WG1579425
Bromoform	U		12.0	50.0	50	11/20/2020 10:45	WG1579425
Bromomethane	U		7.40	25.0	50	11/20/2020 10:45	WG1579425
n-Butylbenzene	U		7.65	25.0	50	11/20/2020 10:45	WG1579425
sec-Butylbenzene	U		5.05	25.0	50	11/20/2020 10:45	WG1579425
tert-Butylbenzene	U		3.10	10.0	50	11/20/2020 10:45	WG1579425
Carbon tetrachloride	U		2.16	10.0	50	11/20/2020 10:45	WG1579425
Chlorobenzene	U		1.15	5.00	50	11/20/2020 10:45	WG1579425

JC 12/8/2020

MW-146-111020

Collected date/time: 11/10/20 11:30

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chlorodibromomethane	U		0.900	5.00	50	11/20/2020 10:45	WG1579425
Chloroethane	U		2.16	10.0	50	11/20/2020 10:45	WG1579425
Chloroform	U		0.830	5.00	50	11/20/2020 10:45	WG1579425
Chloromethane	U	UJ C3	2.78	25.0	50	11/20/2020 10:45	WG1579425
2-Chlorotoluene	U		1.84	5.00	50	11/20/2020 10:45	WG1579425
4-Chlorotoluene	U		2.26	10.0	50	11/20/2020 10:45	WG1579425
1,2-Dibromo-3-Chloropropane	U		10.2	50.0	50	11/20/2020 10:45	WG1579425
1,2-Dibromoethane	U		1.05	5.00	50	11/20/2020 10:45	WG1579425
Dibromomethane	U		2.00	10.0	50	11/20/2020 10:45	WG1579425
1,2-Dichlorobenzene	U		2.90	10.0	50	11/20/2020 10:45	WG1579425
1,3-Dichlorobenzene	U		3.40	10.0	50	11/20/2020 10:45	WG1579425
1,4-Dichlorobenzene	U		3.94	10.0	50	11/20/2020 10:45	WG1579425
Dichlorodifluoromethane	U		1.64	5.00	50	11/20/2020 10:45	WG1579425
1,1-Dichloroethane	U		1.15	5.00	50	11/20/2020 10:45	WG1579425
1,2-Dichloroethane	U		0.950	5.00	50	11/20/2020 10:45	WG1579425
1,1-Dichloroethene	5.58	J- C3	1.00	5.00	50	11/20/2020 10:45	WG1579425
cis-1,2-Dichloroethene	3900		1.38	5.00	50	11/20/2020 10:45	WG1579425
trans-1,2-Dichloroethene	12.5		2.86	10.0	50	11/20/2020 10:45	WG1579425
1,2-Dichloropropane	U		2.54	10.0	50	11/20/2020 10:45	WG1579425
1,1-Dichloropropene	U		1.40	5.00	50	11/20/2020 10:45	WG1579425
1,3-Dichloropropane	U		3.50	10.0	50	11/20/2020 10:45	WG1579425
cis-1,3-Dichloropropene	U		1.36	5.00	50	11/20/2020 10:45	WG1579425
trans-1,3-Dichloropropene	U		3.06	10.0	50	11/20/2020 10:45	WG1579425
2,2-Dichloropropane	U		1.59	5.00	50	11/20/2020 10:45	WG1579425
Di-isopropyl ether	U	UJ C4	0.700	2.00	50	11/20/2020 10:45	WG1579425
Ethylbenzene	U		1.06	5.00	50	11/20/2020 10:45	WG1579425
Hexachloro-1,3-butadiene	U		25.4	50.0	50	11/20/2020 10:45	WG1579425
Isopropylbenzene	U		1.73	5.00	50	11/20/2020 10:45	WG1579425
p-Isopropyltoluene	U		4.66	10.0	50	11/20/2020 10:45	WG1579425
2-Butanone (MEK)	U	UJ C3	25.0	50.0	50	11/20/2020 10:45	WG1579425
Methylene Chloride	U		13.3	50.0	50	11/20/2020 10:45	WG1579425
4-Methyl-2-pentanone (MIBK)	U	UJ C3	20.0	50.0	50	11/20/2020 10:45	WG1579425
Methyl tert-butyl ether	U		0.590	2.00	50	11/20/2020 10:45	WG1579425
Naphthalene	U		6.20	25.0	50	11/20/2020 10:45	WG1579425
n-Propylbenzene	U		2.36	10.0	50	11/20/2020 10:45	WG1579425
Styrene	U		5.45	25.0	50	11/20/2020 10:45	WG1579425
1,1,1,2-Tetrachloroethane	U		1.00	5.00	50	11/20/2020 10:45	WG1579425
1,1,2,2-Tetrachloroethane	U		0.780	5.00	50	11/20/2020 10:45	WG1579425
1,1,2-Trichlorotrifluoroethane	U		1.35	5.00	50	11/21/2020 09:47	WG1579872
Tetrachloroethene	U		1.40	5.00	50	11/20/2020 10:45	WG1579425
Toluene	U		2.50	10.0	50	11/20/2020 10:45	WG1579425
1,2,3-Trichlorobenzene	U		1.25	25.0	50	11/20/2020 10:45	WG1579425
1,2,4-Trichlorobenzene	U		9.65	25.0	50	11/20/2020 10:45	WG1579425
1,1,1-Trichloroethane	U		0.550	5.00	50	11/20/2020 10:45	WG1579425
1,1,2-Trichloroethane	U		1.77	5.00	50	11/20/2020 10:45	WG1579425
Trichloroethene	2.60		0.800	2.00	50	11/20/2020 10:45	WG1579425
Trichlorofluoromethane	U		1.00	5.00	50	11/20/2020 10:45	WG1579425
1,2,3-Trichloropropane	U		10.2	25.0	50	11/20/2020 10:45	WG1579425
1,2,4-Trimethylbenzene	U		2.32	10.0	50	11/20/2020 10:45	WG1579425
1,2,3-Trimethylbenzene	U		2.30	10.0	50	11/20/2020 10:45	WG1579425
1,3,5-Trimethylbenzene	U		2.16	10.0	50	11/20/2020 10:45	WG1579425
Vinyl chloride	4930		1.36	5.00	50	11/20/2020 10:45	WG1579425
Xylenes, Total	U		9.55	13.0	50	11/20/2020 10:45	WG1579425
Ethyl Ether	U	UJ C3	0.850	5.00	50	11/20/2020 10:45	WG1579425
Tetrahydrofuran	U	UJ C3	4.50	25.0	50	11/20/2020 10:45	WG1579425
Iodomethane	U		12.1	25.0	50	11/20/2020 10:45	WG1579425

JC 12/8/2020

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l		Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Allyl chloride	U			29.0	50.0	50	11/20/2020 10:45	WG1579425
Trans-1,4-Dichloro-2-butene	U	UJ	C3	2.80	10.0	50	11/20/2020 10:45	WG1579425
(S) Toluene-d8	*102*				*75.0-131*		*11/20/2020 10:45*	WG1579425
(S) Toluene-d8	*109*				*75.0-131*		*11/21/2020 09:47*	WG1579872
(S) 4-Bromofluorobenzene	*101*				*67.0-138*		*11/20/2020 10:45*	WG1579425
(S) 4-Bromofluorobenzene	*105*				*67.0-138*		*11/21/2020 09:47*	WG1579872
(S) 1,2-Dichloroethane-d4	*90.3*				*70.0-130*		*11/20/2020 10:45*	WG1579425
(S) 1,2-Dichloroethane-d4	*107*				*70.0-130*		*11/21/2020 09:47*	WG1579872

JC 12/8/2020

MW-317-111020
Collected date/time: 11/10/20 12:50

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L1284447

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l		Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	1.56	J-	B C3	0.548	1.00	1	11/19/2020 10:43	WG1578897
Acrylonitrile	U			0.0760	0.500	1	11/19/2020 10:43	WG1578897
Benzene	U			0.0160	0.0400	1	11/19/2020 10:43	WG1578897
Bromobenzene	U			0.0420	0.500	1	11/19/2020 10:43	WG1578897
Bromodichloromethane	U			0.0315	0.100	1	11/19/2020 10:43	WG1578897
Bromoform	U			0.239	1.00	1	11/19/2020 10:43	WG1578897
Bromomethane	U			0.148	0.500	1	11/19/2020 10:43	WG1578897
n-Butylbenzene	U			0.153	0.500	1	11/19/2020 10:43	WG1578897
sec-Butylbenzene	U			0.101	0.500	1	11/19/2020 10:43	WG1578897
tert-Butylbenzene	U			0.0620	0.200	1	11/19/2020 10:43	WG1578897
Carbon tetrachloride	U		~~J4~~	0.0432	0.200	1	11/19/2020 10:43	WG1578897
Chlorobenzene	U			0.0229	0.100	1	11/19/2020 10:43	WG1578897
Chlorodibromomethane	U			0.0180	0.100	1	11/19/2020 10:43	WG1578897
Chloroethane	U		~~J4~~	0.0432	0.200	1	11/19/2020 10:43	WG1578897
Chloroform	U			0.0166	0.100	1	11/19/2020 10:43	WG1578897
Chloromethane	U			0.0556	0.500	1	11/19/2020 10:43	WG1578897
2-Chlorotoluene	U			0.0368	0.100	1	11/19/2020 10:43	WG1578897
4-Chlorotoluene	U			0.0452	0.200	1	11/19/2020 10:43	WG1578897
1,2-Dibromo-3-Chloropropane	U			0.204	1.00	1	11/19/2020 10:43	WG1578897
1,2-Dibromoethane	U			0.0210	0.100	1	11/19/2020 10:43	WG1578897
Dibromomethane	U			0.0400	0.200	1	11/19/2020 10:43	WG1578897
1,2-Dichlorobenzene	U			0.0580	0.200	1	11/19/2020 10:43	WG1578897
1,3-Dichlorobenzene	U			0.0680	0.200	1	11/19/2020 10:43	WG1578897
1,4-Dichlorobenzene	U			0.0788	0.200	1	11/19/2020 10:43	WG1578897
Dichlorodifluoromethane	U			0.0327	0.100	1	11/19/2020 10:43	WG1578897
1,1-Dichloroethane	U			0.0230	0.100	1	11/19/2020 10:43	WG1578897
1,2-Dichloroethane	U			0.0190	0.100	1	11/19/2020 10:43	WG1578897
1,1-Dichloroethene	U			0.0200	0.100	1	11/19/2020 10:43	WG1578897
cis-1,2-Dichloroethene	U			0.0276	0.100	1	11/19/2020 10:43	WG1578897
trans-1,2-Dichloroethene	U			0.0572	0.200	1	11/19/2020 10:43	WG1578897
1,2-Dichloropropane	U			0.0508	0.200	1	11/19/2020 10:43	WG1578897
1,1-Dichloropropene	U			0.0280	0.100	1	11/19/2020 10:43	WG1578897
1,3-Dichloropropane	U			0.0700	0.200	1	11/19/2020 10:43	WG1578897
cis-1,3-Dichloropropene	U			0.0271	0.100	1	11/19/2020 10:43	WG1578897
trans-1,3-Dichloropropene	U			0.0612	0.200	1	11/19/2020 10:43	WG1578897
2,2-Dichloropropane	U			0.0317	0.100	1	11/19/2020 10:43	WG1578897
Di-isopropyl ether	U			0.0140	0.0400	1	11/19/2020 10:43	WG1578897
Ethylbenzene	U			0.0212	0.100	1	11/19/2020 10:43	WG1578897
Hexachloro-1,3-butadiene	U			0.508	1.00	1	11/19/2020 10:43	WG1578897
Isopropylbenzene	U			0.0345	0.100	1	11/19/2020 10:43	WG1578897
p-Isopropyltoluene	U			0.0932	0.200	1	11/19/2020 10:43	WG1578897
2-Butanone (MEK)	U			0.500	1.00	1	11/19/2020 10:43	WG1578897
Methylene Chloride	U			0.265	1.00	1	11/19/2020 10:43	WG1578897
4-Methyl-2-pentanone (MIBK)	U	UJ	C3	0.400	1.00	1	11/19/2020 10:43	WG1578897
Methyl tert-butyl ether	U			0.0118	0.0400	1	11/19/2020 10:43	WG1578897
Naphthalene	U			0.124	0.500	1	11/19/2020 10:43	WG1578897
n-Propylbenzene	U			0.0472	0.200	1	11/19/2020 10:43	WG1578897
Styrene	U			0.109	0.500	1	11/19/2020 10:43	WG1578897
1,1,1,2-Tetrachloroethane	U			0.0200	0.100	1	11/19/2020 10:43	WG1578897
1,1,2,2-Tetrachloroethane	U			0.0156	0.100	1	11/19/2020 10:43	WG1578897
1,1,2-Trichlorotrifluoroethane	U			0.0270	0.100	1	11/19/2020 10:43	WG1578897
Tetrachloroethene	U			0.0280	0.100	1	11/19/2020 10:43	WG1578897
Toluene	0.836	J-	C3	0.0500	0.200	1	11/19/2020 10:43	WG1578897
1,2,3-Trichlorobenzene	U			0.0250	0.500	1	11/19/2020 10:43	WG1578897
1,2,4-Trichlorobenzene	U			0.193	0.500	1	11/19/2020 10:43	WG1578897
1,1,1-Trichloroethane	U			0.0110	0.100	1	11/19/2020 10:43	WG1578897

JC
12/8/2020

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,1,2-Trichloroethane	U		0.0353	0.100	1	11/19/2020 10:43	WG1578897
Trichloroethene	U		0.0160	0.0400	1	11/19/2020 10:43	WG1578897
Trichlorofluoromethane	U		0.0200	0.100	1	11/19/2020 10:43	WG1578897
1,2,3-Trichloropropane	U		0.204	0.500	1	11/19/2020 10:43	WG1578897
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	11/19/2020 10:43	WG1578897
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	11/19/2020 10:43	WG1578897
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	11/19/2020 10:43	WG1578897
Vinyl chloride	U	~~J4~~	0.0273	0.100	1	11/19/2020 10:43	WG1578897
Xylenes, Total	0.419		0.191	0.260	1	11/19/2020 10:43	WG1578897
Ethyl Ether	U	~~J4~~	0.0170	0.100	1	11/19/2020 10:43	WG1578897
Tetrahydrofuran	U		0.0900	0.500	1	11/19/2020 10:43	WG1578897
Iodomethane	U		0.242	0.500	1	11/19/2020 10:43	WG1578897
Allyl chloride	U		0.580	1.00	1	11/19/2020 10:43	WG1578897
Trans-1,4-Dichloro-2-butene	U UJ	C3	0.0560	0.200	1	11/19/2020 10:43	WG1578897
(S) Toluene-d8	*128*			*75.0-131*		*11/19/2020 10:43*	WG1578897
(S) 4-Bromofluorobenzene	*108*			*67.0-138*		*11/19/2020 10:43*	WG1578897
(S) 1,2-Dichloroethane-d4	*108*			*70.0-130*		*11/19/2020 10:43*	WG1578897

JC 12/8/2020

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	238000		8450	20000	1	11/19/2020 06:25	WG1578247

Sample Narrative:

L1284447-17 WG1578247: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Sulfate	17400		594	5000	1	11/20/2020 07:27	WG1579481

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	1290	B	102	1000	1	11/17/2020 21:27	WG1577659

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	5070		28.1	100	1	11/18/2020 12:03	WG1577444
Manganese	696		0.704	5.00	1	11/18/2020 12:03	WG1577444

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	22.4		0.287	0.678	1	11/18/2020 11:16	WG1577557
Ethane	U		0.296	1.29	1	11/18/2020 11:16	WG1577557
Ethene	U		0.422	1.27	1	11/18/2020 11:16	WG1577557

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U UJ	C3	0.548	1.00	1	11/19/2020 11:03	WG1578897
Acrylonitrile	U		0.0760	0.500	1	11/19/2020 11:03	WG1578897
Benzene	U		0.0160	0.0400	1	11/19/2020 11:03	WG1578897
Bromobenzene	U		0.0420	0.500	1	11/19/2020 11:03	WG1578897
Bromodichloromethane	U		0.0315	0.100	1	11/19/2020 11:03	WG1578897
Bromoform	U		0.239	1.00	1	11/19/2020 11:03	WG1578897
Bromomethane	U		0.148	0.500	1	11/19/2020 11:03	WG1578897
n-Butylbenzene	U		0.153	0.500	1	11/19/2020 11:03	WG1578897
sec-Butylbenzene	U		0.101	0.500	1	11/19/2020 11:03	WG1578897
tert-Butylbenzene	U		0.0620	0.200	1	11/19/2020 11:03	WG1578897
Carbon tetrachloride	U	~~J4~~	0.0432	0.200	1	11/19/2020 11:03	WG1578897
Chlorobenzene	U		0.0229	0.100	1	11/19/2020 11:03	WG1578897
Chlorodibromomethane	U		0.0180	0.100	1	11/19/2020 11:03	WG1578897
Chloroethane	U	~~J4~~	0.0432	0.200	1	11/19/2020 11:03	WG1578897
Chloroform	U		0.0166	0.100	1	11/19/2020 11:03	WG1578897
Chloromethane	U		0.0556	0.500	1	11/19/2020 11:03	WG1578897
2-Chlorotoluene	U		0.0368	0.100	1	11/19/2020 11:03	WG1578897
4-Chlorotoluene	U		0.0452	0.200	1	11/19/2020 11:03	WG1578897
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	11/19/2020 11:03	WG1578897
1,2-Dibromoethane	U		0.0210	0.100	1	11/19/2020 11:03	WG1578897
Dibromomethane	U		0.0400	0.200	1	11/19/2020 11:03	WG1578897
1,2-Dichlorobenzene	U		0.0580	0.200	1	11/19/2020 11:03	WG1578897

JC 12/8/2020

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l		Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,3-Dichlorobenzene	U			0.0680	0.200	1	11/19/2020 11:03	WG1578897
1,4-Dichlorobenzene	U			0.0788	0.200	1	11/19/2020 11:03	WG1578897
Dichlorodifluoromethane	U			0.0327	0.100	1	11/19/2020 11:03	WG1578897
1,1-Dichloroethane	U			0.0230	0.100	1	11/19/2020 11:03	WG1578897
1,2-Dichloroethane	U			0.0190	0.100	1	11/19/2020 11:03	WG1578897
1,1-Dichloroethene	U			0.0200	0.100	1	11/19/2020 11:03	WG1578897
cis-1,2-Dichloroethene	U			0.0276	0.100	1	11/19/2020 11:03	WG1578897
trans-1,2-Dichloroethene	U			0.0572	0.200	1	11/19/2020 11:03	WG1578897
1,2-Dichloropropane	U			0.0508	0.200	1	11/19/2020 11:03	WG1578897
1,1-Dichloropropene	U			0.0280	0.100	1	11/19/2020 11:03	WG1578897
1,3-Dichloropropane	U			0.0700	0.200	1	11/19/2020 11:03	WG1578897
cis-1,3-Dichloropropene	U			0.0271	0.100	1	11/19/2020 11:03	WG1578897
trans-1,3-Dichloropropene	U			0.0612	0.200	1	11/19/2020 11:03	WG1578897
2,2-Dichloropropane	U			0.0317	0.100	1	11/19/2020 11:03	WG1578897
Di-isopropyl ether	U			0.0140	0.0400	1	11/19/2020 11:03	WG1578897
Ethylbenzene	U			0.0212	0.100	1	11/19/2020 11:03	WG1578897
Hexachloro-1,3-butadiene	U			0.508	1.00	1	11/19/2020 11:03	WG1578897
Isopropylbenzene	U			0.0345	0.100	1	11/19/2020 11:03	WG1578897
p-Isopropyltoluene	U			0.0932	0.200	1	11/19/2020 11:03	WG1578897
2-Butanone (MEK)	U			0.500	1.00	1	11/19/2020 11:03	WG1578897
Methylene Chloride	U			0.265	1.00	1	11/19/2020 11:03	WG1578897
4-Methyl-2-pentanone (MIBK)	U	UJ	C3	0.400	1.00	1	11/19/2020 11:03	WG1578897
Methyl tert-butyl ether	U			0.0118	0.0400	1	11/19/2020 11:03	WG1578897
Naphthalene	U			0.124	0.500	1	11/19/2020 11:03	WG1578897
n-Propylbenzene	U			0.0472	0.200	1	11/19/2020 11:03	WG1578897
Styrene	U			0.109	0.500	1	11/19/2020 11:03	WG1578897
1,1,1,2-Tetrachloroethane	U			0.0200	0.100	1	11/19/2020 11:03	WG1578897
1,1,2,2-Tetrachloroethane	U			0.0156	0.100	1	11/19/2020 11:03	WG1578897
1,1,2-Trichlorotrifluoroethane	U			0.0270	0.100	1	11/19/2020 11:03	WG1578897
Tetrachloroethene	U			0.0280	0.100	1	11/19/2020 11:03	WG1578897
Toluene	0.415	J-	C3	0.0500	0.200	1	11/19/2020 11:03	WG1578897
1,2,3-Trichlorobenzene	U			0.0250	0.500	1	11/19/2020 11:03	WG1578897
1,2,4-Trichlorobenzene	U			0.193	0.500	1	11/19/2020 11:03	WG1578897
1,1,1-Trichloroethane	U			0.0110	0.100	1	11/19/2020 11:03	WG1578897
1,1,2-Trichloroethane	U			0.0353	0.100	1	11/19/2020 11:03	WG1578897
Trichloroethene	U			0.0160	0.0400	1	11/19/2020 11:03	WG1578897
Trichlorofluoromethane	U			0.0200	0.100	1	11/19/2020 11:03	WG1578897
1,2,3-Trichloropropane	U			0.204	0.500	1	11/19/2020 11:03	WG1578897
1,2,4-Trimethylbenzene	U			0.0464	0.200	1	11/19/2020 11:03	WG1578897
1,2,3-Trimethylbenzene	U			0.0460	0.200	1	11/19/2020 11:03	WG1578897
1,3,5-Trimethylbenzene	U			0.0432	0.200	1	11/19/2020 11:03	WG1578897
Vinyl chloride	U		~~J4~~	0.0273	0.100	1	11/19/2020 11:03	WG1578897
Xylenes, Total	0.233	J	J	0.191	0.260	1	11/19/2020 11:03	WG1578897
Ethyl Ether	U		~~J4~~	0.0170	0.100	1	11/19/2020 11:03	WG1578897
Tetrahydrofuran	U			0.0900	0.500	1	11/19/2020 11:03	WG1578897
Iodomethane	U			0.242	0.500	1	11/19/2020 11:03	WG1578897
Allyl chloride	U			0.580	1.00	1	11/19/2020 11:03	WG1578897
Trans-1,4-Dichloro-2-butene	U	UJ	C3	0.0560	0.200	1	11/19/2020 11:03	WG1578897
(S) Toluene-d8	*144*		J1		*75.0-131*		*11/19/2020 11:03*	WG1578897
(S) 4-Bromofluorobenzene	*126*				*67.0-138*		*11/19/2020 11:03*	WG1578897
(S) 1,2-Dichloroethane-d4	*108*				*70.0-130*		*11/19/2020 11:03*	WG1578897

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Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l		Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	0.578	U	~~B C3 J~~	0.548	1.00	1	11/19/2020 11:23	WG1578897
Acrylonitrile	U			0.0760	0.500	1	11/19/2020 11:23	WG1578897
Benzene	U			0.0160	0.0400	1	11/19/2020 11:23	WG1578897
Bromobenzene	U			0.0420	0.500	1	11/19/2020 11:23	WG1578897
Bromodichloromethane	U			0.0315	0.100	1	11/19/2020 11:23	WG1578897
Bromoform	U			0.239	1.00	1	11/19/2020 11:23	WG1578897
Bromomethane	U			0.148	0.500	1	11/19/2020 11:23	WG1578897
n-Butylbenzene	U			0.153	0.500	1	11/19/2020 11:23	WG1578897
sec-Butylbenzene	U			0.101	0.500	1	11/19/2020 11:23	WG1578897
tert-Butylbenzene	U			0.0620	0.200	1	11/19/2020 11:23	WG1578897
Carbon tetrachloride	U		~~J4~~	0.0432	0.200	1	11/19/2020 11:23	WG1578897
Chlorobenzene	U			0.0229	0.100	1	11/19/2020 11:23	WG1578897
Chlorodibromomethane	U			0.0180	0.100	1	11/19/2020 11:23	WG1578897
Chloroethane	U		~~J4~~	0.0432	0.200	1	11/19/2020 11:23	WG1578897
Chloroform	U			0.0166	0.100	1	11/19/2020 11:23	WG1578897
Chloromethane	U			0.0556	0.500	1	11/19/2020 11:23	WG1578897
2-Chlorotoluene	U			0.0368	0.100	1	11/19/2020 11:23	WG1578897
4-Chlorotoluene	U			0.0452	0.200	1	11/19/2020 11:23	WG1578897
1,2-Dibromo-3-Chloropropane	U			0.204	1.00	1	11/19/2020 11:23	WG1578897
1,2-Dibromoethane	U			0.0210	0.100	1	11/19/2020 11:23	WG1578897
Dibromomethane	U			0.0400	0.200	1	11/19/2020 11:23	WG1578897
1,2-Dichlorobenzene	U			0.0580	0.200	1	11/19/2020 11:23	WG1578897
1,3-Dichlorobenzene	U			0.0680	0.200	1	11/19/2020 11:23	WG1578897
1,4-Dichlorobenzene	U			0.0788	0.200	1	11/19/2020 11:23	WG1578897
Dichlorodifluoromethane	U			0.0327	0.100	1	11/19/2020 11:23	WG1578897
1,1-Dichloroethane	U			0.0230	0.100	1	11/19/2020 11:23	WG1578897
1,2-Dichloroethane	U			0.0190	0.100	1	11/19/2020 11:23	WG1578897
1,1-Dichloroethene	U			0.0200	0.100	1	11/19/2020 11:23	WG1578897
cis-1,2-Dichloroethene	U			0.0276	0.100	1	11/19/2020 11:23	WG1578897
trans-1,2-Dichloroethene	U			0.0572	0.200	1	11/19/2020 11:23	WG1578897
1,2-Dichloropropane	U			0.0508	0.200	1	11/19/2020 11:23	WG1578897
1,1-Dichloropropene	U			0.0280	0.100	1	11/19/2020 11:23	WG1578897
1,3-Dichloropropane	U			0.0700	0.200	1	11/19/2020 11:23	WG1578897
cis-1,3-Dichloropropene	U			0.0271	0.100	1	11/19/2020 11:23	WG1578897
trans-1,3-Dichloropropene	U			0.0612	0.200	1	11/19/2020 11:23	WG1578897
2,2-Dichloropropane	U			0.0317	0.100	1	11/19/2020 11:23	WG1578897
Di-isopropyl ether	U			0.0140	0.0400	1	11/19/2020 11:23	WG1578897
Ethylbenzene	U			0.0212	0.100	1	11/19/2020 11:23	WG1578897
Hexachloro-1,3-butadiene	U			0.508	1.00	1	11/19/2020 11:23	WG1578897
Isopropylbenzene	U			0.0345	0.100	1	11/19/2020 11:23	WG1578897
p-Isopropyltoluene	U			0.0932	0.200	1	11/19/2020 11:23	WG1578897
2-Butanone (MEK)	U			0.500	1.00	1	11/19/2020 11:23	WG1578897
Methylene Chloride	U			0.265	1.00	1	11/19/2020 11:23	WG1578897
4-Methyl-2-pentanone (MIBK)	U	UJ	C3	0.400	1.00	1	11/19/2020 11:23	WG1578897
Methyl tert-butyl ether	U			0.0118	0.0400	1	11/19/2020 11:23	WG1578897
Naphthalene	U			0.124	0.500	1	11/19/2020 11:23	WG1578897
n-Propylbenzene	U			0.0472	0.200	1	11/19/2020 11:23	WG1578897
Styrene	U			0.109	0.500	1	11/19/2020 11:23	WG1578897
1,1,1,2-Tetrachloroethane	U			0.0200	0.100	1	11/19/2020 11:23	WG1578897
1,1,2,2-Tetrachloroethane	U			0.0156	0.100	1	11/19/2020 11:23	WG1578897
1,1,2-Trichlorotrifluoroethane	U			0.0270	0.100	1	11/19/2020 11:23	WG1578897
Tetrachloroethene	U			0.0280	0.100	1	11/19/2020 11:23	WG1578897
Toluene	0.435	J-	C3	0.0500	0.200	1	11/19/2020 11:23	WG1578897
1,2,3-Trichlorobenzene	U			0.0250	0.500	1	11/19/2020 11:23	WG1578897
1,2,4-Trichlorobenzene	U			0.193	0.500	1	11/19/2020 11:23	WG1578897
1,1,1-Trichloroethane	U			0.0110	0.100	1	11/19/2020 11:23	WG1578897

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Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,1,2-Trichloroethane	U		0.0353	0.100	1	11/19/2020 11:23	WG1578897
Trichloroethene	U		0.0160	0.0400	1	11/19/2020 11:23	WG1578897
Trichlorofluoromethane	U		0.0200	0.100	1	11/19/2020 11:23	WG1578897
1,2,3-Trichloropropane	U		0.204	0.500	1	11/19/2020 11:23	WG1578897
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	11/19/2020 11:23	WG1578897
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	11/19/2020 11:23	WG1578897
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	11/19/2020 11:23	WG1578897
Vinyl chloride	U	~~J4~~	0.0273	0.100	1	11/19/2020 11:23	WG1578897
Xylenes, Total	0.316		0.191	0.260	1	11/19/2020 11:23	WG1578897
Ethyl Ether	0.300 J+	C5 ~~J4~~	0.0170	0.100	1	11/19/2020 11:23	WG1578897
Tetrahydrofuran	U		0.0900	0.500	1	11/19/2020 11:23	WG1578897
Iodomethane	U		0.242	0.500	1	11/19/2020 11:23	WG1578897
Allyl chloride	U		0.580	1.00	1	11/19/2020 11:23	WG1578897
Trans-1,4-Dichloro-2-butene	U UJ	C3	0.0560	0.200	1	11/19/2020 11:23	WG1578897
(S) Toluene-d8	*125*			*75.0-131*		*11/19/2020 11:23*	WG1578897
(S) 4-Bromofluorobenzene	*112*			*67.0-138*		*11/19/2020 11:23*	WG1578897
(S) 1,2-Dichloroethane-d4	*112*			*70.0-130*		*11/19/2020 11:23*	WG1578897

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

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Wet Chemistry by Method 9056A

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Sulfate	81200		594	5000	1	11/23/2020 21:44	WG1580294

Wet Chemistry by Method 9060A

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
TOC (Total Organic Carbon)	1610		102	1000	1	11/22/2020 02:42	WG1580390

Metals (ICPMS) by Method 6020B

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Iron	9180		28.1	100	1	11/19/2020 17:51	WG1577486
Manganese	438		0.704	5.00	1	11/19/2020 17:51	WG1577486

Volatile Organic Compounds (GC) by Method RSK175

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Methane	267		0.287	0.678	1	11/19/2020 12:01	WG1578180
Ethane	22.3		0.296	1.29	1	11/19/2020 12:01	WG1578180
Ethene	U		0.422	1.27	1	11/19/2020 12:01	WG1578180

Volatile Organic Compounds (GC/MS) by Method 8260D

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Acetone	U UJ	C3	0.548	1.00	1	11/19/2020 11:44	WG1578897
Acrylonitrile	U		0.0760	0.500	1	11/19/2020 11:44	WG1578897
Benzene	U		0.0160	0.0400	1	11/19/2020 11:44	WG1578897
Bromobenzene	U		0.0420	0.500	1	11/19/2020 11:44	WG1578897
Bromodichloromethane	U		0.0315	0.100	1	11/19/2020 11:44	WG1578897
Bromoform	U		0.239	1.00	1	11/19/2020 11:44	WG1578897
Bromomethane	U		0.148	0.500	1	11/19/2020 11:44	WG1578897
n-Butylbenzene	U		0.153	0.500	1	11/19/2020 11:44	WG1578897
sec-Butylbenzene	U		0.101	0.500	1	11/19/2020 11:44	WG1578897
tert-Butylbenzene	U		0.0620	0.200	1	11/19/2020 11:44	WG1578897
Carbon tetrachloride	U	~~J4~~	0.0432	0.200	1	11/19/2020 11:44	WG1578897
Chlorobenzene	U		0.0229	0.100	1	11/19/2020 11:44	WG1578897
Chlorodibromomethane	U		0.0180	0.100	1	11/19/2020 11:44	WG1578897
Chloroethane	U	~~J4~~	0.0432	0.200	1	11/19/2020 11:44	WG1578897
Chloroform	U		0.0166	0.100	1	11/19/2020 11:44	WG1578897
Chloromethane	U		0.0556	0.500	1	11/19/2020 11:44	WG1578897
2-Chlorotoluene	U		0.0368	0.100	1	11/19/2020 11:44	WG1578897
4-Chlorotoluene	U		0.0452	0.200	1	11/19/2020 11:44	WG1578897
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	11/19/2020 11:44	WG1578897
1,2-Dibromoethane	U		0.0210	0.100	1	11/19/2020 11:44	WG1578897
Dibromomethane	U		0.0400	0.200	1	11/19/2020 11:44	WG1578897
1,2-Dichlorobenzene	U		0.0580	0.200	1	11/19/2020 11:44	WG1578897
1,3-Dichlorobenzene	U		0.0680	0.200	1	11/19/2020 11:44	WG1578897
1,4-Dichlorobenzene	U		0.0788	0.200	1	11/19/2020 11:44	WG1578897
Dichlorodifluoromethane	U		0.0327	0.100	1	11/19/2020 11:44	WG1578897
1,1-Dichloroethane	U		0.0230	0.100	1	11/19/2020 11:44	WG1578897
1,2-Dichloroethane	U		0.0190	0.100	1	11/19/2020 11:44	WG1578897
1,1-Dichloroethene	0.219		0.0200	0.100	1	11/19/2020 11:44	WG1578897
cis-1,2-Dichloroethene	58.8		0.0276	0.100	1	11/19/2020 11:44	WG1578897
trans-1,2-Dichloroethene	0.135	J	0.0572	0.200	1	11/19/2020 11:44	WG1578897
1,2-Dichloropropane	U		0.0508	0.200	1	11/19/2020 11:44	WG1578897

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Volatile Organic Compounds (GC/MS) by Method 8260D

	Result		Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l			ug/l	ug/l		date / time	
1,1-Dichloropropene	U			0.0280	0.100	1	11/19/2020 11:44	WG1578897
1,3-Dichloropropane	U			0.0700	0.200	1	11/19/2020 11:44	WG1578897
cis-1,3-Dichloropropene	U			0.0271	0.100	1	11/19/2020 11:44	WG1578897
trans-1,3-Dichloropropene	U			0.0612	0.200	1	11/19/2020 11:44	WG1578897
2,2-Dichloropropane	U			0.0317	0.100	1	11/19/2020 11:44	WG1578897
Di-isopropyl ether	U			0.0140	0.0400	1	11/19/2020 11:44	WG1578897
Ethylbenzene	U			0.0212	0.100	1	11/19/2020 11:44	WG1578897
Hexachloro-1,3-butadiene	U			0.508	1.00	1	11/19/2020 11:44	WG1578897
Isopropylbenzene	U			0.0345	0.100	1	11/19/2020 11:44	WG1578897
p-Isopropyltoluene	U			0.0932	0.200	1	11/19/2020 11:44	WG1578897
2-Butanone (MEK)	U			0.500	1.00	1	11/19/2020 11:44	WG1578897
Methylene Chloride	U			0.265	1.00	1	11/19/2020 11:44	WG1578897
4-Methyl-2-pentanone (MIBK)	U	UJ	C3	0.400	1.00	1	11/19/2020 11:44	WG1578897
Methyl tert-butyl ether	U			0.0118	0.0400	1	11/19/2020 11:44	WG1578897
Naphthalene	U			0.124	0.500	1	11/19/2020 11:44	WG1578897
n-Propylbenzene	U			0.0472	0.200	1	11/19/2020 11:44	WG1578897
Styrene	U			0.109	0.500	1	11/19/2020 11:44	WG1578897
1,1,1,2-Tetrachloroethane	U			0.0200	0.100	1	11/19/2020 11:44	WG1578897
1,1,2,2-Tetrachloroethane	U			0.0156	0.100	1	11/19/2020 11:44	WG1578897
1,1,2-Trichlorotrifluoroethane	U			0.0270	0.100	1	11/19/2020 11:44	WG1578897
Tetrachloroethene	6.43			0.0280	0.100	1	11/19/2020 11:44	WG1578897
Toluene	0.136	J	C3 J	0.0500	0.200	1	11/19/2020 11:44	WG1578897
1,2,3-Trichlorobenzene	U			0.0250	0.500	1	11/19/2020 11:44	WG1578897
1,2,4-Trichlorobenzene	U			0.193	0.500	1	11/19/2020 11:44	WG1578897
1,1,1-Trichloroethane	U			0.0110	0.100	1	11/19/2020 11:44	WG1578897
1,1,2-Trichloroethane	U			0.0353	0.100	1	11/19/2020 11:44	WG1578897
Trichloroethene	22.3			0.0160	0.0400	1	11/19/2020 11:44	WG1578897
Trichlorofluoromethane	U			0.0200	0.100	1	11/19/2020 11:44	WG1578897
1,2,3-Trichloropropane	U			0.204	0.500	1	11/19/2020 11:44	WG1578897
1,2,4-Trimethylbenzene	U			0.0464	0.200	1	11/19/2020 11:44	WG1578897
1,2,3-Trimethylbenzene	U			0.0460	0.200	1	11/19/2020 11:44	WG1578897
1,3,5-Trimethylbenzene	U			0.0432	0.200	1	11/19/2020 11:44	WG1578897
Vinyl chloride	8.49	J+	C5 ~~J4~~	0.0273	0.100	1	11/19/2020 11:44	WG1578897
Xylenes, Total	U			0.191	0.260	1	11/19/2020 11:44	WG1578897
Ethyl Ether	0.0809	J	J ~~J4~~	0.0170	0.100	1	11/19/2020 11:44	WG1578897
Tetrahydrofuran	U			0.0900	0.500	1	11/19/2020 11:44	WG1578897
Iodomethane	U			0.242	0.500	1	11/19/2020 11:44	WG1578897
Allyl chloride	U			0.580	1.00	1	11/19/2020 11:44	WG1578897
Trans-1,4-Dichloro-2-butene	U	UJ	C3	0.0560	0.200	1	11/19/2020 11:44	WG1578897
(S) Toluene-d8	*107*				*75.0-131*		*11/19/2020 11:44*	WG1578897
(S) 4-Bromofluorobenzene	*134*				*67.0-138*		*11/19/2020 11:44*	WG1578897
(S) 1,2-Dichloroethane-d4	*110*				*70.0-130*		*11/19/2020 11:44*	WG1578897

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Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Sulfate	12600		594	5000	1	11/23/2020 22:16	WG1580294

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	2900		102	1000	1	11/22/2020 03:12	WG1580390

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	7940		28.1	100	1	11/19/2020 17:54	WG1577486
Manganese	3270		0.704	5.00	1	11/19/2020 17:54	WG1577486

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	2900		0.287	0.678	1	11/19/2020 12:04	WG1578180
Ethane	27.2		0.296	1.29	1	11/19/2020 12:04	WG1578180
Ethene	U		0.422	1.27	1	11/19/2020 12:04	WG1578180

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	2.27 J	~~B~~ C3	0.548	1.00	1	11/19/2020 12:04	WG1578897
Acrylonitrile	U		0.0760	0.500	1	11/19/2020 12:04	WG1578897
Benzene	U		0.0160	0.0400	1	11/19/2020 12:04	WG1578897
Bromobenzene	U		0.0420	0.500	1	11/19/2020 12:04	WG1578897
Bromodichloromethane	U		0.0315	0.100	1	11/19/2020 12:04	WG1578897
Bromoform	U		0.239	1.00	1	11/19/2020 12:04	WG1578897
Bromomethane	U		0.148	0.500	1	11/19/2020 12:04	WG1578897
n-Butylbenzene	U		0.153	0.500	1	11/19/2020 12:04	WG1578897
sec-Butylbenzene	U		0.101	0.500	1	11/19/2020 12:04	WG1578897
tert-Butylbenzene	U		0.0620	0.200	1	11/19/2020 12:04	WG1578897
Carbon tetrachloride	U	~~J4~~	0.0432	0.200	1	11/19/2020 12:04	WG1578897
Chlorobenzene	U		0.0229	0.100	1	11/19/2020 12:04	WG1578897
Chlorodibromomethane	U		0.0180	0.100	1	11/19/2020 12:04	WG1578897
Chloroethane	U	~~J4~~	0.0432	0.200	1	11/19/2020 12:04	WG1578897
Chloroform	U		0.0166	0.100	1	11/19/2020 12:04	WG1578897
Chloromethane	U		0.0556	0.500	1	11/19/2020 12:04	WG1578897
2-Chlorotoluene	U		0.0368	0.100	1	11/19/2020 12:04	WG1578897
4-Chlorotoluene	U		0.0452	0.200	1	11/19/2020 12:04	WG1578897
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	11/19/2020 12:04	WG1578897
1,2-Dibromoethane	U		0.0210	0.100	1	11/19/2020 12:04	WG1578897
Dibromomethane	U		0.0400	0.200	1	11/19/2020 12:04	WG1578897
1,2-Dichlorobenzene	U		0.0580	0.200	1	11/19/2020 12:04	WG1578897
1,3-Dichlorobenzene	U		0.0680	0.200	1	11/19/2020 12:04	WG1578897
1,4-Dichlorobenzene	U		0.0788	0.200	1	11/19/2020 12:04	WG1578897
Dichlorodifluoromethane	U		0.0327	0.100	1	11/19/2020 12:04	WG1578897
1,1-Dichloroethane	U		0.0230	0.100	1	11/19/2020 12:04	WG1578897
1,2-Dichloroethane	U		0.0190	0.100	1	11/19/2020 12:04	WG1578897
1,1-Dichloroethene	U		0.0200	0.100	1	11/19/2020 12:04	WG1578897
cis-1,2-Dichloroethene	0.561 J		0.0276	0.100	1	11/19/2020 12:04	WG1578897
trans-1,2-Dichloroethene	U		0.0572	0.200	1	11/19/2020 12:04	WG1578897
1,2-Dichloropropane	U		0.0508	0.200	1	11/19/2020 12:04	WG1578897

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Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,1-Dichloropropene	U		0.0280	0.100	1	11/19/2020 12:04	WG1578897
1,3-Dichloropropane	U		0.0700	0.200	1	11/19/2020 12:04	WG1578897
cis-1,3-Dichloropropene	U		0.0271	0.100	1	11/19/2020 12:04	WG1578897
trans-1,3-Dichloropropene	U		0.0612	0.200	1	11/19/2020 12:04	WG1578897
2,2-Dichloropropane	U		0.0317	0.100	1	11/19/2020 12:04	WG1578897
Di-isopropyl ether	U		0.0140	0.0400	1	11/19/2020 12:04	WG1578897
Ethylbenzene	U		0.0212	0.100	1	11/19/2020 12:04	WG1578897
Hexachloro-1,3-butadiene	U		0.508	1.00	1	11/19/2020 12:04	WG1578897
Isopropylbenzene	U		0.0345	0.100	1	11/19/2020 12:04	WG1578897
p-Isopropyltoluene	U		0.0932	0.200	1	11/19/2020 12:04	WG1578897
2-Butanone (MEK)	U		0.500	1.00	1	11/19/2020 12:04	WG1578897
Methylene Chloride	U		0.265	1.00	1	11/19/2020 12:04	WG1578897
4-Methyl-2-pentanone (MIBK)	U UJ	C3	0.400	1.00	1	11/19/2020 12:04	WG1578897
Methyl tert-butyl ether	U		0.0118	0.0400	1	11/19/2020 12:04	WG1578897
Naphthalene	U		0.124	0.500	1	11/19/2020 12:04	WG1578897
n-Propylbenzene	U		0.0472	0.200	1	11/19/2020 12:04	WG1578897
Styrene	U		0.109	0.500	1	11/19/2020 12:04	WG1578897
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	11/19/2020 12:04	WG1578897
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	11/19/2020 12:04	WG1578897
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	11/19/2020 12:04	WG1578897
Tetrachloroethene	U		0.0280	0.100	1	11/19/2020 12:04	WG1578897
Toluene	0.457 J	C3	0.0500	0.200	1	11/19/2020 12:04	WG1578897
1,2,3-Trichlorobenzene	U		0.0250	0.500	1	11/19/2020 12:04	WG1578897
1,2,4-Trichlorobenzene	U		0.193	0.500	1	11/19/2020 12:04	WG1578897
1,1,1-Trichloroethane	U		0.0110	0.100	1	11/19/2020 12:04	WG1578897
1,1,2-Trichloroethane	U		0.0353	0.100	1	11/19/2020 12:04	WG1578897
Trichloroethene	U		0.0160	0.0400	1	11/19/2020 12:04	WG1578897
Trichlorofluoromethane	U		0.0200	0.100	1	11/19/2020 12:04	WG1578897
1,2,3-Trichloropropane	U		0.204	0.500	1	11/19/2020 12:04	WG1578897
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	11/19/2020 12:04	WG1578897
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	11/19/2020 12:04	WG1578897
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	11/19/2020 12:04	WG1578897
Vinyl chloride	0.214 J	C5 ~~J4~~	0.0273	0.100	1	11/19/2020 12:04	WG1578897
Xylenes, Total	U		0.191	0.260	1	11/19/2020 12:04	WG1578897
Ethyl Ether	U	~~J4~~	0.0170	0.100	1	11/19/2020 12:04	WG1578897
Tetrahydrofuran	U		0.0900	0.500	1	11/19/2020 12:04	WG1578897
Iodomethane	U		0.242	0.500	1	11/19/2020 12:04	WG1578897
Allyl chloride	U		0.580	1.00	1	11/19/2020 12:04	WG1578897
Trans-1,4-Dichloro-2-butene	U UJ	C3	0.0560	0.200	1	11/19/2020 12:04	WG1578897
(S) Toluene-d8	*147*	J1		*75.0-131*		*11/19/2020 12:04*	WG1578897
(S) 4-Bromofluorobenzene	*110*			*67.0-138*		*11/19/2020 12:04*	WG1578897
(S) 1,2-Dichloroethane-d4	*111*			*70.0-130*		*11/19/2020 12:04*	WG1578897

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Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Sulfate	60000		2970	25000	5	11/23/2020 22:48	WG1580294

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	1020		102	1000	1	11/22/2020 03:25	WG1580390

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	4270		28.1	100	1	11/19/2020 17:58	WG1577486
Manganese	341		0.704	5.00	1	11/19/2020 17:58	WG1577486

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	544		0.287	0.678	1	11/19/2020 12:06	WG1578180
Ethane	U		0.296	1.29	1	11/19/2020 12:06	WG1578180
Ethene	U		0.422	1.27	1	11/19/2020 12:06	WG1578180

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U UJ	C3	0.548	1.00	1	11/19/2020 12:25	WG1578897
Acrylonitrile	U		0.0760	0.500	1	11/19/2020 12:25	WG1578897
Benzene	U		0.0160	0.0400	1	11/19/2020 12:25	WG1578897
Bromobenzene	U		0.0420	0.500	1	11/19/2020 12:25	WG1578897
Bromodichloromethane	U		0.0315	0.100	1	11/19/2020 12:25	WG1578897
Bromoform	U		0.239	1.00	1	11/19/2020 12:25	WG1578897
Bromomethane	U		0.148	0.500	1	11/19/2020 12:25	WG1578897
n-Butylbenzene	U		0.153	0.500	1	11/19/2020 12:25	WG1578897
sec-Butylbenzene	U		0.101	0.500	1	11/19/2020 12:25	WG1578897
tert-Butylbenzene	U		0.0620	0.200	1	11/19/2020 12:25	WG1578897
Carbon tetrachloride	U	~~J4~~	0.0432	0.200	1	11/19/2020 12:25	WG1578897
Chlorobenzene	U		0.0229	0.100	1	11/19/2020 12:25	WG1578897
Chlorodibromomethane	U		0.0180	0.100	1	11/19/2020 12:25	WG1578897
Chloroethane	U	~~J4~~	0.0432	0.200	1	11/19/2020 12:25	WG1578897
Chloroform	U		0.0166	0.100	1	11/19/2020 12:25	WG1578897
Chloromethane	U		0.0556	0.500	1	11/19/2020 12:25	WG1578897
2-Chlorotoluene	U		0.0368	0.100	1	11/19/2020 12:25	WG1578897
4-Chlorotoluene	U		0.0452	0.200	1	11/19/2020 12:25	WG1578897
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	11/19/2020 12:25	WG1578897
1,2-Dibromoethane	U		0.0210	0.100	1	11/19/2020 12:25	WG1578897
Dibromomethane	U		0.0400	0.200	1	11/19/2020 12:25	WG1578897
1,2-Dichlorobenzene	U		0.0580	0.200	1	11/19/2020 12:25	WG1578897
1,3-Dichlorobenzene	U		0.0680	0.200	1	11/19/2020 12:25	WG1578897
1,4-Dichlorobenzene	U		0.0788	0.200	1	11/19/2020 12:25	WG1578897
Dichlorodifluoromethane	U		0.0327	0.100	1	11/19/2020 12:25	WG1578897
1,1-Dichloroethane	U		0.0230	0.100	1	11/19/2020 12:25	WG1578897
1,2-Dichloroethane	U		0.0190	0.100	1	11/19/2020 12:25	WG1578897
1,1-Dichloroethene	U		0.0200	0.100	1	11/19/2020 12:25	WG1578897
cis-1,2-Dichloroethene	U		0.0276	0.100	1	11/19/2020 12:25	WG1578897
trans-1,2-Dichloroethene	U		0.0572	0.200	1	11/19/2020 12:25	WG1578897
1,2-Dichloropropane	U		0.0508	0.200	1	11/19/2020 12:25	WG1578897

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Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,1-Dichloropropene	U		0.0280	0.100	1	11/19/2020 12:25	WG1578897
1,3-Dichloropropane	U		0.0700	0.200	1	11/19/2020 12:25	WG1578897
cis-1,3-Dichloropropene	U		0.0271	0.100	1	11/19/2020 12:25	WG1578897
trans-1,3-Dichloropropene	U		0.0612	0.200	1	11/19/2020 12:25	WG1578897
2,2-Dichloropropane	U		0.0317	0.100	1	11/19/2020 12:25	WG1578897
Di-isopropyl ether	U		0.0140	0.0400	1	11/19/2020 12:25	WG1578897
Ethylbenzene	U		0.0212	0.100	1	11/19/2020 12:25	WG1578897
Hexachloro-1,3-butadiene	U		0.508	1.00	1	11/19/2020 12:25	WG1578897
Isopropylbenzene	U		0.0345	0.100	1	11/19/2020 12:25	WG1578897
p-Isopropyltoluene	U		0.0932	0.200	1	11/19/2020 12:25	WG1578897
2-Butanone (MEK)	U		0.500	1.00	1	11/19/2020 12:25	WG1578897
Methylene Chloride	U		0.265	1.00	1	11/19/2020 12:25	WG1578897
4-Methyl-2-pentanone (MIBK)	U	UJ C3	0.400	1.00	1	11/19/2020 12:25	WG1578897
Methyl tert-butyl ether	U		0.0118	0.0400	1	11/19/2020 12:25	WG1578897
Naphthalene	U		0.124	0.500	1	11/19/2020 12:25	WG1578897
n-Propylbenzene	U		0.0472	0.200	1	11/19/2020 12:25	WG1578897
Styrene	U		0.109	0.500	1	11/19/2020 12:25	WG1578897
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	11/19/2020 12:25	WG1578897
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	11/19/2020 12:25	WG1578897
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	11/19/2020 12:25	WG1578897
Tetrachloroethene	U		0.0280	0.100	1	11/19/2020 12:25	WG1578897
Toluene	0.310	J C3	0.0500	0.200	1	11/19/2020 12:25	WG1578897
1,2,3-Trichlorobenzene	U		0.0250	0.500	1	11/19/2020 12:25	WG1578897
1,2,4-Trichlorobenzene	U		0.193	0.500	1	11/19/2020 12:25	WG1578897
1,1,1-Trichloroethane	U		0.0110	0.100	1	11/19/2020 12:25	WG1578897
1,1,2-Trichloroethane	U		0.0353	0.100	1	11/19/2020 12:25	WG1578897
Trichloroethene	U		0.0160	0.0400	1	11/19/2020 12:25	WG1578897
Trichlorofluoromethane	U		0.0200	0.100	1	11/19/2020 12:25	WG1578897
1,2,3-Trichloropropane	U		0.204	0.500	1	11/19/2020 12:25	WG1578897
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	11/19/2020 12:25	WG1578897
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	11/19/2020 12:25	WG1578897
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	11/19/2020 12:25	WG1578897
Vinyl chloride	U	~~J4~~	0.0273	0.100	1	11/19/2020 12:25	WG1578897
Xylenes, Total	U		0.191	0.260	1	11/19/2020 12:25	WG1578897
Ethyl Ether	U	~~J4~~	0.0170	0.100	1	11/19/2020 12:25	WG1578897
Tetrahydrofuran	U		0.0900	0.500	1	11/19/2020 12:25	WG1578897
Iodomethane	U		0.242	0.500	1	11/19/2020 12:25	WG1578897
Allyl chloride	U		0.580	1.00	1	11/19/2020 12:25	WG1578897
Trans-1,4-Dichloro-2-butene	U	UJ C3	0.0560	0.200	1	11/19/2020 12:25	WG1578897
(S) Toluene-d8	*99.4*			*75.0-131*		*11/19/2020 12:25*	WG1578897
(S) 4-Bromofluorobenzene	*125*			*67.0-138*		*11/19/2020 12:25*	WG1578897
(S) 1,2-Dichloroethane-d4	*112*			*70.0-130*		*11/19/2020 12:25*	WG1578897

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Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Sulfate	84400		594	5000	1	11/23/2020 23:04	WG1580294

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	1780		102	1000	1	11/23/2020 13:23	WG1581104

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	441		28.1	100	1	11/19/2020 18:21	WG1577486
Manganese	67.3		0.704	5.00	1	11/19/2020 18:21	WG1577486

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	106		0.287	0.678	1	11/19/2020 12:09	WG1578180
Ethane	U		0.296	1.29	1	11/19/2020 12:09	WG1578180
Ethene	U		0.422	1.27	1	11/19/2020 12:09	WG1578180

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U UJ	C3	0.548	1.00	1	11/19/2020 12:45	WG1578897
Acrylonitrile	U		0.0760	0.500	1	11/19/2020 12:45	WG1578897
Benzene	U		0.0160	0.0400	1	11/19/2020 12:45	WG1578897
Bromobenzene	U		0.0420	0.500	1	11/19/2020 12:45	WG1578897
Bromodichloromethane	U		0.0315	0.100	1	11/19/2020 12:45	WG1578897
Bromoform	U		0.239	1.00	1	11/19/2020 12:45	WG1578897
Bromomethane	U		0.148	0.500	1	11/19/2020 12:45	WG1578897
n-Butylbenzene	U		0.153	0.500	1	11/19/2020 12:45	WG1578897
sec-Butylbenzene	U		0.101	0.500	1	11/19/2020 12:45	WG1578897
tert-Butylbenzene	U		0.0620	0.200	1	11/19/2020 12:45	WG1578897
Carbon tetrachloride	U	~~J4~~	0.0432	0.200	1	11/19/2020 12:45	WG1578897
Chlorobenzene	U		0.0229	0.100	1	11/19/2020 12:45	WG1578897
Chlorodibromomethane	U		0.0180	0.100	1	11/19/2020 12:45	WG1578897
Chloroethane	U	~~J4~~	0.0432	0.200	1	11/19/2020 12:45	WG1578897
Chloroform	U		0.0166	0.100	1	11/19/2020 12:45	WG1578897
Chloromethane	U		0.0556	0.500	1	11/19/2020 12:45	WG1578897
2-Chlorotoluene	U		0.0368	0.100	1	11/19/2020 12:45	WG1578897
4-Chlorotoluene	U		0.0452	0.200	1	11/19/2020 12:45	WG1578897
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	11/19/2020 12:45	WG1578897
1,2-Dibromoethane	U		0.0210	0.100	1	11/19/2020 12:45	WG1578897
Dibromomethane	U		0.0400	0.200	1	11/19/2020 12:45	WG1578897
1,2-Dichlorobenzene	U		0.0580	0.200	1	11/19/2020 12:45	WG1578897
1,3-Dichlorobenzene	U		0.0680	0.200	1	11/19/2020 12:45	WG1578897
1,4-Dichlorobenzene	U		0.0788	0.200	1	11/19/2020 12:45	WG1578897
Dichlorodifluoromethane	U		0.0327	0.100	1	11/19/2020 12:45	WG1578897
1,1-Dichloroethane	U		0.0230	0.100	1	11/19/2020 12:45	WG1578897
1,2-Dichloroethane	U		0.0190	0.100	1	11/19/2020 12:45	WG1578897
1,1-Dichloroethene	U		0.0200	0.100	1	11/19/2020 12:45	WG1578897
cis-1,2-Dichloroethene	11.7		0.0276	0.100	1	11/19/2020 12:45	WG1578897
trans-1,2-Dichloroethene	0.108	J	0.0572	0.200	1	11/19/2020 12:45	WG1578897
1,2-Dichloropropane	U		0.0508	0.200	1	11/19/2020 12:45	WG1578897

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Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,1-Dichloropropene	U		0.0280	0.100	1	11/19/2020 12:45	WG1578897
1,3-Dichloropropane	U		0.0700	0.200	1	11/19/2020 12:45	WG1578897
cis-1,3-Dichloropropene	U		0.0271	0.100	1	11/19/2020 12:45	WG1578897
trans-1,3-Dichloropropene	U		0.0612	0.200	1	11/19/2020 12:45	WG1578897
2,2-Dichloropropane	U		0.0317	0.100	1	11/19/2020 12:45	WG1578897
Di-isopropyl ether	U		0.0140	0.0400	1	11/19/2020 12:45	WG1578897
Ethylbenzene	U		0.0212	0.100	1	11/19/2020 12:45	WG1578897
Hexachloro-1,3-butadiene	U		0.508	1.00	1	11/19/2020 12:45	WG1578897
Isopropylbenzene	U		0.0345	0.100	1	11/19/2020 12:45	WG1578897
p-Isopropyltoluene	U		0.0932	0.200	1	11/19/2020 12:45	WG1578897
2-Butanone (MEK)	U		0.500	1.00	1	11/19/2020 12:45	WG1578897
Methylene Chloride	U		0.265	1.00	1	11/19/2020 12:45	WG1578897
4-Methyl-2-pentanone (MIBK)	U	UJ C3	0.400	1.00	1	11/19/2020 12:45	WG1578897
Methyl tert-butyl ether	U		0.0118	0.0400	1	11/19/2020 12:45	WG1578897
Naphthalene	U		0.124	0.500	1	11/19/2020 12:45	WG1578897
n-Propylbenzene	U		0.0472	0.200	1	11/19/2020 12:45	WG1578897
Styrene	U		0.109	0.500	1	11/19/2020 12:45	WG1578897
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	11/19/2020 12:45	WG1578897
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	11/19/2020 12:45	WG1578897
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	11/19/2020 12:45	WG1578897
Tetrachloroethene	119		0.0280	0.100	1	11/19/2020 12:45	WG1578897
Toluene	U	UJ C3	0.0500	0.200	1	11/19/2020 12:45	WG1578897
1,2,3-Trichlorobenzene	U		0.0250	0.500	1	11/19/2020 12:45	WG1578897
1,2,4-Trichlorobenzene	U		0.193	0.500	1	11/19/2020 12:45	WG1578897
1,1,1-Trichloroethane	U		0.0110	0.100	1	11/19/2020 12:45	WG1578897
1,1,2-Trichloroethane	U		0.0353	0.100	1	11/19/2020 12:45	WG1578897
Trichloroethene	26.0		0.0160	0.0400	1	11/19/2020 12:45	WG1578897
Trichlorofluoromethane	U		0.0200	0.100	1	11/19/2020 12:45	WG1578897
1,2,3-Trichloropropane	U		0.204	0.500	1	11/19/2020 12:45	WG1578897
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	11/19/2020 12:45	WG1578897
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	11/19/2020 12:45	WG1578897
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	11/19/2020 12:45	WG1578897
Vinyl chloride	0.190	J_+ C5 ~~J4~~	0.0273	0.100	1	11/19/2020 12:45	WG1578897
Xylenes, Total	U		0.191	0.260	1	11/19/2020 12:45	WG1578897
Ethyl Ether	U	~~J4~~	0.0170	0.100	1	11/19/2020 12:45	WG1578897
Tetrahydrofuran	U		0.0900	0.500	1	11/19/2020 12:45	WG1578897
Iodomethane	U		0.242	0.500	1	11/19/2020 12:45	WG1578897
Allyl chloride	U		0.580	1.00	1	11/19/2020 12:45	WG1578897
Trans-1,4-Dichloro-2-butene	U	UJ C3	0.0560	0.200	1	11/19/2020 12:45	WG1578897
(S) Toluene-d8	*122*			*75.0-131*		*11/19/2020 12:45*	WG1578897
(S) 4-Bromofluorobenzene	*110*			*67.0-138*		*11/19/2020 12:45*	WG1578897
(S) 1,2-Dichloroethane-d4	*108*			*70.0-130*		*11/19/2020 12:45*	WG1578897

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Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Sulfate	118000		2970	25000	5	11/24/2020 11:32	WG1580294

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	9960		102	1000	1	11/23/2020 01:34	WG1580392

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	3360		28.1	100	1	11/19/2020 18:24	WG1577486
Manganese	3230		0.704	5.00	1	11/19/2020 18:24	WG1577486

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	993		0.287	0.678	1	11/19/2020 12:13	WG1578180
Ethane	19.8		0.296	1.29	1	11/19/2020 12:13	WG1578180
Ethene	U		0.422	1.27	1	11/19/2020 12:13	WG1578180

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U UJ	C3	0.548	1.00	1	11/19/2020 13:05	WG1578897
Acrylonitrile	U		0.0760	0.500	1	11/19/2020 13:05	WG1578897
Benzene	0.149		0.0160	0.0400	1	11/19/2020 13:05	WG1578897
Bromobenzene	U		0.0420	0.500	1	11/19/2020 13:05	WG1578897
Bromodichloromethane	U		0.0315	0.100	1	11/19/2020 13:05	WG1578897
Bromoform	U		0.239	1.00	1	11/19/2020 13:05	WG1578897
Bromomethane	U		0.148	0.500	1	11/19/2020 13:05	WG1578897
n-Butylbenzene	U		0.153	0.500	1	11/19/2020 13:05	WG1578897
sec-Butylbenzene	U		0.101	0.500	1	11/19/2020 13:05	WG1578897
tert-Butylbenzene	U		0.0620	0.200	1	11/19/2020 13:05	WG1578897
Carbon tetrachloride	U	~~J4~~	0.0432	0.200	1	11/19/2020 13:05	WG1578897
Chlorobenzene	U		0.0229	0.100	1	11/19/2020 13:05	WG1578897
Chlorodibromomethane	U		0.0180	0.100	1	11/19/2020 13:05	WG1578897
Chloroethane	U	~~J4~~	0.0432	0.200	1	11/19/2020 13:05	WG1578897
Chloroform	U		0.0166	0.100	1	11/19/2020 13:05	WG1578897
Chloromethane	U		0.0556	0.500	1	11/19/2020 13:05	WG1578897
2-Chlorotoluene	U		0.0368	0.100	1	11/19/2020 13:05	WG1578897
4-Chlorotoluene	U		0.0452	0.200	1	11/19/2020 13:05	WG1578897
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	11/19/2020 13:05	WG1578897
1,2-Dibromoethane	U		0.0210	0.100	1	11/19/2020 13:05	WG1578897
Dibromomethane	U		0.0400	0.200	1	11/19/2020 13:05	WG1578897
1,2-Dichlorobenzene	U		0.0580	0.200	1	11/19/2020 13:05	WG1578897
1,3-Dichlorobenzene	U		0.0680	0.200	1	11/19/2020 13:05	WG1578897
1,4-Dichlorobenzene	U		0.0788	0.200	1	11/19/2020 13:05	WG1578897
Dichlorodifluoromethane	U		0.0327	0.100	1	11/19/2020 13:05	WG1578897
1,1-Dichloroethane	0.361		0.0230	0.100	1	11/19/2020 13:05	WG1578897
1,2-Dichloroethane	0.183		0.0190	0.100	1	11/19/2020 13:05	WG1578897
1,1-Dichloroethene	3.10		0.0200	0.100	1	11/19/2020 13:05	WG1578897
cis-1,2-Dichloroethene	850		0.276	1.00	10	11/20/2020 12:47	WG1579283
trans-1,2-Dichloroethene	4.29		0.0572	0.200	1	11/19/2020 13:05	WG1578897
1,2-Dichloropropane	0.331		0.0508	0.200	1	11/19/2020 13:05	WG1578897

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Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,1-Dichloropropene	U		0.0280	0.100	1	11/19/2020 13:05	WG1578897
1,3-Dichloropropane	U		0.0700	0.200	1	11/19/2020 13:05	WG1578897
cis-1,3-Dichloropropene	U		0.0271	0.100	1	11/19/2020 13:05	WG1578897
trans-1,3-Dichloropropene	U		0.0612	0.200	1	11/19/2020 13:05	WG1578897
2,2-Dichloropropane	U		0.0317	0.100	1	11/19/2020 13:05	WG1578897
Di-isopropyl ether	U		0.0140	0.0400	1	11/19/2020 13:05	WG1578897
Ethylbenzene	U		0.0212	0.100	1	11/19/2020 13:05	WG1578897
Hexachloro-1,3-butadiene	U		0.508	1.00	1	11/19/2020 13:05	WG1578897
Isopropylbenzene	U		0.0345	0.100	1	11/19/2020 13:05	WG1578897
p-Isopropyltoluene	U		0.0932	0.200	1	11/19/2020 13:05	WG1578897
2-Butanone (MEK)	U		0.500	1.00	1	11/19/2020 13:05	WG1578897
Methylene Chloride	U		0.265	1.00	1	11/19/2020 13:05	WG1578897
4-Methyl-2-pentanone (MIBK)	U UJ	C3	0.400	1.00	1	11/19/2020 13:05	WG1578897
Methyl tert-butyl ether	U		0.0118	0.0400	1	11/19/2020 13:05	WG1578897
Naphthalene	U		0.124	0.500	1	11/19/2020 13:05	WG1578897
n-Propylbenzene	U		0.0472	0.200	1	11/19/2020 13:05	WG1578897
Styrene	U		0.109	0.500	1	11/19/2020 13:05	WG1578897
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	11/19/2020 13:05	WG1578897
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	11/19/2020 13:05	WG1578897
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	11/19/2020 13:05	WG1578897
Tetrachloroethene	719		0.280	1.00	10	11/20/2020 12:47	WG1579283
Toluene	0.453 J	C3	0.0500	0.200	1	11/19/2020 13:05	WG1578897
1,2,3-Trichlorobenzene	U		0.0250	0.500	1	11/19/2020 13:05	WG1578897
1,2,4-Trichlorobenzene	U		0.193	0.500	1	11/19/2020 13:05	WG1578897
1,1,1-Trichloroethane	U		0.0110	0.100	1	11/19/2020 13:05	WG1578897
1,1,2-Trichloroethane	U		0.0353	0.100	1	11/19/2020 13:05	WG1578897
Trichloroethene	363		0.160	0.400	10	11/20/2020 12:47	WG1579283
Trichlorofluoromethane	U		0.0200	0.100	1	11/19/2020 13:05	WG1578897
1,2,3-Trichloropropane	U		0.204	0.500	1	11/19/2020 13:05	WG1578897
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	11/19/2020 13:05	WG1578897
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	11/19/2020 13:05	WG1578897
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	11/19/2020 13:05	WG1578897
Vinyl chloride	2.14 J+	C5 ~~J4~~	0.0273	0.100	1	11/19/2020 13:05	WG1578897
Xylenes, Total	U		0.191	0.260	1	11/19/2020 13:05	WG1578897
Ethyl Ether	U	~~J4~~	0.0170	0.100	1	11/19/2020 13:05	WG1578897
Tetrahydrofuran	0.872		0.0900	0.500	1	11/19/2020 13:05	WG1578897
Iodomethane	U		0.242	0.500	1	11/19/2020 13:05	WG1578897
Allyl chloride	U		0.580	1.00	1	11/19/2020 13:05	WG1578897
Trans-1,4-Dichloro-2-butene	U UJ	C3	0.0560	0.200	1	11/19/2020 13:05	WG1578897
(S) Toluene-d8	*101*			*75.0-131*		*11/19/2020 13:05*	WG1578897
(S) Toluene-d8	*101*			*75.0-131*		*11/20/2020 12:47*	WG1579283
(S) 4-Bromofluorobenzene	*128*			*67.0-138*		*11/19/2020 13:05*	WG1578897
(S) 4-Bromofluorobenzene	*100*			*67.0-138*		*11/20/2020 12:47*	WG1579283
(S) 1,2-Dichloroethane-d4	*110*			*70.0-130*		*11/19/2020 13:05*	WG1578897
(S) 1,2-Dichloroethane-d4	*94.6*			*70.0-130*		*11/20/2020 12:47*	WG1579283

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Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Sulfate	26700		594	5000	1	11/23/2020 23:35	WG1580294

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	6430		102	1000	1	11/23/2020 02:21	WG1580392

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	11100		28.1	100	1	11/19/2020 18:27	WG1577486
Manganese	2510		0.704	5.00	1	11/19/2020 18:27	WG1577486

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	6170		0.287	0.678	1	11/19/2020 13:20	WG1578180
Ethane	U		0.296	1.29	1	11/19/2020 13:20	WG1578180
Ethene	U		0.422	1.27	1	11/19/2020 13:20	WG1578180

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	0.936 U	~~B~~ C3 J	0.548	1.00	1	11/19/2020 13:25	WG1578897
Acrylonitrile	U		0.0760	0.500	1	11/19/2020 13:25	WG1578897
Benzene	U		0.0160	0.0400	1	11/19/2020 13:25	WG1578897
Bromobenzene	U		0.0420	0.500	1	11/19/2020 13:25	WG1578897
Bromodichloromethane	U		0.0315	0.100	1	11/19/2020 13:25	WG1578897
Bromoform	U		0.239	1.00	1	11/19/2020 13:25	WG1578897
Bromomethane	U		0.148	0.500	1	11/19/2020 13:25	WG1578897
n-Butylbenzene	U		0.153	0.500	1	11/19/2020 13:25	WG1578897
sec-Butylbenzene	U		0.101	0.500	1	11/19/2020 13:25	WG1578897
tert-Butylbenzene	U		0.0620	0.200	1	11/19/2020 13:25	WG1578897
Carbon tetrachloride	U	~~J4~~	0.0432	0.200	1	11/19/2020 13:25	WG1578897
Chlorobenzene	U		0.0229	0.100	1	11/19/2020 13:25	WG1578897
Chlorodibromomethane	U		0.0180	0.100	1	11/19/2020 13:25	WG1578897
Chloroethane	U	~~J4~~	0.0432	0.200	1	11/19/2020 13:25	WG1578897
Chloroform	U		0.0166	0.100	1	11/19/2020 13:25	WG1578897
Chloromethane	U		0.0556	0.500	1	11/19/2020 13:25	WG1578897
2-Chlorotoluene	U		0.0368	0.100	1	11/19/2020 13:25	WG1578897
4-Chlorotoluene	U		0.0452	0.200	1	11/19/2020 13:25	WG1578897
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	11/19/2020 13:25	WG1578897
1,2-Dibromoethane	U		0.0210	0.100	1	11/19/2020 13:25	WG1578897
Dibromomethane	U		0.0400	0.200	1	11/19/2020 13:25	WG1578897
1,2-Dichlorobenzene	U		0.0580	0.200	1	11/19/2020 13:25	WG1578897
1,3-Dichlorobenzene	U		0.0680	0.200	1	11/19/2020 13:25	WG1578897
1,4-Dichlorobenzene	U		0.0788	0.200	1	11/19/2020 13:25	WG1578897
Dichlorodifluoromethane	U		0.0327	0.100	1	11/19/2020 13:25	WG1578897
1,1-Dichloroethane	U		0.0230	0.100	1	11/19/2020 13:25	WG1578897
1,2-Dichloroethane	U		0.0190	0.100	1	11/19/2020 13:25	WG1578897
1,1-Dichloroethene	U		0.0200	0.100	1	11/19/2020 13:25	WG1578897
cis-1,2-Dichloroethene	12.9		0.0276	0.100	1	11/20/2020 11:47	WG1579425
trans-1,2-Dichloroethene	0.0983	J	0.0572	0.200	1	11/19/2020 13:25	WG1578897
1,2-Dichloropropane	U		0.0508	0.200	1	11/19/2020 13:25	WG1578897

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Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,1-Dichloropropene	U		0.0280	0.100	1	11/19/2020 13:25	WG1578897
1,3-Dichloropropane	U		0.0700	0.200	1	11/19/2020 13:25	WG1578897
cis-1,3-Dichloropropene	U		0.0271	0.100	1	11/19/2020 13:25	WG1578897
trans-1,3-Dichloropropene	U		0.0612	0.200	1	11/19/2020 13:25	WG1578897
2,2-Dichloropropane	U		0.0317	0.100	1	11/19/2020 13:25	WG1578897
Di-isopropyl ether	U		0.0140	0.0400	1	11/19/2020 13:25	WG1578897
Ethylbenzene	U		0.0212	0.100	1	11/19/2020 13:25	WG1578897
Hexachloro-1,3-butadiene	U		0.508	1.00	1	11/19/2020 13:25	WG1578897
Isopropylbenzene	U		0.0345	0.100	1	11/19/2020 13:25	WG1578897
p-Isopropyltoluene	U		0.0932	0.200	1	11/19/2020 13:25	WG1578897
2-Butanone (MEK)	U		0.500	1.00	1	11/19/2020 13:25	WG1578897
Methylene Chloride	U		0.265	1.00	1	11/19/2020 13:25	WG1578897
4-Methyl-2-pentanone (MIBK)	U	UJ C3	0.400	1.00	1	11/19/2020 13:25	WG1578897
Methyl tert-butyl ether	U		0.0118	0.0400	1	11/19/2020 13:25	WG1578897
Naphthalene	U		0.124	0.500	1	11/19/2020 13:25	WG1578897
n-Propylbenzene	U		0.0472	0.200	1	11/19/2020 13:25	WG1578897
Styrene	U		0.109	0.500	1	11/19/2020 13:25	WG1578897
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	11/19/2020 13:25	WG1578897
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	11/19/2020 13:25	WG1578897
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	11/19/2020 13:25	WG1578897
Tetrachloroethene	0.420		0.0280	0.100	1	11/20/2020 11:47	WG1579425
Toluene	U	UJ C3	0.0500	0.200	1	11/19/2020 13:25	WG1578897
1,2,3-Trichlorobenzene	U		0.0250	0.500	1	11/19/2020 13:25	WG1578897
1,2,4-Trichlorobenzene	U		0.193	0.500	1	11/19/2020 13:25	WG1578897
1,1,1-Trichloroethane	U		0.0110	0.100	1	11/19/2020 13:25	WG1578897
1,1,2-Trichloroethane	U		0.0353	0.100	1	11/19/2020 13:25	WG1578897
Trichloroethene	2.63		0.0160	0.0400	1	11/20/2020 11:47	WG1579425
Trichlorofluoromethane	U		0.0200	0.100	1	11/19/2020 13:25	WG1578897
1,2,3-Trichloropropane	U		0.204	0.500	1	11/19/2020 13:25	WG1578897
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	11/19/2020 13:25	WG1578897
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	11/19/2020 13:25	WG1578897
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	11/19/2020 13:25	WG1578897
Vinyl chloride	0.212	J+ C5 ~~J4~~	0.0273	0.100	1	11/19/2020 13:25	WG1578897
Xylenes, Total	U		0.191	0.260	1	11/19/2020 13:25	WG1578897
Ethyl Ether	U	~~J4~~	0.0170	0.100	1	11/19/2020 13:25	WG1578897
Tetrahydrofuran	U		0.0900	0.500	1	11/19/2020 13:25	WG1578897
Iodomethane	U		0.242	0.500	1	11/19/2020 13:25	WG1578897
Allyl chloride	U		0.580	1.00	1	11/19/2020 13:25	WG1578897
Trans-1,4-Dichloro-2-butene	U	UJ C3	0.0560	0.200	1	11/19/2020 13:25	WG1578897
(S) Toluene-d8	*97.7*			*75.0-131*		*11/19/2020 13:25*	WG1578897
(S) Toluene-d8	*99.8*			*75.0-131*		*11/20/2020 11:47*	WG1579425
(S) 4-Bromofluorobenzene	*93.8*			*67.0-138*		*11/19/2020 13:25*	WG1578897
(S) 4-Bromofluorobenzene	*98.1*			*67.0-138*		*11/20/2020 11:47*	WG1579425
(S) 1,2-Dichloroethane-d4	*115*			*70.0-130*		*11/19/2020 13:25*	WG1578897
(S) 1,2-Dichloroethane-d4	*95.6*			*70.0-130*		*11/20/2020 11:47*	WG1579425

JC 12/8/2020

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	2.42 J	~~B~~ C3	0.548	1.00	1	11/19/2020 13:46	WG1578897
Acrylonitrile	U		0.0760	0.500	1	11/19/2020 13:46	WG1578897
Benzene	U		0.0160	0.0400	1	11/19/2020 13:46	WG1578897
Bromobenzene	U		0.0420	0.500	1	11/19/2020 13:46	WG1578897
Bromodichloromethane	U		0.0315	0.100	1	11/19/2020 13:46	WG1578897
Bromoform	U		0.239	1.00	1	11/19/2020 13:46	WG1578897
Bromomethane	U		0.148	0.500	1	11/19/2020 13:46	WG1578897
n-Butylbenzene	U		0.153	0.500	1	11/19/2020 13:46	WG1578897
sec-Butylbenzene	U		0.101	0.500	1	11/19/2020 13:46	WG1578897
tert-Butylbenzene	U		0.0620	0.200	1	11/19/2020 13:46	WG1578897
Carbon tetrachloride	U	~~J4~~	0.0432	0.200	1	11/19/2020 13:46	WG1578897
Chlorobenzene	U		0.0229	0.100	1	11/19/2020 13:46	WG1578897
Chlorodibromomethane	U		0.0180	0.100	1	11/19/2020 13:46	WG1578897
Chloroethane	U	~~J4~~	0.0432	0.200	1	11/19/2020 13:46	WG1578897
Chloroform	U		0.0166	0.100	1	11/19/2020 13:46	WG1578897
Chloromethane	U		0.0556	0.500	1	11/19/2020 13:46	WG1578897
2-Chlorotoluene	U		0.0368	0.100	1	11/19/2020 13:46	WG1578897
4-Chlorotoluene	U		0.0452	0.200	1	11/19/2020 13:46	WG1578897
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	11/19/2020 13:46	WG1578897
1,2-Dibromoethane	U		0.0210	0.100	1	11/19/2020 13:46	WG1578897
Dibromomethane	U		0.0400	0.200	1	11/19/2020 13:46	WG1578897
1,2-Dichlorobenzene	U		0.0580	0.200	1	11/19/2020 13:46	WG1578897
1,3-Dichlorobenzene	U		0.0680	0.200	1	11/19/2020 13:46	WG1578897
1,4-Dichlorobenzene	U		0.0788	0.200	1	11/19/2020 13:46	WG1578897
Dichlorodifluoromethane	U		0.0327	0.100	1	11/19/2020 13:46	WG1578897
1,1-Dichloroethane	U		0.0230	0.100	1	11/19/2020 13:46	WG1578897
1,2-Dichloroethane	U		0.0190	0.100	1	11/19/2020 13:46	WG1578897
1,1-Dichloroethene	U		0.0200	0.100	1	11/19/2020 13:46	WG1578897
cis-1,2-Dichloroethene	0.0820	J	0.0276	0.100	1	11/20/2020 12:07	WG1579425
trans-1,2-Dichloroethene	U		0.0572	0.200	1	11/19/2020 13:46	WG1578897
1,2-Dichloropropane	U		0.0508	0.200	1	11/19/2020 13:46	WG1578897
1,1-Dichloropropene	U		0.0280	0.100	1	11/19/2020 13:46	WG1578897
1,3-Dichloropropane	U		0.0700	0.200	1	11/19/2020 13:46	WG1578897
cis-1,3-Dichloropropene	U		0.0271	0.100	1	11/19/2020 13:46	WG1578897
trans-1,3-Dichloropropene	U		0.0612	0.200	1	11/19/2020 13:46	WG1578897
2,2-Dichloropropane	U		0.0317	0.100	1	11/19/2020 13:46	WG1578897
Di-isopropyl ether	U		0.0140	0.0400	1	11/19/2020 13:46	WG1578897
Ethylbenzene	U		0.0212	0.100	1	11/19/2020 13:46	WG1578897
Hexachloro-1,3-butadiene	U		0.508	1.00	1	11/19/2020 13:46	WG1578897
Isopropylbenzene	U		0.0345	0.100	1	11/19/2020 13:46	WG1578897
p-Isopropyltoluene	U		0.0932	0.200	1	11/19/2020 13:46	WG1578897
2-Butanone (MEK)	0.563	J	0.500	1.00	1	11/19/2020 13:46	WG1578897
Methylene Chloride	U		0.265	1.00	1	11/19/2020 13:46	WG1578897
4-Methyl-2-pentanone (MIBK)	U UJ	C3	0.400	1.00	1	11/19/2020 13:46	WG1578897
Methyl tert-butyl ether	U		0.0118	0.0400	1	11/19/2020 13:46	WG1578897
Naphthalene	U		0.124	0.500	1	11/19/2020 13:46	WG1578897
n-Propylbenzene	U		0.0472	0.200	1	11/19/2020 13:46	WG1578897
Styrene	U		0.109	0.500	1	11/19/2020 13:46	WG1578897
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	11/19/2020 13:46	WG1578897
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	11/19/2020 13:46	WG1578897
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	11/19/2020 13:46	WG1578897
Tetrachloroethene	0.137		0.0280	0.100	1	11/20/2020 12:07	WG1579425
Toluene	1.12 J -	C3	0.0500	0.200	1	11/19/2020 13:46	WG1578897
1,2,3-Trichlorobenzene	U		0.0250	0.500	1	11/19/2020 13:46	WG1578897
1,2,4-Trichlorobenzene	U		0.193	0.500	1	11/19/2020 13:46	WG1578897
1,1,1-Trichloroethane	U		0.0110	0.100	1	11/19/2020 13:46	WG1578897

JC 12/8/2020

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,1,2-Trichloroethane	U		0.0353	0.100	1	11/19/2020 13:46	WG1578897
Trichloroethene	0.0407		0.0160	0.0400	1	11/20/2020 12:07	WG1579425
Trichlorofluoromethane	U		0.0200	0.100	1	11/19/2020 13:46	WG1578897
1,2,3-Trichloropropane	U		0.204	0.500	1	11/19/2020 13:46	WG1578897
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	11/19/2020 13:46	WG1578897
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	11/19/2020 13:46	WG1578897
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	11/19/2020 13:46	WG1578897
Vinyl chloride	U	~~J4~~	0.0273	0.100	1	11/19/2020 13:46	WG1578897
Xylenes, Total	U		0.191	0.260	1	11/19/2020 13:46	WG1578897
Ethyl Ether	U	~~J4~~	0.0170	0.100	1	11/19/2020 13:46	WG1578897
Tetrahydrofuran	0.150	J	0.0900	0.500	1	11/19/2020 13:46	WG1578897
Iodomethane	U		0.242	0.500	1	11/19/2020 13:46	WG1578897
Allyl chloride	U		0.580	1.00	1	11/19/2020 13:46	WG1578897
Trans-1,4-Dichloro-2-butene	U	UJ C3	0.0560	0.200	1	11/19/2020 13:46	WG1578897
(S) Toluene-d8	*102*			*75.0-131*		*11/19/2020 13:46*	WG1578897
(S) Toluene-d8	*101*			*75.0-131*		*11/20/2020 12:07*	WG1579425
(S) 4-Bromofluorobenzene	*112*			*67.0-138*		*11/19/2020 13:46*	WG1578897
(S) 4-Bromofluorobenzene	*100*			*67.0-138*		*11/20/2020 12:07*	WG1579425
(S) 1,2-Dichloroethane-d4	*112*			*70.0-130*		*11/19/2020 13:46*	WG1578897
(S) 1,2-Dichloroethane-d4	*95.0*			*70.0-130*		*11/20/2020 12:07*	WG1579425

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

JC 12/8/2020

MW-320-111220

Collected date/time: 11/12/20 10:05

SAMPLE RESULTS - 02

L1285785

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l		Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	0.783	J.	~~B~~ C3 J	0.548	1.00	1	11/19/2020 14:06	WG1578897
Acrylonitrile	U			0.0760	0.500	1	11/19/2020 14:06	WG1578897
Benzene	U			0.0160	0.0400	1	11/19/2020 14:06	WG1578897
Bromobenzene	U			0.0420	0.500	1	11/19/2020 14:06	WG1578897
Bromodichloromethane	U			0.0315	0.100	1	11/19/2020 14:06	WG1578897
Bromoform	U			0.239	1.00	1	11/19/2020 14:06	WG1578897
Bromomethane	U			0.148	0.500	1	11/19/2020 14:06	WG1578897
n-Butylbenzene	U			0.153	0.500	1	11/19/2020 14:06	WG1578897
sec-Butylbenzene	U			0.101	0.500	1	11/19/2020 14:06	WG1578897
tert-Butylbenzene	U			0.0620	0.200	1	11/19/2020 14:06	WG1578897
Carbon tetrachloride	U		~~J4~~	0.0432	0.200	1	11/19/2020 14:06	WG1578897
Chlorobenzene	U			0.0229	0.100	1	11/19/2020 14:06	WG1578897
Chlorodibromomethane	U			0.0180	0.100	1	11/19/2020 14:06	WG1578897
Chloroethane	U		~~J4~~	0.0432	0.200	1	11/19/2020 14:06	WG1578897
Chloroform	U			0.0166	0.100	1	11/19/2020 14:06	WG1578897
Chloromethane	U			0.0556	0.500	1	11/19/2020 14:06	WG1578897
2-Chlorotoluene	U			0.0368	0.100	1	11/19/2020 14:06	WG1578897
4-Chlorotoluene	U			0.0452	0.200	1	11/19/2020 14:06	WG1578897
1,2-Dibromo-3-Chloropropane	U			0.204	1.00	1	11/19/2020 14:06	WG1578897
1,2-Dibromoethane	U			0.0210	0.100	1	11/19/2020 14:06	WG1578897
Dibromomethane	U			0.0400	0.200	1	11/19/2020 14:06	WG1578897
1,2-Dichlorobenzene	U			0.0580	0.200	1	11/19/2020 14:06	WG1578897
1,3-Dichlorobenzene	U			0.0680	0.200	1	11/19/2020 14:06	WG1578897
1,4-Dichlorobenzene	U			0.0788	0.200	1	11/19/2020 14:06	WG1578897
Dichlorodifluoromethane	U			0.0327	0.100	1	11/19/2020 14:06	WG1578897
1,1-Dichloroethane	U			0.0230	0.100	1	11/19/2020 14:06	WG1578897
1,2-Dichloroethane	U			0.0190	0.100	1	11/19/2020 14:06	WG1578897
1,1-Dichloroethene	U			0.0200	0.100	1	11/19/2020 14:06	WG1578897
cis-1,2-Dichloroethene	0.0350		J	0.0276	0.100	1	11/20/2020 12:27	WG1579425
trans-1,2-Dichloroethene	U			0.0572	0.200	1	11/19/2020 14:06	WG1578897
1,2-Dichloropropane	U			0.0508	0.200	1	11/19/2020 14:06	WG1578897
1,1-Dichloropropene	U			0.0280	0.100	1	11/19/2020 14:06	WG1578897
1,3-Dichloropropane	U			0.0700	0.200	1	11/19/2020 14:06	WG1578897
cis-1,3-Dichloropropene	U			0.0271	0.100	1	11/19/2020 14:06	WG1578897
trans-1,3-Dichloropropene	U			0.0612	0.200	1	11/19/2020 14:06	WG1578897
2,2-Dichloropropane	U			0.0317	0.100	1	11/19/2020 14:06	WG1578897
Di-isopropyl ether	U			0.0140	0.0400	1	11/19/2020 14:06	WG1578897
Ethylbenzene	U			0.0212	0.100	1	11/19/2020 14:06	WG1578897
Hexachloro-1,3-butadiene	U			0.508	1.00	1	11/19/2020 14:06	WG1578897
Isopropylbenzene	U			0.0345	0.100	1	11/19/2020 14:06	WG1578897
p-Isopropyltoluene	U			0.0932	0.200	1	11/19/2020 14:06	WG1578897
2-Butanone (MEK)	U			0.500	1.00	1	11/19/2020 14:06	WG1578897
Methylene Chloride	U			0.265	1.00	1	11/19/2020 14:06	WG1578897
4-Methyl-2-pentanone (MIBK)	U	UJ	C3	0.400	1.00	1	11/19/2020 14:06	WG1578897
Methyl tert-butyl ether	U			0.0118	0.0400	1	11/19/2020 14:06	WG1578897
Naphthalene	U			0.124	0.500	1	11/19/2020 14:06	WG1578897
n-Propylbenzene	U			0.0472	0.200	1	11/19/2020 14:06	WG1578897
Styrene	U			0.109	0.500	1	11/19/2020 14:06	WG1578897
1,1,1,2-Tetrachloroethane	U			0.0200	0.100	1	11/19/2020 14:06	WG1578897
1,1,2,2-Tetrachloroethane	U			0.0156	0.100	1	11/19/2020 14:06	WG1578897
1,1,2-Trichlorotrifluoroethane	U			0.0270	0.100	1	11/19/2020 14:06	WG1578897
Tetrachloroethene	U			0.0280	0.100	1	11/20/2020 12:27	WG1579425
Toluene	0.338	J-	C3	0.0500	0.200	1	11/19/2020 14:06	WG1578897
1,2,3-Trichlorobenzene	U			0.0250	0.500	1	11/19/2020 14:06	WG1578897
1,2,4-Trichlorobenzene	U			0.193	0.500	1	11/19/2020 14:06	WG1578897
1,1,1-Trichloroethane	U			0.0110	0.100	1	11/19/2020 14:06	WG1578897

JC 12/8/2020

MW-320-111220

Collected date/time: 11/12/20 10:05

SAMPLE RESULTS - 02

L1285785

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,1,2-Trichloroethane	U		0.0353	0.100	1	11/19/2020 14:06	WG1578897
Trichloroethene	U		0.0160	0.0400	1	11/19/2020 14:06	WG1578897
Trichlorofluoromethane	U		0.0200	0.100	1	11/19/2020 14:06	WG1578897
1,2,3-Trichloropropane	U		0.204	0.500	1	11/19/2020 14:06	WG1578897
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	11/19/2020 14:06	WG1578897
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	11/19/2020 14:06	WG1578897
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	11/19/2020 14:06	WG1578897
Vinyl chloride	U	~~J4~~	0.0273	0.100	1	11/19/2020 14:06	WG1578897
Xylenes, Total	U		0.191	0.260	1	11/19/2020 14:06	WG1578897
Ethyl Ether	U	~~J4~~	0.0170	0.100	1	11/19/2020 14:06	WG1578897
Tetrahydrofuran	U		0.0900	0.500	1	11/19/2020 14:06	WG1578897
Iodomethane	U		0.242	0.500	1	11/19/2020 14:06	WG1578897
Allyl chloride	U		0.580	1.00	1	11/19/2020 14:06	WG1578897
Trans-1,4-Dichloro-2-butene	U UJ	C3	0.0560	0.200	1	11/19/2020 14:06	WG1578897
(S) Toluene-d8	*111*			*75.0-131*		*11/19/2020 14:06*	WG1578897
(S) Toluene-d8	*101*			*75.0-131*		*11/20/2020 12:27*	WG1579425
(S) 4-Bromofluorobenzene	*142*	J1		*67.0-138*		*11/19/2020 14:06*	WG1578897
(S) 4-Bromofluorobenzene	*101*			*67.0-138*		*11/20/2020 12:27*	WG1579425
(S) 1,2-Dichloroethane-d4	*113*			*70.0-130*		*11/19/2020 14:06*	WG1578897
(S) 1,2-Dichloroethane-d4	*92.9*			*70.0-130*		*11/20/2020 12:27*	WG1579425

JC 12/8/2020

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Sulfate	1940	J	594	5000	1	11/24/2020 01:29	WG1580304

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	5900		102	1000	1	11/25/2020 21:52	WG1581342

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	5950		28.1	100	1	11/20/2020 16:31	WG1578885
Manganese	790		0.704	5.00	1	11/20/2020 16:31	WG1578885

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	10100		2.87	6.78	10	11/19/2020 16:34	WG1579392
Ethane	U		0.296	1.29	1	11/19/2020 14:21	WG1578180
Ethene	U		0.422	1.27	1	11/19/2020 14:21	WG1578180

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U UJ	C3	0.548	1.00	1	11/19/2020 14:26	WG1578897
Acrylonitrile	U		0.0760	0.500	1	11/19/2020 14:26	WG1578897
Benzene	U		0.0160	0.0400	1	11/19/2020 14:26	WG1578897
Bromobenzene	U		0.0420	0.500	1	11/19/2020 14:26	WG1578897
Bromodichloromethane	U		0.0315	0.100	1	11/19/2020 14:26	WG1578897
Bromoform	U		0.239	1.00	1	11/19/2020 14:26	WG1578897
Bromomethane	U		0.148	0.500	1	11/19/2020 14:26	WG1578897
n-Butylbenzene	U		0.153	0.500	1	11/19/2020 14:26	WG1578897
sec-Butylbenzene	U		0.101	0.500	1	11/19/2020 14:26	WG1578897
tert-Butylbenzene	U		0.0620	0.200	1	11/19/2020 14:26	WG1578897
Carbon tetrachloride	U	~~J4~~	0.0432	0.200	1	11/19/2020 14:26	WG1578897
Chlorobenzene	U		0.0229	0.100	1	11/19/2020 14:26	WG1578897
Chlorodibromomethane	U		0.0180	0.100	1	11/19/2020 14:26	WG1578897
Chloroethane	U	~~J4~~	0.0432	0.200	1	11/19/2020 14:26	WG1578897
Chloroform	U		0.0166	0.100	1	11/19/2020 14:26	WG1578897
Chloromethane	U		0.0556	0.500	1	11/19/2020 14:26	WG1578897
2-Chlorotoluene	U		0.0368	0.100	1	11/19/2020 14:26	WG1578897
4-Chlorotoluene	U		0.0452	0.200	1	11/19/2020 14:26	WG1578897
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	11/19/2020 14:26	WG1578897
1,2-Dibromoethane	U		0.0210	0.100	1	11/19/2020 14:26	WG1578897
Dibromomethane	U		0.0400	0.200	1	11/19/2020 14:26	WG1578897
1,2-Dichlorobenzene	U		0.0580	0.200	1	11/19/2020 14:26	WG1578897
1,3-Dichlorobenzene	U		0.0680	0.200	1	11/19/2020 14:26	WG1578897
1,4-Dichlorobenzene	U		0.0788	0.200	1	11/19/2020 14:26	WG1578897
Dichlorodifluoromethane	U		0.0327	0.100	1	11/19/2020 14:26	WG1578897
1,1-Dichloroethane	U		0.0230	0.100	1	11/19/2020 14:26	WG1578897
1,2-Dichloroethane	U		0.0190	0.100	1	11/19/2020 14:26	WG1578897
1,1-Dichloroethene	U		0.0200	0.100	1	11/19/2020 14:26	WG1578897
cis-1,2-Dichloroethene	U		0.0276	0.100	1	11/19/2020 14:26	WG1578897
trans-1,2-Dichloroethene	U		0.0572	0.200	1	11/19/2020 14:26	WG1578897
1,2-Dichloropropane	U		0.0508	0.200	1	11/19/2020 14:26	WG1578897

JC 12/8/2020

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l		Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,1-Dichloropropene	U			0.0280	0.100	1	11/19/2020 14:26	WG1578897
1,3-Dichloropropane	U			0.0700	0.200	1	11/19/2020 14:26	WG1578897
cis-1,3-Dichloropropene	U			0.0271	0.100	1	11/19/2020 14:26	WG1578897
trans-1,3-Dichloropropene	U			0.0612	0.200	1	11/19/2020 14:26	WG1578897
2,2-Dichloropropane	U			0.0317	0.100	1	11/19/2020 14:26	WG1578897
Di-isopropyl ether	U			0.0140	0.0400	1	11/19/2020 14:26	WG1578897
Ethylbenzene	U			0.0212	0.100	1	11/19/2020 14:26	WG1578897
Hexachloro-1,3-butadiene	U			0.508	1.00	1	11/19/2020 14:26	WG1578897
Isopropylbenzene	U			0.0345	0.100	1	11/19/2020 14:26	WG1578897
p-Isopropyltoluene	U			0.0932	0.200	1	11/19/2020 14:26	WG1578897
2-Butanone (MEK)	U			0.500	1.00	1	11/19/2020 14:26	WG1578897
Methylene Chloride	U			0.265	1.00	1	11/19/2020 14:26	WG1578897
4-Methyl-2-pentanone (MIBK)	U	UJ	C3	0.400	1.00	1	11/19/2020 14:26	WG1578897
Methyl tert-butyl ether	U			0.0118	0.0400	1	11/19/2020 14:26	WG1578897
Naphthalene	U			0.124	0.500	1	11/19/2020 14:26	WG1578897
n-Propylbenzene	U			0.0472	0.200	1	11/19/2020 14:26	WG1578897
Styrene	U			0.109	0.500	1	11/19/2020 14:26	WG1578897
1,1,1,2-Tetrachloroethane	U			0.0200	0.100	1	11/19/2020 14:26	WG1578897
1,1,2,2-Tetrachloroethane	U			0.0156	0.100	1	11/19/2020 14:26	WG1578897
1,1,2-Trichlorotrifluoroethane	U			0.0270	0.100	1	11/19/2020 14:26	WG1578897
Tetrachloroethene	U			0.0280	0.100	1	11/19/2020 14:26	WG1578897
Toluene	U	UJ	C3	0.0500	0.200	1	11/19/2020 14:26	WG1578897
1,2,3-Trichlorobenzene	U			0.0250	0.500	1	11/19/2020 14:26	WG1578897
1,2,4-Trichlorobenzene	U			0.193	0.500	1	11/19/2020 14:26	WG1578897
1,1,1-Trichloroethane	U			0.0110	0.100	1	11/19/2020 14:26	WG1578897
1,1,2-Trichloroethane	U			0.0353	0.100	1	11/19/2020 14:26	WG1578897
Trichloroethene	U			0.0160	0.0400	1	11/19/2020 14:26	WG1578897
Trichlorofluoromethane	U			0.0200	0.100	1	11/19/2020 14:26	WG1578897
1,2,3-Trichloropropane	U			0.204	0.500	1	11/19/2020 14:26	WG1578897
1,2,4-Trimethylbenzene	U			0.0464	0.200	1	11/19/2020 14:26	WG1578897
1,2,3-Trimethylbenzene	U			0.0460	0.200	1	11/19/2020 14:26	WG1578897
1,3,5-Trimethylbenzene	U			0.0432	0.200	1	11/19/2020 14:26	WG1578897
Vinyl chloride	U		~~J4~~	0.0273	0.100	1	11/19/2020 14:26	WG1578897
Xylenes, Total	U			0.191	0.260	1	11/19/2020 14:26	WG1578897
Ethyl Ether	U		~~J4~~	0.0170	0.100	1	11/19/2020 14:26	WG1578897
Tetrahydrofuran	U			0.0900	0.500	1	11/19/2020 14:26	WG1578897
Iodomethane	U			0.242	0.500	1	11/19/2020 14:26	WG1578897
Allyl chloride	U			0.580	1.00	1	11/19/2020 14:26	WG1578897
Trans-1,4-Dichloro-2-butene	U	UJ	C3	0.0560	0.200	1	11/19/2020 14:26	WG1578897
(S) Toluene-d8	*102*				*75.0-131*		*11/19/2020 14:26*	WG1578897
(S) 4-Bromofluorobenzene	*135*				*67.0-138*		*11/19/2020 14:26*	WG1578897
(S) 1,2-Dichloroethane-d4	*112*				*70.0-130*		*11/19/2020 14:26*	WG1578897

JC 12/8/2020

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l		Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	0.618	U	~~B~~ C3 J	0.548	1.00	1	11/19/2020 14:46	WG1578897
Acrylonitrile	U			0.0760	0.500	1	11/19/2020 14:46	WG1578897
Benzene	U			0.0160	0.0400	1	11/19/2020 14:46	WG1578897
Bromobenzene	U			0.0420	0.500	1	11/19/2020 14:46	WG1578897
Bromodichloromethane	U			0.0315	0.100	1	11/19/2020 14:46	WG1578897
Bromoform	U			0.239	1.00	1	11/19/2020 14:46	WG1578897
Bromomethane	U			0.148	0.500	1	11/19/2020 14:46	WG1578897
n-Butylbenzene	U			0.153	0.500	1	11/19/2020 14:46	WG1578897
sec-Butylbenzene	U			0.101	0.500	1	11/19/2020 14:46	WG1578897
tert-Butylbenzene	U			0.0620	0.200	1	11/19/2020 14:46	WG1578897
Carbon tetrachloride	U		~~J4~~	0.0432	0.200	1	11/19/2020 14:46	WG1578897
Chlorobenzene	U			0.0229	0.100	1	11/19/2020 14:46	WG1578897
Chlorodibromomethane	U			0.0180	0.100	1	11/19/2020 14:46	WG1578897
Chloroethane	U		~~J4~~	0.0432	0.200	1	11/19/2020 14:46	WG1578897
Chloroform	U			0.0166	0.100	1	11/19/2020 14:46	WG1578897
Chloromethane	U			0.0556	0.500	1	11/19/2020 14:46	WG1578897
2-Chlorotoluene	U			0.0368	0.100	1	11/19/2020 14:46	WG1578897
4-Chlorotoluene	U			0.0452	0.200	1	11/19/2020 14:46	WG1578897
1,2-Dibromo-3-Chloropropane	U			0.204	1.00	1	11/19/2020 14:46	WG1578897
1,2-Dibromoethane	U			0.0210	0.100	1	11/19/2020 14:46	WG1578897
Dibromomethane	U			0.0400	0.200	1	11/19/2020 14:46	WG1578897
1,2-Dichlorobenzene	U			0.0580	0.200	1	11/19/2020 14:46	WG1578897
1,3-Dichlorobenzene	U			0.0680	0.200	1	11/19/2020 14:46	WG1578897
1,4-Dichlorobenzene	U			0.0788	0.200	1	11/19/2020 14:46	WG1578897
Dichlorodifluoromethane	U			0.0327	0.100	1	11/19/2020 14:46	WG1578897
1,1-Dichloroethane	U			0.0230	0.100	1	11/19/2020 14:46	WG1578897
1,2-Dichloroethane	U			0.0190	0.100	1	11/19/2020 14:46	WG1578897
1,1-Dichloroethene	U			0.0200	0.100	1	11/19/2020 14:46	WG1578897
cis-1,2-Dichloroethene	0.202	J		0.0276	0.100	1	11/19/2020 14:46	WG1578897
trans-1,2-Dichloroethene	U			0.0572	0.200	1	11/19/2020 14:46	WG1578897
1,2-Dichloropropane	U			0.0508	0.200	1	11/19/2020 14:46	WG1578897
1,1-Dichloropropene	U			0.0280	0.100	1	11/19/2020 14:46	WG1578897
1,3-Dichloropropane	U			0.0700	0.200	1	11/19/2020 14:46	WG1578897
cis-1,3-Dichloropropene	U			0.0271	0.100	1	11/19/2020 14:46	WG1578897
trans-1,3-Dichloropropene	U			0.0612	0.200	1	11/19/2020 14:46	WG1578897
2,2-Dichloropropane	U			0.0317	0.100	1	11/19/2020 14:46	WG1578897
Di-isopropyl ether	U			0.0140	0.0400	1	11/19/2020 14:46	WG1578897
Ethylbenzene	U			0.0212	0.100	1	11/19/2020 14:46	WG1578897
Hexachloro-1,3-butadiene	U			0.508	1.00	1	11/19/2020 14:46	WG1578897
Isopropylbenzene	U			0.0345	0.100	1	11/19/2020 14:46	WG1578897
p-Isopropyltoluene	U			0.0932	0.200	1	11/19/2020 14:46	WG1578897
2-Butanone (MEK)	U			0.500	1.00	1	11/19/2020 14:46	WG1578897
Methylene Chloride	U			0.265	1.00	1	11/19/2020 14:46	WG1578897
4-Methyl-2-pentanone (MIBK)	U	UJ	C3	0.400	1.00	1	11/19/2020 14:46	WG1578897
Methyl tert-butyl ether	U			0.0118	0.0400	1	11/19/2020 14:46	WG1578897
Naphthalene	U			0.124	0.500	1	11/19/2020 14:46	WG1578897
n-Propylbenzene	U			0.0472	0.200	1	11/19/2020 14:46	WG1578897
Styrene	U			0.109	0.500	1	11/19/2020 14:46	WG1578897
1,1,1,2-Tetrachloroethane	U			0.0200	0.100	1	11/19/2020 14:46	WG1578897
1,1,2,2-Tetrachloroethane	U			0.0156	0.100	1	11/19/2020 14:46	WG1578897
1,1,2-Trichlorotrifluoroethane	U			0.0270	0.100	1	11/19/2020 14:46	WG1578897
Tetrachloroethene	0.112	J		0.0280	0.100	1	11/19/2020 14:46	WG1578897
Toluene	0.584	J-	C3	0.0500	0.200	1	11/19/2020 14:46	WG1578897
1,2,3-Trichlorobenzene	U			0.0250	0.500	1	11/19/2020 14:46	WG1578897
1,2,4-Trichlorobenzene	U			0.193	0.500	1	11/19/2020 14:46	WG1578897
1,1,1-Trichloroethane	U			0.0110	0.100	1	11/19/2020 14:46	WG1578897

JC 12/8/2020

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,1,2-Trichloroethane	U		0.0353	0.100	1	11/19/2020 14:46	WG1578897
Trichloroethene	U		0.0160	0.0400	1	11/19/2020 14:46	WG1578897
Trichlorofluoromethane	U		0.0200	0.100	1	11/19/2020 14:46	WG1578897
1,2,3-Trichloropropane	U		0.204	0.500	1	11/19/2020 14:46	WG1578897
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	11/19/2020 14:46	WG1578897
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	11/19/2020 14:46	WG1578897
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	11/19/2020 14:46	WG1578897
Vinyl chloride	0.102 J+	C5 ~~J4~~	0.0273	0.100	1	11/19/2020 14:46	WG1578897
Xylenes, Total	U		0.191	0.260	1	11/19/2020 14:46	WG1578897
Ethyl Ether	U	~~J4~~	0.0170	0.100	1	11/19/2020 14:46	WG1578897
Tetrahydrofuran	U		0.0900	0.500	1	11/19/2020 14:46	WG1578897
Iodomethane	U		0.242	0.500	1	11/19/2020 14:46	WG1578897
Allyl chloride	U		0.580	1.00	1	11/19/2020 14:46	WG1578897
Trans-1,4-Dichloro-2-butene	U UJ	C3	0.0560	0.200	1	11/19/2020 14:46	WG1578897
(S) Toluene-d8	*156*	J1		*75.0-131*		*11/19/2020 14:46*	WG1578897
(S) 4-Bromofluorobenzene	*126*			*67.0-138*		*11/19/2020 14:46*	WG1578897
(S) 1,2-Dichloroethane-d4	*112*			*70.0-130*		*11/19/2020 14:46*	WG1578897

JC 12/8/2020

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l		Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U	UJ	C3	0.548	1.00	1	11/19/2020 15:07	WG1578897
Acrylonitrile	U			0.0760	0.500	1	11/19/2020 15:07	WG1578897
Benzene	4.20			0.0160	0.0400	1	11/19/2020 15:07	WG1578897
Bromobenzene	U			0.0420	0.500	1	11/19/2020 15:07	WG1578897
Bromodichloromethane	U			0.0315	0.100	1	11/19/2020 15:07	WG1578897
Bromoform	U			0.239	1.00	1	11/19/2020 15:07	WG1578897
Bromomethane	U			0.148	0.500	1	11/19/2020 15:07	WG1578897
n-Butylbenzene	U			0.153	0.500	1	11/19/2020 15:07	WG1578897
sec-Butylbenzene	U			0.101	0.500	1	11/19/2020 15:07	WG1578897
tert-Butylbenzene	U			0.0620	0.200	1	11/19/2020 15:07	WG1578897
Carbon tetrachloride	U		~~J4~~	0.0432	0.200	1	11/19/2020 15:07	WG1578897
Chlorobenzene	U			0.0229	0.100	1	11/19/2020 15:07	WG1578897
Chlorodibromomethane	U			0.0180	0.100	1	11/19/2020 15:07	WG1578897
Chloroethane	U		~~J4~~	0.0432	0.200	1	11/19/2020 15:07	WG1578897
Chloroform	U			0.0166	0.100	1	11/19/2020 15:07	WG1578897
Chloromethane	U			0.0556	0.500	1	11/19/2020 15:07	WG1578897
2-Chlorotoluene	U			0.0368	0.100	1	11/19/2020 15:07	WG1578897
4-Chlorotoluene	U			0.0452	0.200	1	11/19/2020 15:07	WG1578897
1,2-Dibromo-3-Chloropropane	U			0.204	1.00	1	11/19/2020 15:07	WG1578897
1,2-Dibromoethane	U			0.0210	0.100	1	11/19/2020 15:07	WG1578897
Dibromomethane	U			0.0400	0.200	1	11/19/2020 15:07	WG1578897
1,2-Dichlorobenzene	U			0.0580	0.200	1	11/19/2020 15:07	WG1578897
1,3-Dichlorobenzene	U			0.0680	0.200	1	11/19/2020 15:07	WG1578897
1,4-Dichlorobenzene	U			0.0788	0.200	1	11/19/2020 15:07	WG1578897
Dichlorodifluoromethane	U			0.0327	0.100	1	11/19/2020 15:07	WG1578897
1,1-Dichloroethane	U			0.0230	0.100	1	11/19/2020 15:07	WG1578897
1,2-Dichloroethane	U			0.0190	0.100	1	11/19/2020 15:07	WG1578897
1,1-Dichloroethene	U			0.0200	0.100	1	11/19/2020 15:07	WG1578897
cis-1,2-Dichloroethene	0.499			0.0276	0.100	1	11/19/2020 15:07	WG1578897
trans-1,2-Dichloroethene	U			0.0572	0.200	1	11/19/2020 15:07	WG1578897
1,2-Dichloropropane	U			0.0508	0.200	1	11/19/2020 15:07	WG1578897
1,1-Dichloropropene	U			0.0280	0.100	1	11/19/2020 15:07	WG1578897
1,3-Dichloropropane	U			0.0700	0.200	1	11/19/2020 15:07	WG1578897
cis-1,3-Dichloropropene	U			0.0271	0.100	1	11/19/2020 15:07	WG1578897
trans-1,3-Dichloropropene	U			0.0612	0.200	1	11/19/2020 15:07	WG1578897
2,2-Dichloropropane	U			0.0317	0.100	1	11/19/2020 15:07	WG1578897
Di-isopropyl ether	0.330			0.0140	0.0400	1	11/19/2020 15:07	WG1578897
Ethylbenzene	U			0.0212	0.100	1	11/19/2020 15:07	WG1578897
Hexachloro-1,3-butadiene	U			0.508	1.00	1	11/19/2020 15:07	WG1578897
Isopropylbenzene	U			0.0345	0.100	1	11/19/2020 15:07	WG1578897
p-Isopropyltoluene	U			0.0932	0.200	1	11/19/2020 15:07	WG1578897
2-Butanone (MEK)	U			0.500	1.00	1	11/19/2020 15:07	WG1578897
Methylene Chloride	U			0.265	1.00	1	11/19/2020 15:07	WG1578897
4-Methyl-2-pentanone (MIBK)	U	UJ	C3	0.400	1.00	1	11/19/2020 15:07	WG1578897
Methyl tert-butyl ether	0.270			0.0118	0.0400	1	11/19/2020 15:07	WG1578897
Naphthalene	U			0.124	0.500	1	11/19/2020 15:07	WG1578897
n-Propylbenzene	U			0.0472	0.200	1	11/19/2020 15:07	WG1578897
Styrene	U			0.109	0.500	1	11/19/2020 15:07	WG1578897
1,1,1,2-Tetrachloroethane	U			0.0200	0.100	1	11/19/2020 15:07	WG1578897
1,1,2,2-Tetrachloroethane	U			0.0156	0.100	1	11/19/2020 15:07	WG1578897
1,1,2-Trichlorotrifluoroethane	U			0.0270	0.100	1	11/19/2020 15:07	WG1578897
Tetrachloroethene	U			0.0280	0.100	1	11/19/2020 15:07	WG1578897
Toluene	0.224	J-	C3	0.0500	0.200	1	11/19/2020 15:07	WG1578897
1,2,3-Trichlorobenzene	U			0.0250	0.500	1	11/19/2020 15:07	WG1578897
1,2,4-Trichlorobenzene	U			0.193	0.500	1	11/19/2020 15:07	WG1578897
1,1,1-Trichloroethane	U			0.0110	0.100	1	11/19/2020 15:07	WG1578897

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Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l		Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,1,2-Trichloroethane	U			0.0353	0.100	1	11/19/2020 15:07	WG1578897
Trichloroethene	U			0.0160	0.0400	1	11/19/2020 15:07	WG1578897
Trichlorofluoromethane	U			0.0200	0.100	1	11/19/2020 15:07	WG1578897
1,2,3-Trichloropropane	U			0.204	0.500	1	11/19/2020 15:07	WG1578897
1,2,4-Trimethylbenzene	U			0.0464	0.200	1	11/19/2020 15:07	WG1578897
1,2,3-Trimethylbenzene	U			0.0460	0.200	1	11/19/2020 15:07	WG1578897
1,3,5-Trimethylbenzene	U			0.0432	0.200	1	11/19/2020 15:07	WG1578897
Vinyl chloride	0.865	J+	C5 ~~J4~~	0.0273	0.100	1	11/19/2020 15:07	WG1578897
Xylenes, Total	0.229		J	0.191	0.260	1	11/19/2020 15:07	WG1578897
Ethyl Ether	1.20	J+	C5 ~~J4~~	0.0170	0.100	1	11/19/2020 15:07	WG1578897
Tetrahydrofuran	U			0.0900	0.500	1	11/19/2020 15:07	WG1578897
Iodomethane	U			0.242	0.500	1	11/19/2020 15:07	WG1578897
Allyl chloride	U			0.580	1.00	1	11/19/2020 15:07	WG1578897
Trans-1,4-Dichloro-2-butene	U	UJ	C3	0.0560	0.200	1	11/19/2020 15:07	WG1578897
(S) Toluene-d8	*101*				*75.0-131*		*11/19/2020 15:07*	WG1578897
(S) 4-Bromofluorobenzene	*137*				*67.0-138*		*11/19/2020 15:07*	WG1578897
(S) 1,2-Dichloroethane-d4	*113*				*70.0-130*		*11/19/2020 15:07*	WG1578897

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

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1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Sulfate	170000		2970	25000	5	11/24/2020 02:06	WG1580304

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	7330		102	1000	1	11/25/2020 22:18	WG1581342

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	7990		28.1	100	1	11/20/2020 16:43	WG1578885
Manganese	1560		0.704	5.00	1	11/20/2020 16:43	WG1578885

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	641		0.287	0.678	1	11/19/2020 14:23	WG1578180
Ethane	3.90		0.296	1.29	1	11/19/2020 14:23	WG1578180
Ethene	U		0.422	1.27	1	11/19/2020 14:23	WG1578180

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	0.691 U	~~B~~ C3 J	0.548	1.00	1	11/19/2020 15:27	WG1578897
Acrylonitrile	U		0.0760	0.500	1	11/19/2020 15:27	WG1578897
Benzene	U		0.0160	0.0400	1	11/19/2020 15:27	WG1578897
Bromobenzene	U		0.0420	0.500	1	11/19/2020 15:27	WG1578897
Bromodichloromethane	U		0.0315	0.100	1	11/19/2020 15:27	WG1578897
Bromoform	U		0.239	1.00	1	11/19/2020 15:27	WG1578897
Bromomethane	U		0.148	0.500	1	11/19/2020 15:27	WG1578897
n-Butylbenzene	U		0.153	0.500	1	11/19/2020 15:27	WG1578897
sec-Butylbenzene	U		0.101	0.500	1	11/19/2020 15:27	WG1578897
tert-Butylbenzene	U		0.0620	0.200	1	11/19/2020 15:27	WG1578897
Carbon tetrachloride	U	~~J4~~	0.0432	0.200	1	11/19/2020 15:27	WG1578897
Chlorobenzene	U		0.0229	0.100	1	11/19/2020 15:27	WG1578897
Chlorodibromomethane	U		0.0180	0.100	1	11/19/2020 15:27	WG1578897
Chloroethane	U	~~J4~~	0.0432	0.200	1	11/19/2020 15:27	WG1578897
Chloroform	U		0.0166	0.100	1	11/19/2020 15:27	WG1578897
Chloromethane	U		0.0556	0.500	1	11/19/2020 15:27	WG1578897
2-Chlorotoluene	U		0.0368	0.100	1	11/19/2020 15:27	WG1578897
4-Chlorotoluene	U		0.0452	0.200	1	11/19/2020 15:27	WG1578897
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	11/19/2020 15:27	WG1578897
1,2-Dibromoethane	U		0.0210	0.100	1	11/19/2020 15:27	WG1578897
Dibromomethane	U		0.0400	0.200	1	11/19/2020 15:27	WG1578897
1,2-Dichlorobenzene	U		0.0580	0.200	1	11/19/2020 15:27	WG1578897
1,3-Dichlorobenzene	U		0.0680	0.200	1	11/19/2020 15:27	WG1578897
1,4-Dichlorobenzene	U		0.0788	0.200	1	11/19/2020 15:27	WG1578897
Dichlorodifluoromethane	U		0.0327	0.100	1	11/19/2020 15:27	WG1578897
1,1-Dichloroethane	U		0.0230	0.100	1	11/19/2020 15:27	WG1578897
1,2-Dichloroethane	U		0.0190	0.100	1	11/19/2020 15:27	WG1578897
1,1-Dichloroethene	U		0.0200	0.100	1	11/19/2020 15:27	WG1578897
cis-1,2-Dichloroethene	0.308		0.0276	0.100	1	11/19/2020 15:27	WG1578897
trans-1,2-Dichloroethene	U		0.0572	0.200	1	11/19/2020 15:27	WG1578897
1,2-Dichloropropane	U		0.0508	0.200	1	11/19/2020 15:27	WG1578897

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Volatile Organic Compounds (GC/MS) by Method 8260D

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
1,1-Dichloropropene	U		0.0280	0.100	1	11/19/2020 15:27	WG1578897
1,3-Dichloropropane	U		0.0700	0.200	1	11/19/2020 15:27	WG1578897
cis-1,3-Dichloropropene	U		0.0271	0.100	1	11/19/2020 15:27	WG1578897
trans-1,3-Dichloropropene	U		0.0612	0.200	1	11/19/2020 15:27	WG1578897
2,2-Dichloropropane	U		0.0317	0.100	1	11/19/2020 15:27	WG1578897
Di-isopropyl ether	U		0.0140	0.0400	1	11/19/2020 15:27	WG1578897
Ethylbenzene	U		0.0212	0.100	1	11/19/2020 15:27	WG1578897
Hexachloro-1,3-butadiene	U		0.508	1.00	1	11/19/2020 15:27	WG1578897
Isopropylbenzene	U		0.0345	0.100	1	11/19/2020 15:27	WG1578897
p-Isopropyltoluene	U		0.0932	0.200	1	11/19/2020 15:27	WG1578897
2-Butanone (MEK)	U		0.500	1.00	1	11/19/2020 15:27	WG1578897
Methylene Chloride	U		0.265	1.00	1	11/19/2020 15:27	WG1578897
4-Methyl-2-pentanone (MIBK)	U UJ	C3	0.400	1.00	1	11/19/2020 15:27	WG1578897
Methyl tert-butyl ether	U		0.0118	0.0400	1	11/19/2020 15:27	WG1578897
Naphthalene	U		0.124	0.500	1	11/19/2020 15:27	WG1578897
n-Propylbenzene	U		0.0472	0.200	1	11/19/2020 15:27	WG1578897
Styrene	U		0.109	0.500	1	11/19/2020 15:27	WG1578897
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	11/19/2020 15:27	WG1578897
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	11/19/2020 15:27	WG1578897
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	11/19/2020 15:27	WG1578897
Tetrachloroethene	U		0.0280	0.100	1	11/19/2020 15:27	WG1578897
Toluene	0.221 J-	C3	0.0500	0.200	1	11/19/2020 15:27	WG1578897
1,2,3-Trichlorobenzene	U		0.0250	0.500	1	11/19/2020 15:27	WG1578897
1,2,4-Trichlorobenzene	U		0.193	0.500	1	11/19/2020 15:27	WG1578897
1,1,1-Trichloroethane	U		0.0110	0.100	1	11/19/2020 15:27	WG1578897
1,1,2-Trichloroethane	U		0.0353	0.100	1	11/19/2020 15:27	WG1578897
Trichloroethene	U		0.0160	0.0400	1	11/19/2020 15:27	WG1578897
Trichlorofluoromethane	U		0.0200	0.100	1	11/19/2020 15:27	WG1578897
1,2,3-Trichloropropane	U		0.204	0.500	1	11/19/2020 15:27	WG1578897
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	11/19/2020 15:27	WG1578897
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	11/19/2020 15:27	WG1578897
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	11/19/2020 15:27	WG1578897
Vinyl chloride	0.808 J+	C5 ~~J4~~	0.0273	0.100	1	11/19/2020 15:27	WG1578897
Xylenes, Total	U		0.191	0.260	1	11/19/2020 15:27	WG1578897
Ethyl Ether	0.195 J+	C5 ~~J4~~	0.0170	0.100	1	11/19/2020 15:27	WG1578897
Tetrahydrofuran	U		0.0900	0.500	1	11/19/2020 15:27	WG1578897
Iodomethane	U		0.242	0.500	1	11/19/2020 15:27	WG1578897
Allyl chloride	U		0.580	1.00	1	11/19/2020 15:27	WG1578897
Trans-1,4-Dichloro-2-butene	U UJ	C3	0.0560	0.200	1	11/19/2020 15:27	WG1578897
(S) Toluene-d8	*127*			*75.0-131*		*11/19/2020 15:27*	WG1578897
(S) 4-Bromofluorobenzene	*111*			*67.0-138*		*11/19/2020 15:27*	WG1578897
(S) 1,2-Dichloroethane-d4	*115*			*70.0-130*		*11/19/2020 15:27*	WG1578897

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Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U	UJ C3	0.548	1.00	1	11/19/2020 15:47	WG1578897
Acrylonitrile	U		0.0760	0.500	1	11/19/2020 15:47	WG1578897
Benzene	U		0.0160	0.0400	1	11/19/2020 15:47	WG1578897
Bromobenzene	U		0.0420	0.500	1	11/19/2020 15:47	WG1578897
Bromodichloromethane	U		0.0315	0.100	1	11/19/2020 15:47	WG1578897
Bromoform	U		0.239	1.00	1	11/19/2020 15:47	WG1578897
Bromomethane	U		0.148	0.500	1	11/19/2020 15:47	WG1578897
n-Butylbenzene	U		0.153	0.500	1	11/19/2020 15:47	WG1578897
sec-Butylbenzene	U		0.101	0.500	1	11/19/2020 15:47	WG1578897
tert-Butylbenzene	U		0.0620	0.200	1	11/19/2020 15:47	WG1578897
Carbon tetrachloride	U	~~J4~~	0.0432	0.200	1	11/19/2020 15:47	WG1578897
Chlorobenzene	U		0.0229	0.100	1	11/19/2020 15:47	WG1578897
Chlorodibromomethane	U		0.0180	0.100	1	11/19/2020 15:47	WG1578897
Chloroethane	U	~~J4~~	0.0432	0.200	1	11/19/2020 15:47	WG1578897
Chloroform	U		0.0166	0.100	1	11/19/2020 15:47	WG1578897
Chloromethane	U		0.0556	0.500	1	11/19/2020 15:47	WG1578897
2-Chlorotoluene	U		0.0368	0.100	1	11/19/2020 15:47	WG1578897
4-Chlorotoluene	U		0.0452	0.200	1	11/19/2020 15:47	WG1578897
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	11/19/2020 15:47	WG1578897
1,2-Dibromoethane	U		0.0210	0.100	1	11/19/2020 15:47	WG1578897
Dibromomethane	U		0.0400	0.200	1	11/19/2020 15:47	WG1578897
1,2-Dichlorobenzene	U		0.0580	0.200	1	11/19/2020 15:47	WG1578897
1,3-Dichlorobenzene	U		0.0680	0.200	1	11/19/2020 15:47	WG1578897
1,4-Dichlorobenzene	U		0.0788	0.200	1	11/19/2020 15:47	WG1578897
Dichlorodifluoromethane	U		0.0327	0.100	1	11/19/2020 15:47	WG1578897
1,1-Dichloroethane	0.176		0.0230	0.100	1	11/19/2020 15:47	WG1578897
1,2-Dichloroethane	U		0.0190	0.100	1	11/19/2020 15:47	WG1578897
1,1-Dichloroethene	0.143		0.0200	0.100	1	11/19/2020 15:47	WG1578897
cis-1,2-Dichloroethene	47.6		0.0276	0.100	1	11/19/2020 15:47	WG1578897
trans-1,2-Dichloroethene	U		0.0572	0.200	1	11/19/2020 15:47	WG1578897
1,2-Dichloropropane	U		0.0508	0.200	1	11/19/2020 15:47	WG1578897
1,1-Dichloropropene	U		0.0280	0.100	1	11/19/2020 15:47	WG1578897
1,3-Dichloropropane	U		0.0700	0.200	1	11/19/2020 15:47	WG1578897
cis-1,3-Dichloropropene	U		0.0271	0.100	1	11/19/2020 15:47	WG1578897
trans-1,3-Dichloropropene	U		0.0612	0.200	1	11/19/2020 15:47	WG1578897
2,2-Dichloropropane	U		0.0317	0.100	1	11/19/2020 15:47	WG1578897
Di-isopropyl ether	U		0.0140	0.0400	1	11/19/2020 15:47	WG1578897
Ethylbenzene	U		0.0212	0.100	1	11/19/2020 15:47	WG1578897
Hexachloro-1,3-butadiene	U		0.508	1.00	1	11/19/2020 15:47	WG1578897
Isopropylbenzene	U		0.0345	0.100	1	11/19/2020 15:47	WG1578897
p-Isopropyltoluene	U		0.0932	0.200	1	11/19/2020 15:47	WG1578897
2-Butanone (MEK)	U		0.500	1.00	1	11/19/2020 15:47	WG1578897
Methylene Chloride	U		0.265	1.00	1	11/19/2020 15:47	WG1578897
4-Methyl-2-pentanone (MIBK)	U	UJ C3	0.400	1.00	1	11/19/2020 15:47	WG1578897
Methyl tert-butyl ether	U		0.0118	0.0400	1	11/19/2020 15:47	WG1578897
Naphthalene	U		0.124	0.500	1	11/19/2020 15:47	WG1578897
n-Propylbenzene	U		0.0472	0.200	1	11/19/2020 15:47	WG1578897
Styrene	U		0.109	0.500	1	11/19/2020 15:47	WG1578897
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	11/19/2020 15:47	WG1578897
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	11/19/2020 15:47	WG1578897
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	11/19/2020 15:47	WG1578897
Tetrachloroethene	0.110		0.0280	0.100	1	11/19/2020 15:47	WG1578897
Toluene	U	UJ C3	0.0500	0.200	1	11/19/2020 15:47	WG1578897
1,2,3-Trichlorobenzene	U		0.0250	0.500	1	11/19/2020 15:47	WG1578897
1,2,4-Trichlorobenzene	U		0.193	0.500	1	11/19/2020 15:47	WG1578897
1,1,1-Trichloroethane	U		0.0110	0.100	1	11/19/2020 15:47	WG1578897

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Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l		Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,1,2-Trichloroethane	U			0.0353	0.100	1	11/19/2020 15:47	WG1578897
Trichloroethene	13.9			0.0160	0.0400	1	11/19/2020 15:47	WG1578897
Trichlorofluoromethane	U			0.0200	0.100	1	11/19/2020 15:47	WG1578897
1,2,3-Trichloropropane	U			0.204	0.500	1	11/19/2020 15:47	WG1578897
1,2,4-Trimethylbenzene	U			0.0464	0.200	1	11/19/2020 15:47	WG1578897
1,2,3-Trimethylbenzene	U			0.0460	0.200	1	11/19/2020 15:47	WG1578897
1,3,5-Trimethylbenzene	U			0.0432	0.200	1	11/19/2020 15:47	WG1578897
Vinyl chloride	4.58	J+	C5 ~~J4~~	0.0273	0.100	1	11/19/2020 15:47	WG1578897
Xylenes, Total	U			0.191	0.260	1	11/19/2020 15:47	WG1578897
Ethyl Ether	U		~~J4~~	0.0170	0.100	1	11/19/2020 15:47	WG1578897
Tetrahydrofuran	U			0.0900	0.500	1	11/19/2020 15:47	WG1578897
Iodomethane	U			0.242	0.500	1	11/19/2020 15:47	WG1578897
Allyl chloride	U			0.580	1.00	1	11/19/2020 15:47	WG1578897
Trans-1,4-Dichloro-2-butene	U	UJ	C3	0.0560	0.200	1	11/19/2020 15:47	WG1578897
(S) Toluene-d8	*105*				*75.0-131*		*11/19/2020 15:47*	WG1578897
(S) 4-Bromofluorobenzene	*135*				*67.0-138*		*11/19/2020 15:47*	WG1578897
(S) 1,2-Dichloroethane-d4	*115*				*70.0-130*		*11/19/2020 15:47*	WG1578897

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Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l		Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	0.640	J	C3 J	0.548	1.00	1	11/22/2020 14:15	WG1580676
Acrylonitrile	U	UJ	C3	0.0760	0.500	1	11/22/2020 14:15	WG1580676
Benzene	U			0.0160	0.0400	1	11/22/2020 14:15	WG1580676
Bromobenzene	U			0.0420	0.500	1	11/22/2020 14:15	WG1580676
Bromodichloromethane	U			0.0315	0.100	1	11/22/2020 14:15	WG1580676
Bromoform	U			0.239	1.00	1	11/22/2020 14:15	WG1580676
Bromomethane	U		~~J4~~	0.148	0.500	1	11/22/2020 14:15	WG1580676
n-Butylbenzene	U			0.153	0.500	1	11/22/2020 14:15	WG1580676
sec-Butylbenzene	U			0.101	0.500	1	11/22/2020 14:15	WG1580676
tert-Butylbenzene	U			0.0620	0.200	1	11/22/2020 14:15	WG1580676
Carbon tetrachloride	U			0.0432	0.200	1	11/22/2020 14:15	WG1580676
Chlorobenzene	U			0.0229	0.100	1	11/22/2020 14:15	WG1580676
Chlorodibromomethane	U			0.0180	0.100	1	11/22/2020 14:15	WG1580676
Chloroethane	U			0.0432	0.200	1	11/22/2020 14:15	WG1580676
Chloroform	U			0.0166	0.100	1	11/22/2020 14:15	WG1580676
Chloromethane	U	UJ	C3	0.0556	0.500	1	11/22/2020 14:15	WG1580676
2-Chlorotoluene	U			0.0368	0.100	1	11/22/2020 14:15	WG1580676
4-Chlorotoluene	U			0.0452	0.200	1	11/22/2020 14:15	WG1580676
1,2-Dibromo-3-Chloropropane	U			0.204	1.00	1	11/22/2020 14:15	WG1580676
1,2-Dibromoethane	U			0.0210	0.100	1	11/22/2020 14:15	WG1580676
Dibromomethane	U			0.0400	0.200	1	11/22/2020 14:15	WG1580676
1,2-Dichlorobenzene	U			0.0580	0.200	1	11/22/2020 14:15	WG1580676
1,3-Dichlorobenzene	U			0.0680	0.200	1	11/22/2020 14:15	WG1580676
1,4-Dichlorobenzene	U			0.0788	0.200	1	11/22/2020 14:15	WG1580676
Dichlorodifluoromethane	U		~~J3~~	0.0327	0.100	1	11/22/2020 14:15	WG1580676
1,1-Dichloroethane	0.103			0.0230	0.100	1	11/22/2020 14:15	WG1580676
1,2-Dichloroethane	U			0.0190	0.100	1	11/22/2020 14:15	WG1580676
1,1-Dichloroethene	U	UJ	C3	0.0200	0.100	1	11/22/2020 14:15	WG1580676
cis-1,2-Dichloroethene	U			0.0276	0.100	1	11/22/2020 14:15	WG1580676
trans-1,2-Dichloroethene	U			0.0572	0.200	1	11/22/2020 14:15	WG1580676
1,2-Dichloropropane	U			0.0508	0.200	1	11/22/2020 14:15	WG1580676
1,1-Dichloropropene	U			0.0280	0.100	1	11/22/2020 14:15	WG1580676
1,3-Dichloropropane	U			0.0700	0.200	1	11/22/2020 14:15	WG1580676
cis-1,3-Dichloropropene	U			0.0271	0.100	1	11/22/2020 14:15	WG1580676
trans-1,3-Dichloropropene	U			0.0612	0.200	1	11/22/2020 14:15	WG1580676
2,2-Dichloropropane	U			0.0317	0.100	1	11/22/2020 14:15	WG1580676
Di-isopropyl ether	0.0222	J	C3 J	0.0140	0.0400	1	11/22/2020 14:15	WG1580676
Ethylbenzene	0.0217		J	0.0212	0.100	1	11/22/2020 14:15	WG1580676
Hexachloro-1,3-butadiene	U			0.508	1.00	1	11/22/2020 14:15	WG1580676
Isopropylbenzene	U			0.0345	0.100	1	11/22/2020 14:15	WG1580676
p-Isopropyltoluene	U			0.0932	0.200	1	11/22/2020 14:15	WG1580676
2-Butanone (MEK)	U	UJ	C3	0.500	1.00	1	11/22/2020 14:15	WG1580676
Methylene Chloride	U			0.265	1.00	1	11/22/2020 14:15	WG1580676
4-Methyl-2-pentanone (MIBK)	U	UJ	C3	0.400	1.00	1	11/22/2020 14:15	WG1580676
Methyl tert-butyl ether	U			0.0118	0.0400	1	11/22/2020 14:15	WG1580676
Naphthalene	U			0.124	0.500	1	11/22/2020 14:15	WG1580676
n-Propylbenzene	U			0.0472	0.200	1	11/22/2020 14:15	WG1580676
Styrene	U			0.109	0.500	1	11/22/2020 14:15	WG1580676
1,1,1,2-Tetrachloroethane	U			0.0200	0.100	1	11/22/2020 14:15	WG1580676
1,1,2,2-Tetrachloroethane	U			0.0156	0.100	1	11/22/2020 14:15	WG1580676
1,1,2-Trichlorotrifluoroethane	U			0.0270	0.100	1	11/24/2020 17:23	WG1581939
Tetrachloroethene	U			0.0280	0.100	1	11/22/2020 14:15	WG1580676
Toluene	0.296			0.0500	0.200	1	11/22/2020 14:15	WG1580676
1,2,3-Trichlorobenzene	U			0.0250	0.500	1	11/22/2020 14:15	WG1580676
1,2,4-Trichlorobenzene	U			0.193	0.500	1	11/22/2020 14:15	WG1580676
1,1,1-Trichloroethane	U			0.0110	0.100	1	11/22/2020 14:15	WG1580676

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Volatile Organic Compounds (GC/MS) by Method 8260D

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
1,1,2-Trichloroethane	U		0.0353	0.100	1	11/22/2020 14:15	WG1580676
Trichloroethene	U		0.0160	0.0400	1	11/22/2020 14:15	WG1580676
Trichlorofluoromethane	U		0.0200	0.100	1	11/22/2020 14:15	WG1580676
1,2,3-Trichloropropane	U		0.204	0.500	1	11/22/2020 14:15	WG1580676
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	11/22/2020 14:15	WG1580676
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	11/22/2020 14:15	WG1580676
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	11/22/2020 14:15	WG1580676
Vinyl chloride	U		0.0273	0.100	1	11/22/2020 14:15	WG1580676
Xylenes, Total	0.236	J	0.191	0.260	1	11/22/2020 14:15	WG1580676
Ethyl Ether	0.112		0.0170	0.100	1	11/22/2020 14:15	WG1580676
Tetrahydrofuran	U UJ	C3	0.0900	0.500	1	11/22/2020 14:15	WG1580676
Iodomethane	U		0.242	0.500	1	11/22/2020 14:15	WG1580676
Allyl chloride	U		0.580	1.00	1	11/22/2020 14:15	WG1580676
Trans-1,4-Dichloro-2-butene	U UJ	C3	0.0560	0.200	1	11/22/2020 14:15	WG1580676
(S) Toluene-d8	*100*			*75.0-131*		*11/22/2020 14:15*	WG1580676
(S) Toluene-d8	*98.4*			*75.0-131*		*11/24/2020 17:23*	WG1581939
(S) 4-Bromofluorobenzene	*102*			*67.0-138*		*11/22/2020 14:15*	WG1580676
(S) 4-Bromofluorobenzene	*103*			*67.0-138*		*11/24/2020 17:23*	WG1581939
(S) 1,2-Dichloroethane-d4	*94.1*			*70.0-130*		*11/22/2020 14:15*	WG1580676
(S) 1,2-Dichloroethane-d4	*129*			*70.0-130*		*11/24/2020 17:23*	WG1581939

JC 12/8/2020

MEMORANDUM

TO: Project File **DATE:** January 11, 2021

FROM: Jessie Compeau

SUBJECT: Laboratory Data Validation Review

PROJECT: American Linen Data Validation

PROJECT #: 1413.001.02.501G and 1413.001.05.601

TASK: EIM Data Validation Level EPA2A for 4th Quarter Monitoring – Groundwater Samples – Group 4

LAB: Pace Sample Delivery Groups (SDGs): L1289162, L1290835, and L1289162.

Thirteen (13) groundwater samples including three field duplicates, one equipment blank, and two trip blanks were collected as part of the 4th Quarterly Monitoring Round for 2020 for the ongoing Remedial Investigation (RI) sampling at the Former American Linen Supply Site, in Seattle, Washington on November 19, 30 and December 1, 2020. The samples were shipped and delivered to Pace Lab Sciences (Pace) of Mount Juliet, TN for laboratory analysis. Selected samples were analyzed for the following:

- Volatile organic compounds (VOCs) by United States Environmental Protection Agency (USEPA) Method 8260D;
- Total petroleum hydrocarbons as gasoline (TPH-Gx) by NWTPH-Gx per analytical method stipulated by Washington State Department of Ecology;
- VOCs (dissolved gases – methane, ethane, and ethene) by EPA SOP RSK 175;
- Alkalinity by Method 2320 B-2011;
- Anions (chloride, nitrate, and sulfate) by USEPA Method 9056A;
- Total Organic Carbon (TOC) by USEPA Method 9060A; and
- Metals (iron and manganese) by USEPA Method 6020B.

Fourth quarter results are reported in multiple SDGs from Pace. Pace SDGs are reviewed in small groups for each data validation report. Group 4 analytical results are reported in SDGs L1289162, L1290835, and L1289162. The quality assurance review of the laboratory data associated with Group 4 is summarized below.

DATA QUALIFICATIONS

Guidelines established by USEPA for a limited data validation review of analytical data along with Pace control limit criteria were used to validate the data. The comments presented in this memorandum refer to the laboratory's performance in meeting the quality control criteria outlined in the USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (USEPA, 2017) and USEPA Contract Laboratory

Program National Functional Guidelines for Inorganic Superfund Methods Data Review (USEPA, 2017). Following Guidelines, non-project-specific laboratory duplicates and matrix spike results were not evaluated as part of this data validation.

DATA VALIDATION

Completeness

All samples were collected and analyzed as requested with a minor exception:

- SDG L1290835: Sample MW-143-113020 is not reported with this SDG. Refer to SDG L1290496 (L1290496-11) for sample MW-143-113020 results. This discrepancy is not noted on the chain of custody or Pace non-conformance forms.

Sample Collection and Preservation

Samples were collected in laboratory-supplied sample containers preserved as appropriate for the individual analyses conducted. The samples were packed on ice in coolers and delivered by courier to the analytical laboratory. The laboratory reported that the coolers were received at a cooler temperature less than the recommended temperature preservation of 6°C. Overall, samples were received in good condition. No data were qualified based upon the sample collection and preservation information.

Holding Times

USEPA Method 8260D:
All samples were analyzed for VOCs within the EPA recommended holding time of fourteen days for preserved waters from the date of collection. All holding time criteria are met.

NWTPH-Gx Method:
All samples were analyzed within the WA State recommended holding time of fourteen days for preserved waters from the date of sample collection. All holding time criteria are met.

Dissolved Gases (Methane, Ethane, and Ethene) by RSK 175:
All samples were analyzed within the WA State recommended holding time of fourteen days for preserved waters from the date of sample collection. All holding time criteria are met.

USEPA Method 6020B:
All samples were analyzed within the USEPA recommended holding time for iron and manganese of 180 days for preserved waters from the date of sample collection. All holding time criteria are met.

General Chemistry (Alkalinity, Chloride, Sulfate, Nitrate, and TOC):
All samples were analyzed within the USEPA recommended holding time for alkalinity (14 days), chloride (28 days), sulfate (28 days), and nitrate (48 hours), and TOC (28 days) for preserved waters from the date of sample collection. All holding time criteria are met.

Initial and Continuing Calibration

Calibration data for this project are not required for this deliverable however Pace's notes indicate the following:

- Multiple SDGs - *USEPA Method 8260D:* Continuing calibration verification (CCV) issues were noted by Pace for multiple compounds associated with analytical batches in each SDG. These compounds are qualified by the laboratory "C3" to indicate that percent difference CCV is below laboratory acceptance criteria and showing low bias. **Associated sample results with laboratory qualified (C3) results are estimated and qualified (J-/UJ). Results reported below the RDL are estimated (J) and bias is not assigned.**

- Multiple SDGs - *USEPA Method 8260D:* Continuing calibration verification (CCV) issues were noted by Pace for multiple compounds associated with analytical batches in each SDG. These compounds are qualified by the laboratory "C4" to indicate that percent difference CCV is below laboratory acceptance criteria and showing low bias. **Associated sample results with laboratory qualified (C4) results are estimated and qualified (J-/UJ). Results reported below the RDL are estimated (J) and bias is not assigned.**

- Multiple SDGs - *USEPA Method 8260D:* Continuing calibration verification (CCV) issues were noted by Pace for multiple compounds associated with analytical batches in each SDG. These compounds are qualified by the laboratory "C5" to indicate that percent difference CCV is above laboratory acceptance criteria and showing high bias. **Associated sample results with laboratory qualified (C5) positively detected results are estimated and qualified (J+). Results reported below the RDL are estimated (J) and bias is not assigned.**

Method Blank Results

USEPA Method 8260D:
Laboratory method blanks were included with the analytical batches per method requirement. The target analytes were not detected in the method blanks at or above the reporting detection limits (RDLs) with the following exceptions:

- SDG L1290835 - Analytical batch WG1588230: A low level (below the RDL) of tetrahydrofuran was detected in the method blank. No action is taken since tetrahydrofuran is not detected in the associated samples.

- SDG L1291220 - Analytical batch WG1588230: A low level (below the RDL) of tetrahydrofuran was detected in the method blank. No action is taken since tetrahydrofuran is either not detected or detected greater than the action level.

NWTPH-Gx Method:

Laboratory method blanks were included with the analytical batches per method requirement. The target analyte (gasoline) was not detected in the method blanks at or above the RDLs with the following exception:

- SDG L1291220 – Analytical batch WG1587876: A low level of gasoline was detected below the RDL in the method blank. No action is needed since gasoline is not detected in the associated samples.

Dissolved Gases (Methane, Ethane, and Ethene) by RSK 175:
Laboratory method blanks were included with the analytical batches per method requirement. The target analytes (dissolved gases) are not detected in the method blanks at or above the RDLs.

USEPA Method 6020B and General Chemistry (Alkalinity, Chloride, Sulfate, Nitrate, and TOC):
Laboratory method blanks were included with the analytical batches per method requirement. The target analytes were detected in the method blanks below the RDLs. Per Guidance, no action is taken for blank detections less than the RDL when associated sample detections are greater than the RDL. General chemistry and metal blank detections are shown below:

SDG	Batch	Method	Analyte	Method Blank Result	Qualifier	RDL	Units	Associated Result(s) Qualified
L1290835	WG1585509	9060A	TOC	141	J	1000	ug/L	NO
L1290835	WG1586926	9060A	TOC	865	J	1000	ug/L	NO
L1290835	WG1585699	6020B	Manganese	2.11	J	5.00	ug/L	NO
L1291220	WG1586926	9060A	TOC	865	J	1000	ug/L	NO
L1291220	WG1585699	6020B	Manganese	2.11	J	5.00	ug/L	NO

Target analytes were detected in method blanks at low levels with no impact to the associated samples.

Trip Blank Results

USEPA Method 8260D and NWTPH-Gx:
Two trip blanks (TB-113020 (SDG L1290835) and TB-113020 (SDG L1291220)) were collected and analyzed for VOCs and gasoline. The target analytes were not detected in the associated samples with the following exceptions:

- SDG L1291220: A low level of acetone, above the RDL, is detected in the trip blank (TB-113020). Acetone was also detected in the associated equipment blank**. Low levels of acetone were also detected in samples MW-161-120120, R-MW6-120120, and MW-946-120120 and are qualified as estimated (J+) due to various blank contaminations. Sample MW-330-120120 was detected below the RDL and is qualified as not detected (U) due to various blank contaminations.**

Field, Rinsate, or Equipment Blank Results

All Analytical Methods:

Two equipment blanks associated with Group 4 were collected and analyzed. Details are as follows:

Equipment blank (EQ-113020 with SDG L1290835) is an equipment blank for the bladder pump and associated samples are MW-161-120120, MW-946-120120, MW-330-120120 collected on December 1, 2020. Low levels of nitrate, total organic carbon, iron, manganese, and acetone are detected in the equipment blank. Actions are as follows:

- Nitrate, total organic carbon, iron, manganese results are not impacted because concentrations are greater than the blank detection or non-detect.
- **Acetone detections in samples MW-944-113020, MW120-113020, MW-301-113020, MW-160-113020, and MW121-113020 exceeding the RDL are qualified estimated (J+) due to equipment blank contamination.**

Equipment blank (EQ-120120 with SDG L1291220) is an equipment blank for the bladder pump and associated samples are MW-161-120120, MW-946-120120, MW-330-120120 collected on December 1, 2020. Low levels of nitrate, total organic carbon, acetone, chloroform, 2-butanone (MEK), and toluene are detected in the equipment blank.

- No action is taken for nitrate since it wasn't analyzed for in the associated samples.
- No action is needed for TOC since associated results are greater than the RDL.
- Low levels of acetone, chloroform, 2-butanone (MEK), and toluene were detected in the equipment blank. **Toluene detection in sample MW-161-120120 is qualified as non-detected (U). Acetone detections above the RDL are qualified (J+). Acetone detection below the RDL is qualified as not detected (U). Refer to the associated trip blank discussion for further details on acetone.**

Field Duplicate Analyses

Field duplicate pairs were submitted and analyzed. Field duplicate sample pairs are as follows:

- SDG L1290835: MW-944-113020 is a field duplicate of MW120-113020
- SDG L1290835: MW-945-113020 is a field duplicate of MW-301-113020
- SDG L1291220: MW-946-120120 is a field duplicate of MW-330-120120

Target analyte results are comparable and within a relative percent difference (RPD) of 30% (± 1x RDL for groundwater results <5X the RDL) for the field duplicate pairs with the following exceptions:

- SDG L1290835: **Acetone, methane and ethane results (MW120-113020 and MW-944-113020) are qualified as estimated (UJ/J) due to absolute value difference exceedance (± 1x RDL for groundwater results <5X the RDL).**

- SDG L1290835: **Methane, iron and manganese results (MW-301-113020 and MW-945-113020) are qualified as estimated (UJ/J) due to absolute value difference exceedance (± 1x RDL for groundwater results <5X the RDL).**

Laboratory Duplicate Analyses

USEPA Method 8260D:
Laboratory duplicate samples were not analyzed. Refer to laboratory control sample/sample duplicate (LCS/LCSD) or matrix spike/matrix spike duplicate (MS/MSD) results for precision data.

NWTPH-Gx Method:
Laboratory duplicate samples were not analyzed. Refer to MS/MSD results associated with SDG L1288012 for precision data.

Dissolved Gases (Methane, Ethane, and Ethene) by RSK 175:
Laboratory duplicate sample analyses were performed on client and non-client samples within the analytical batches. The primary/duplicate RPDs for dissolved gas analyses are within the laboratory control limit of 20%.

USEPA Method 6020B:
Laboratory duplicate samples were not analyzed. Precision data are not available for Refer to MS/MSD results for precision data.

General Chemistry (Alkalinity, Chloride, Sulfate, Nitrate, and TOC):
Laboratory duplicate sample analyses were performed on client samples and/or on non-client samples. The primary/duplicate RPDs for general chemistry parameters are within the laboratory control RPD limits or ± 1x RDL for groundwater results <5X the RDL.

Surrogate Recoveries

USEPA Method 8260D:
The surrogate recovery results for the samples, laboratory control samples, and the method blanks are within the laboratory surrogate control limits for all the analyses.

NWTPH-Gx Method:
The surrogate recovery results for the samples, laboratory control samples, and the method blanks are within the laboratory surrogate control limits for all analyses.

Laboratory Control Samples

USEPA Method 8260D:
Laboratory control sample/laboratory control sample duplicate (LCS/LCSD) or laboratory control sample (LCS) were analyzed by USEPA Method 8260D method. The LCS % Rs or LCS/LCSD % Rs and RPDs for all target compounds are within the laboratory control criteria for waters.

NWTPH-Gx Method:
The LCS % R, LCS/LCSD % Rs, and RPDs for the target compound (gasoline) are within the laboratory control criteria for waters.

Dissolved Gases (Methane, Ethane, and Ethene) by RSK 175:

The LCS/LCSD % Rs and RPDs for the target compound (dissolved gases) are within the laboratory control criteria for waters.

USEPA Method 6020B:
The LCS % R or LCS/LCSD % Rs and RPDs for the target compound (iron and manganese) are within the laboratory control criteria for waters.

General Chemistry (Alkalinity, Chloride, Sulfate, Nitrate, and TOC):
The LCS % Rs for general chemistry parameters are within the laboratory control criteria for waters.

Matrix Spike/Matrix Spike Duplicates

USEPA Method 8260D:
MS/MSD analyses were not performed. Refer to LCS results. No action was taken other than to note this.

NWTPH-Gx Method:
MS/MSD analyses were not performed. Refer to LCS results. No action was taken other than to note this.

Dissolved Gases (Methane, Ethane, and Ethene) by RSK 175:
MS/MSD analyses were not performed. Refer to LCS results and field duplicate sample for accuracy and precision data.

USEPA Method 6020B:
MS/MSD analyses were performed on non-client samples within the analytical batches. The MS/MSD % Rs and RPD were acceptable and within laboratory control limit criteria for water samples with the following discussion:

- SDG L1291220: Sample MW-161-120120 manganese spike is below criteria and laboratory qualified (V). No action is needed since the sample amount is > 4X the spike amount.

General Chemistry (Alkalinity, Chloride, Sulfate, Nitrate, and TOC):
MS or MS/MSD analyses were performed on client and/or non-client samples within the analytical batches. In cases where MS/MSD spike analyses are not performed refer to LCS/LCSD or laboratory duplicate data for accuracy and precision data. The MS/MSD % Rs and RPDs are acceptable and within laboratory control limit criteria for water samples.

Other Quality Control Issues

No laboratory quality control issues were identified in the laboratory report with the following discussions:

- Electronic data deliverables (EDDs) for these SDGs were provided by the laboratory and data validator qualifiers were entered. In some cases, different chemical synonyms are used between the EDD and the hardcopy however associated Chemical Abstracts Service (CAS) numbers are provided in the EDD to confirm chemical identifications.

Compound Quantitation Limits

Results of the analyses were reported based on laboratory RDLs for all compounds. RDLs for selected compounds are elevated due to method-required dilutions.

Data Assessment

The laboratory data reported for this project were reviewed based on the criteria outlined in:

- USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (USEPA, 2017); and
- USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Superfund Methods Data Review (USEPA, 2017).

Data qualifiers are assigned and laboratory report pages with qualifiers are attached. All data, including qualified data, are judged to be acceptable for their intended use.

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	2.73 J+	C5	0.548	1.00	1	11/30/2020 23:17	WG1584116
Acrylonitrile	U		0.0760	0.500	1	11/30/2020 23:17	WG1584116
Benzene	0.0850		0.0160	0.0400	1	11/30/2020 23:17	WG1584116
Bromobenzene	U		0.0420	0.500	1	11/30/2020 23:17	WG1584116
Bromodichloromethane	U		0.0315	0.100	1	11/30/2020 23:17	WG1584116
Bromoform	U		0.239	1.00	1	11/30/2020 23:17	WG1584116
Bromomethane	U		0.148	0.500	1	11/30/2020 23:17	WG1584116
n-Butylbenzene	U		0.153	0.500	1	11/30/2020 23:17	WG1584116
sec-Butylbenzene	U		0.101	0.500	1	11/30/2020 23:17	WG1584116
tert-Butylbenzene	U		0.0620	0.200	1	11/30/2020 23:17	WG1584116
Carbon tetrachloride	U		0.0432	0.200	1	11/30/2020 23:17	WG1584116
Chlorobenzene	U		0.0229	0.100	1	11/30/2020 23:17	WG1584116
Chlorodibromomethane	U		0.0180	0.100	1	11/30/2020 23:17	WG1584116
Chloroethane	U		0.0432	0.200	1	11/30/2020 23:17	WG1584116
Chloroform	U		0.0166	0.100	1	11/30/2020 23:17	WG1584116
Chloromethane	U		0.0556	0.500	1	11/30/2020 23:17	WG1584116
2-Chlorotoluene	U		0.0368	0.100	1	11/30/2020 23:17	WG1584116
4-Chlorotoluene	U		0.0452	0.200	1	11/30/2020 23:17	WG1584116
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	11/30/2020 23:17	WG1584116
1,2-Dibromoethane	U		0.0210	0.100	1	11/30/2020 23:17	WG1584116
Dibromomethane	U		0.0400	0.200	1	11/30/2020 23:17	WG1584116
1,2-Dichlorobenzene	U		0.0580	0.200	1	11/30/2020 23:17	WG1584116
1,3-Dichlorobenzene	U		0.0680	0.200	1	11/30/2020 23:17	WG1584116
1,4-Dichlorobenzene	U		0.0788	0.200	1	11/30/2020 23:17	WG1584116
Dichlorodifluoromethane	U		0.0327	0.100	1	11/30/2020 23:17	WG1584116
1,1-Dichloroethane	0.0680	J	0.0230	0.100	1	11/30/2020 23:17	WG1584116
1,2-Dichloroethane	U		0.0190	0.100	1	11/30/2020 23:17	WG1584116
1,1-Dichloroethene	U		0.0200	0.100	1	11/30/2020 23:17	WG1584116
cis-1,2-Dichloroethene	7.91		0.0276	0.100	1	11/30/2020 23:17	WG1584116
trans-1,2-Dichloroethene	U		0.0572	0.200	1	11/30/2020 23:17	WG1584116
1,2-Dichloropropane	U		0.0508	0.200	1	11/30/2020 23:17	WG1584116
1,1-Dichloropropene	U		0.0280	0.100	1	11/30/2020 23:17	WG1584116
1,3-Dichloropropane	U		0.0700	0.200	1	11/30/2020 23:17	WG1584116
cis-1,3-Dichloropropene	U		0.0271	0.100	1	11/30/2020 23:17	WG1584116
trans-1,3-Dichloropropene	U		0.0612	0.200	1	11/30/2020 23:17	WG1584116
2,2-Dichloropropane	U		0.0317	0.100	1	11/30/2020 23:17	WG1584116
Di-isopropyl ether	U		0.0140	0.0400	1	11/30/2020 23:17	WG1584116
Ethylbenzene	U		0.0212	0.100	1	11/30/2020 23:17	WG1584116
Hexachloro-1,3-butadiene	U		0.508	1.00	1	11/30/2020 23:17	WG1584116
Isopropylbenzene	U		0.0345	0.100	1	11/30/2020 23:17	WG1584116
p-Isopropyltoluene	U		0.0932	0.200	1	11/30/2020 23:17	WG1584116
2-Butanone (MEK)	U		0.500	1.00	1	11/30/2020 23:17	WG1584116
Methylene Chloride	U		0.265	1.00	1	11/30/2020 23:17	WG1584116
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	11/30/2020 23:17	WG1584116
Methyl tert-butyl ether	U		0.0118	0.0400	1	11/30/2020 23:17	WG1584116
Naphthalene	U UJ	C3	0.124	0.500	1	11/30/2020 23:17	WG1584116
n-Propylbenzene	U		0.0472	0.200	1	11/30/2020 23:17	WG1584116
Styrene	U		0.109	0.500	1	11/30/2020 23:17	WG1584116
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	11/30/2020 23:17	WG1584116
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	11/30/2020 23:17	WG1584116
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	11/30/2020 23:17	WG1584116
Tetrachloroethene	U		0.0280	0.100	1	11/30/2020 23:17	WG1584116
Toluene	0.0520	J	0.0500	0.200	1	11/30/2020 23:17	WG1584116
1,2,3-Trichlorobenzene	U UJ	C4	0.0250	0.500	1	11/30/2020 23:17	WG1584116
1,2,4-Trichlorobenzene	U		0.193	0.500	1	11/30/2020 23:17	WG1584116
1,1,1-Trichloroethane	U		0.0110	0.100	1	11/30/2020 23:17	WG1584116

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Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,1,2-Trichloroethane	U		0.0353	0.100	1	11/30/2020 23:17	WG1584116
Trichloroethene	U		0.0160	0.0400	1	11/30/2020 23:17	WG1584116
Trichlorofluoromethane	U		0.0200	0.100	1	11/30/2020 23:17	WG1584116
1,2,3-Trichloropropane	U		0.204	0.500	1	11/30/2020 23:17	WG1584116
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	11/30/2020 23:17	WG1584116
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	11/30/2020 23:17	WG1584116
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	11/30/2020 23:17	WG1584116
Vinyl chloride	0.109		0.0273	0.100	1	11/30/2020 23:17	WG1584116
Xylenes, Total	U		0.191	0.260	1	11/30/2020 23:17	WG1584116
Ethyl Ether	U		0.0170	0.100	1	11/30/2020 23:17	WG1584116
Tetrahydrofuran	U		0.0900	0.500	1	11/30/2020 23:17	WG1584116
Iodomethane	U		0.242	0.500	1	11/30/2020 23:17	WG1584116
Allyl chloride	U		0.580	1.00	1	11/30/2020 23:17	WG1584116
Trans-1,4-Dichloro-2-butene	U		0.0560	0.200	1	11/30/2020 23:17	WG1584116
(S) Toluene-d8	*102*			*75.0-131*		*11/30/2020 23:17*	WG1584116
(S) 4-Bromofluorobenzene	*95.6*			*67.0-138*		*11/30/2020 23:17*	WG1584116
(S) 1,2-Dichloroethane-d4	*114*			*70.0-130*		*11/30/2020 23:17*	WG1584116

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Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U		0.548	1.00	1	11/30/2020 23:36	WG1584116
Acrylonitrile	U		0.0760	0.500	1	11/30/2020 23:36	WG1584116
Benzene	2.97		0.0160	0.0400	1	11/30/2020 23:36	WG1584116
Bromobenzene	U		0.0420	0.500	1	11/30/2020 23:36	WG1584116
Bromodichloromethane	U		0.0315	0.100	1	11/30/2020 23:36	WG1584116
Bromoform	U		0.239	1.00	1	11/30/2020 23:36	WG1584116
Bromomethane	U		0.148	0.500	1	11/30/2020 23:36	WG1584116
n-Butylbenzene	U		0.153	0.500	1	11/30/2020 23:36	WG1584116
sec-Butylbenzene	U		0.101	0.500	1	11/30/2020 23:36	WG1584116
tert-Butylbenzene	U		0.0620	0.200	1	11/30/2020 23:36	WG1584116
Carbon tetrachloride	U		0.0432	0.200	1	11/30/2020 23:36	WG1584116
Chlorobenzene	U		0.0229	0.100	1	11/30/2020 23:36	WG1584116
Chlorodibromomethane	U		0.0180	0.100	1	11/30/2020 23:36	WG1584116
Chloroethane	U		0.0432	0.200	1	11/30/2020 23:36	WG1584116
Chloroform	U		0.0166	0.100	1	11/30/2020 23:36	WG1584116
Chloromethane	U		0.0556	0.500	1	11/30/2020 23:36	WG1584116
2-Chlorotoluene	U		0.0368	0.100	1	11/30/2020 23:36	WG1584116
4-Chlorotoluene	U		0.0452	0.200	1	11/30/2020 23:36	WG1584116
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	11/30/2020 23:36	WG1584116
1,2-Dibromoethane	U		0.0210	0.100	1	11/30/2020 23:36	WG1584116
Dibromomethane	U		0.0400	0.200	1	11/30/2020 23:36	WG1584116
1,2-Dichlorobenzene	U		0.0580	0.200	1	11/30/2020 23:36	WG1584116
1,3-Dichlorobenzene	U		0.0680	0.200	1	11/30/2020 23:36	WG1584116
1,4-Dichlorobenzene	U		0.0788	0.200	1	11/30/2020 23:36	WG1584116
Dichlorodifluoromethane	U		0.0327	0.100	1	11/30/2020 23:36	WG1584116
1,1-Dichloroethane	0.0240	J	0.0230	0.100	1	11/30/2020 23:36	WG1584116
1,2-Dichloroethane	U		0.0190	0.100	1	11/30/2020 23:36	WG1584116
1,1-Dichloroethene	U		0.0200	0.100	1	11/30/2020 23:36	WG1584116
cis-1,2-Dichloroethene	0.997		0.0276	0.100	1	11/30/2020 23:36	WG1584116
trans-1,2-Dichloroethene	U		0.0572	0.200	1	11/30/2020 23:36	WG1584116
1,2-Dichloropropane	U		0.0508	0.200	1	11/30/2020 23:36	WG1584116
1,1-Dichloropropene	U		0.0280	0.100	1	11/30/2020 23:36	WG1584116
1,3-Dichloropropane	U		0.0700	0.200	1	11/30/2020 23:36	WG1584116
cis-1,3-Dichloropropene	U		0.0271	0.100	1	11/30/2020 23:36	WG1584116
trans-1,3-Dichloropropene	U		0.0612	0.200	1	11/30/2020 23:36	WG1584116
2,2-Dichloropropane	U		0.0317	0.100	1	11/30/2020 23:36	WG1584116
Di-isopropyl ether	0.0670 J+	C5	0.0140	0.0400	1	11/30/2020 23:36	WG1584116
Ethylbenzene	U		0.0212	0.100	1	11/30/2020 23:36	WG1584116
Hexachloro-1,3-butadiene	U		0.508	1.00	1	11/30/2020 23:36	WG1584116
Isopropylbenzene	U		0.0345	0.100	1	11/30/2020 23:36	WG1584116
p-Isopropyltoluene	U		0.0932	0.200	1	11/30/2020 23:36	WG1584116
2-Butanone (MEK)	U		0.500	1.00	1	11/30/2020 23:36	WG1584116
Methylene Chloride	U		0.265	1.00	1	11/30/2020 23:36	WG1584116
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	11/30/2020 23:36	WG1584116
Methyl tert-butyl ether	U		0.0118	0.0400	1	11/30/2020 23:36	WG1584116
Naphthalene	U J-	C3	0.124	0.500	1	11/30/2020 23:36	WG1584116
n-Propylbenzene	U		0.0472	0.200	1	11/30/2020 23:36	WG1584116
Styrene	U		0.109	0.500	1	11/30/2020 23:36	WG1584116
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	11/30/2020 23:36	WG1584116
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	11/30/2020 23:36	WG1584116
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	11/30/2020 23:36	WG1584116
Tetrachloroethene	U		0.0280	0.100	1	11/30/2020 23:36	WG1584116
Toluene	U		0.0500	0.200	1	11/30/2020 23:36	WG1584116
1,2,3-Trichlorobenzene	U UJ	C4	0.0250	0.500	1	11/30/2020 23:36	WG1584116
1,2,4-Trichlorobenzene	U		0.193	0.500	1	11/30/2020 23:36	WG1584116
1,1,1-Trichloroethane	U		0.0110	0.100	1	11/30/2020 23:36	WG1584116

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1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,1,2-Trichloroethane	U		0.0353	0.100	1	11/30/2020 23:36	WG1584116
Trichloroethene	U		0.0160	0.0400	1	11/30/2020 23:36	WG1584116
Trichlorofluoromethane	U		0.0200	0.100	1	11/30/2020 23:36	WG1584116
1,2,3-Trichloropropane	U		0.204	0.500	1	11/30/2020 23:36	WG1584116
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	11/30/2020 23:36	WG1584116
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	11/30/2020 23:36	WG1584116
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	11/30/2020 23:36	WG1584116
Vinyl chloride	42.7		0.0273	0.100	1	11/30/2020 23:36	WG1584116
Xylenes, Total	U		0.191	0.260	1	11/30/2020 23:36	WG1584116
Ethyl Ether	0.103		0.0170	0.100	1	11/30/2020 23:36	WG1584116
Tetrahydrofuran	U		0.0900	0.500	1	11/30/2020 23:36	WG1584116
Iodomethane	U		0.242	0.500	1	11/30/2020 23:36	WG1584116
Allyl chloride	U		0.580	1.00	1	11/30/2020 23:36	WG1584116
Trans-1,4-Dichloro-2-butene	U		0.0560	0.200	1	11/30/2020 23:36	WG1584116
(S) Toluene-d8	*102*			*75.0-131*		*11/30/2020 23:36*	WG1584116
(S) 4-Bromofluorobenzene	*96.3*			*67.0-138*		*11/30/2020 23:36*	WG1584116
(S) 1,2-Dichloroethane-d4	*117*			*70.0-130*		*11/30/2020 23:36*	WG1584116

JC 1/10/2021

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Sulfate	122000		2970	25000	5	12/08/2020 09:50	WG1587718

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	1930		102	1000	1	12/04/2020 05:19	WG1585509

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	5090		140	500	5	12/04/2020 07:38	WG1585699
Manganese	628		3.52	25.0	5	12/04/2020 07:38	WG1585699

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	124 J		0.287	0.678	1	12/02/2020 11:25	WG1584472
Ethane	3.29 J		0.296	1.29	1	12/02/2020 11:25	WG1584472
Ethene	U		0.422	1.27	1	12/02/2020 11:25	WG1584472

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	2.21 J+	C5	0.548	1.00	1	12/08/2020 17:56	WG1588230
Acrylonitrile	U		0.0760	0.500	1	12/08/2020 17:56	WG1588230
Benzene	0.0580		0.0160	0.0400	1	12/08/2020 17:56	WG1588230
Bromobenzene	U		0.0420	0.500	1	12/08/2020 17:56	WG1588230
Bromodichloromethane	U		0.0315	0.100	1	12/08/2020 17:56	WG1588230
Bromoform	U		0.239	1.00	1	12/08/2020 17:56	WG1588230
Bromomethane	U		0.148	0.500	1	12/08/2020 17:56	WG1588230
n-Butylbenzene	U		0.153	0.500	1	12/08/2020 17:56	WG1588230
sec-Butylbenzene	U		0.101	0.500	1	12/08/2020 17:56	WG1588230
tert-Butylbenzene	U		0.0620	0.200	1	12/08/2020 17:56	WG1588230
Carbon tetrachloride	U		0.0432	0.200	1	12/08/2020 17:56	WG1588230
Chlorobenzene	U		0.0229	0.100	1	12/08/2020 17:56	WG1588230
Chlorodibromomethane	U		0.0180	0.100	1	12/08/2020 17:56	WG1588230
Chloroethane	U		0.0432	0.200	1	12/08/2020 17:56	WG1588230
Chloroform	0.0590	J	0.0166	0.100	1	12/08/2020 17:56	WG1588230
Chloromethane	U		0.0556	0.500	1	12/08/2020 17:56	WG1588230
2-Chlorotoluene	U		0.0368	0.100	1	12/08/2020 17:56	WG1588230
4-Chlorotoluene	U		0.0452	0.200	1	12/08/2020 17:56	WG1588230
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	12/08/2020 17:56	WG1588230
1,2-Dibromoethane	U		0.0210	0.100	1	12/08/2020 17:56	WG1588230
Dibromomethane	U		0.0400	0.200	1	12/08/2020 17:56	WG1588230
1,2-Dichlorobenzene	U		0.0580	0.200	1	12/08/2020 17:56	WG1588230
1,3-Dichlorobenzene	U		0.0680	0.200	1	12/08/2020 17:56	WG1588230
1,4-Dichlorobenzene	U		0.0788	0.200	1	12/08/2020 17:56	WG1588230
Dichlorodifluoromethane	U		0.0327	0.100	1	12/08/2020 17:56	WG1588230
1,1-Dichloroethane	2.15		0.0230	0.100	1	12/08/2020 17:56	WG1588230
1,2-Dichloroethane	0.502		0.0190	0.100	1	12/08/2020 17:56	WG1588230
1,1-Dichloroethene	0.557		0.0200	0.100	1	12/08/2020 17:56	WG1588230
cis-1,2-Dichloroethene	37.0		0.0276	0.100	1	12/08/2020 17:56	WG1588230
trans-1,2-Dichloroethene	0.196	J	0.0572	0.200	1	12/08/2020 17:56	WG1588230
1,2-Dichloropropane	0.933		0.0508	0.200	1	12/08/2020 17:56	WG1588230

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1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,1-Dichloropropene	U		0.0280	0.100	1	12/08/2020 17:56	WG1588230
1,3-Dichloropropane	U		0.0700	0.200	1	12/08/2020 17:56	WG1588230
cis-1,3-Dichloropropene	U		0.0271	0.100	1	12/08/2020 17:56	WG1588230
trans-1,3-Dichloropropene	U		0.0612	0.200	1	12/08/2020 17:56	WG1588230
2,2-Dichloropropane	U		0.0317	0.100	1	12/08/2020 17:56	WG1588230
Di-isopropyl ether	U		0.0140	0.0400	1	12/08/2020 17:56	WG1588230
Ethylbenzene	U		0.0212	0.100	1	12/08/2020 17:56	WG1588230
Hexachloro-1,3-butadiene	U		0.508	1.00	1	12/08/2020 17:56	WG1588230
Isopropylbenzene	U		0.0345	0.100	1	12/08/2020 17:56	WG1588230
p-Isopropyltoluene	U		0.0932	0.200	1	12/08/2020 17:56	WG1588230
2-Butanone (MEK)	U		0.500	1.00	1	12/08/2020 17:56	WG1588230
Methylene Chloride	U		0.265	1.00	1	12/08/2020 17:56	WG1588230
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	12/08/2020 17:56	WG1588230
Methyl tert-butyl ether	U		0.0118	0.0400	1	12/08/2020 17:56	WG1588230
Naphthalene	U		0.124	0.500	1	12/08/2020 17:56	WG1588230
n-Propylbenzene	U		0.0472	0.200	1	12/08/2020 17:56	WG1588230
Styrene	U		0.109	0.500	1	12/08/2020 17:56	WG1588230
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	12/08/2020 17:56	WG1588230
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	12/08/2020 17:56	WG1588230
1,1,2-Trichlorotrifluoroethane	0.338		0.0270	0.100	1	12/08/2020 17:56	WG1588230
Tetrachloroethene	44.4		0.0280	0.100	1	12/08/2020 17:56	WG1588230
Toluene	0.172	J	0.0500	0.200	1	12/08/2020 17:56	WG1588230
1,2,3-Trichlorobenzene	U		0.0250	0.500	1	12/08/2020 17:56	WG1588230
1,2,4-Trichlorobenzene	U		0.193	0.500	1	12/08/2020 17:56	WG1588230
1,1,1-Trichloroethane	0.179		0.0110	0.100	1	12/08/2020 17:56	WG1588230
1,1,2-Trichloroethane	U		0.0353	0.100	1	12/08/2020 17:56	WG1588230
Trichloroethene	16.2		0.0160	0.0400	1	12/08/2020 17:56	WG1588230
Trichlorofluoromethane	U		0.0200	0.100	1	12/08/2020 17:56	WG1588230
1,2,3-Trichloropropane	U		0.204	0.500	1	12/08/2020 17:56	WG1588230
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	12/08/2020 17:56	WG1588230
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	12/08/2020 17:56	WG1588230
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	12/08/2020 17:56	WG1588230
Vinyl chloride	1.52		0.0273	0.100	1	12/08/2020 17:56	WG1588230
Xylenes, Total	0.376		0.191	0.260	1	12/08/2020 17:56	WG1588230
Ethyl Ether	U		0.0170	0.100	1	12/08/2020 17:56	WG1588230
Tetrahydrofuran	U		0.0900	0.500	1	12/08/2020 17:56	WG1588230
Iodomethane	U		0.242	0.500	1	12/08/2020 17:56	WG1588230
Allyl chloride	U		0.580	1.00	1	12/08/2020 17:56	WG1588230
Trans-1,4-Dichloro-2-butene	U		0.0560	0.200	1	12/08/2020 17:56	WG1588230
(S) Toluene-d8	*101*			*75.0-131*		*12/08/2020 17:56*	WG1588230
(S) 4-Bromofluorobenzene	*99.7*			*67.0-138*		*12/08/2020 17:56*	WG1588230
(S) 1,2-Dichloroethane-d4	*111*			*70.0-130*		*12/08/2020 17:56*	WG1588230

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Wet Chemistry by Method 2320 B-2011

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Alkalinity	152000		8450	20000	1	12/06/2020 16:57	WG1586891

Sample Narrative:

L1290835-02 WG1586891: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 9056A

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Chloride	28700		379	1000	1	12/01/2020 14:10	WG1584534
Nitrate	4000		48.0	100	1	12/01/2020 14:10	WG1584534
Sulfate	25500		594	5000	1	12/01/2020 14:10	WG1584534

Wet Chemistry by Method 9060A

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
TOC (Total Organic Carbon)	2720		102	1000	1	12/04/2020 05:43	WG1585509

Metals (ICPMS) by Method 6020B

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Iron	149	J	28.1	100	1	12/04/2020 02:55	WG1585699
Manganese	6.85	J ~~B~~	0.704	5.00	1	12/04/2020 02:55	WG1585699

Volatile Organic Compounds (GC) by Method NWTPHGX

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Gasoline Range Organics-NWTPH	U		31.6	100	1	12/07/2020 08:29	WG1587412
(S) a,a,a-Trifluorotoluene(FID)	*96.3*			*78.0-120*		*12/07/2020 08:29*	WG1587412

Volatile Organic Compounds (GC) by Method RSK175

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Methane	U	UJ	0.287	0.678	1	12/02/2020 11:28	WG1584472
Ethane	U		0.296	1.29	1	12/02/2020 11:28	WG1584472
Ethene	U		0.422	1.27	1	12/02/2020 11:28	WG1584472

Volatile Organic Compounds (GC/MS) by Method 8260D

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Acetone	U		0.548	1.00	1	12/08/2020 18:15	WG1588230
Acrylonitrile	U		0.0760	0.500	1	12/08/2020 18:15	WG1588230
Benzene	U		0.0160	0.0400	1	12/08/2020 18:15	WG1588230
Bromobenzene	U		0.0420	0.500	1	12/08/2020 18:15	WG1588230
Bromodichloromethane	U		0.0315	0.100	1	12/08/2020 18:15	WG1588230
Bromoform	U		0.239	1.00	1	12/08/2020 18:15	WG1588230
Bromomethane	U		0.148	0.500	1	12/08/2020 18:15	WG1588230
n-Butylbenzene	U		0.153	0.500	1	12/08/2020 18:15	WG1588230
sec-Butylbenzene	U		0.101	0.500	1	12/08/2020 18:15	WG1588230
tert-Butylbenzene	U		0.0620	0.200	1	12/08/2020 18:15	WG1588230
Carbon tetrachloride	U		0.0432	0.200	1	12/08/2020 18:15	WG1588230
Chlorobenzene	U		0.0229	0.100	1	12/08/2020 18:15	WG1588230
Chlorodibromomethane	U		0.0180	0.100	1	12/08/2020 18:15	WG1588230

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Volatile Organic Compounds (GC/MS) by Method 8260D

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Chloroethane	U		0.0432	0.200	1	12/08/2020 18:15	WG1588230
Chloroform	0.515		0.0166	0.100	1	12/08/2020 18:15	WG1588230
Chloromethane	U		0.0556	0.500	1	12/08/2020 18:15	WG1588230
2-Chlorotoluene	U		0.0368	0.100	1	12/08/2020 18:15	WG1588230
4-Chlorotoluene	U		0.0452	0.200	1	12/08/2020 18:15	WG1588230
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	12/08/2020 18:15	WG1588230
1,2-Dibromoethane	U		0.0210	0.100	1	12/08/2020 18:15	WG1588230
Dibromomethane	U		0.0400	0.200	1	12/08/2020 18:15	WG1588230
1,2-Dichlorobenzene	U		0.0580	0.200	1	12/08/2020 18:15	WG1588230
1,3-Dichlorobenzene	U		0.0680	0.200	1	12/08/2020 18:15	WG1588230
1,4-Dichlorobenzene	U		0.0788	0.200	1	12/08/2020 18:15	WG1588230
Dichlorodifluoromethane	U		0.0327	0.100	1	12/08/2020 18:15	WG1588230
1,1-Dichloroethane	U		0.0230	0.100	1	12/08/2020 18:15	WG1588230
1,2-Dichloroethane	U		0.0190	0.100	1	12/08/2020 18:15	WG1588230
1,1-Dichloroethene	U		0.0200	0.100	1	12/08/2020 18:15	WG1588230
cis-1,2-Dichloroethene	U		0.0276	0.100	1	12/08/2020 18:15	WG1588230
trans-1,2-Dichloroethene	U		0.0572	0.200	1	12/08/2020 18:15	WG1588230
1,2-Dichloropropane	U		0.0508	0.200	1	12/08/2020 18:15	WG1588230
1,1-Dichloropropene	U		0.0280	0.100	1	12/08/2020 18:15	WG1588230
1,3-Dichloropropane	U		0.0700	0.200	1	12/08/2020 18:15	WG1588230
cis-1,3-Dichloropropene	U		0.0271	0.100	1	12/08/2020 18:15	WG1588230
trans-1,3-Dichloropropene	U		0.0612	0.200	1	12/08/2020 18:15	WG1588230
2,2-Dichloropropane	U		0.0317	0.100	1	12/08/2020 18:15	WG1588230
Di-isopropyl ether	U		0.0140	0.0400	1	12/08/2020 18:15	WG1588230
Ethylbenzene	U		0.0212	0.100	1	12/08/2020 18:15	WG1588230
Hexachloro-1,3-butadiene	U		0.508	1.00	1	12/08/2020 18:15	WG1588230
Isopropylbenzene	U		0.0345	0.100	1	12/08/2020 18:15	WG1588230
p-Isopropyltoluene	U		0.0932	0.200	1	12/08/2020 18:15	WG1588230
2-Butanone (MEK)	U		0.500	1.00	1	12/08/2020 18:15	WG1588230
Methylene Chloride	U		0.265	1.00	1	12/08/2020 18:15	WG1588230
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	12/08/2020 18:15	WG1588230
Methyl tert-butyl ether	U		0.0118	0.0400	1	12/08/2020 18:15	WG1588230
Naphthalene	U		0.124	0.500	1	12/08/2020 18:15	WG1588230
n-Propylbenzene	U		0.0472	0.200	1	12/08/2020 18:15	WG1588230
Styrene	U		0.109	0.500	1	12/08/2020 18:15	WG1588230
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	12/08/2020 18:15	WG1588230
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	12/08/2020 18:15	WG1588230
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	12/08/2020 18:15	WG1588230
Tetrachloroethene	1.94		0.0280	0.100	1	12/08/2020 18:15	WG1588230
Toluene	U		0.0500	0.200	1	12/08/2020 18:15	WG1588230
1,2,3-Trichlorobenzene	U		0.0250	0.500	1	12/08/2020 18:15	WG1588230
1,2,4-Trichlorobenzene	U		0.193	0.500	1	12/08/2020 18:15	WG1588230
1,1,1-Trichloroethane	U		0.0110	0.100	1	12/08/2020 18:15	WG1588230
1,1,2-Trichloroethane	U		0.0353	0.100	1	12/08/2020 18:15	WG1588230
Trichloroethene	0.156		0.0160	0.0400	1	12/08/2020 18:15	WG1588230
Trichlorofluoromethane	U		0.0200	0.100	1	12/08/2020 18:15	WG1588230
1,2,3-Trichloropropane	U		0.204	0.500	1	12/08/2020 18:15	WG1588230
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	12/08/2020 18:15	WG1588230
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	12/08/2020 18:15	WG1588230
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	12/08/2020 18:15	WG1588230
Vinyl chloride	U		0.0273	0.100	1	12/08/2020 18:15	WG1588230
Xylenes, Total	0.202	J	0.191	0.260	1	12/08/2020 18:15	WG1588230
Ethyl Ether	U		0.0170	0.100	1	12/08/2020 18:15	WG1588230
Tetrahydrofuran	U		0.0900	0.500	1	12/08/2020 18:15	WG1588230
Iodomethane	U		0.242	0.500	1	12/08/2020 18:15	WG1588230
Allyl chloride	U		0.580	1.00	1	12/08/2020 18:15	WG1588230

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Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Trans-1,4-Dichloro-2-butene	U		0.0560	0.200	1	12/08/2020 18:15	WG1588230
(S) Toluene-d8	*102*			*75.0-131*		*12/08/2020 18:15*	WG1588230
(S) 4-Bromofluorobenzene	*99.3*			*67.0-138*		*12/08/2020 18:15*	WG1588230
(S) 1,2-Dichloroethane-d4	*110*			*70.0-130*		*12/08/2020 18:15*	WG1588230

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Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Sulfate	121000		2970	25000	5	12/08/2020 04:20	WG1587718

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	1700		102	1000	1	12/04/2020 05:57	WG1585509

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	5450		140	500	5	12/04/2020 07:41	WG1585699
Manganese	611		3.52	25.0	5	12/04/2020 07:41	WG1585699

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	87.5 J		0.287	0.678	1	12/02/2020 11:58	WG1584472
Ethane	U UJ		0.296	1.29	1	12/02/2020 11:58	WG1584472
Ethene	U		0.422	1.27	1	12/02/2020 11:58	WG1584472

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	1.06 J+	C5	0.548	1.00	1	12/08/2020 18:35	WG1588230
Acrylonitrile	U		0.0760	0.500	1	12/08/2020 18:35	WG1588230
Benzene	0.0560		0.0160	0.0400	1	12/08/2020 18:35	WG1588230
Bromobenzene	U		0.0420	0.500	1	12/08/2020 18:35	WG1588230
Bromodichloromethane	U		0.0315	0.100	1	12/08/2020 18:35	WG1588230
Bromoform	U		0.239	1.00	1	12/08/2020 18:35	WG1588230
Bromomethane	U		0.148	0.500	1	12/08/2020 18:35	WG1588230
n-Butylbenzene	U		0.153	0.500	1	12/08/2020 18:35	WG1588230
sec-Butylbenzene	U		0.101	0.500	1	12/08/2020 18:35	WG1588230
tert-Butylbenzene	U		0.0620	0.200	1	12/08/2020 18:35	WG1588230
Carbon tetrachloride	U		0.0432	0.200	1	12/08/2020 18:35	WG1588230
Chlorobenzene	U		0.0229	0.100	1	12/08/2020 18:35	WG1588230
Chlorodibromomethane	U		0.0180	0.100	1	12/08/2020 18:35	WG1588230
Chloroethane	U		0.0432	0.200	1	12/08/2020 18:35	WG1588230
Chloroform	U		0.0166	0.100	1	12/08/2020 18:35	WG1588230
Chloromethane	U		0.0556	0.500	1	12/08/2020 18:35	WG1588230
2-Chlorotoluene	U		0.0368	0.100	1	12/08/2020 18:35	WG1588230
4-Chlorotoluene	U		0.0452	0.200	1	12/08/2020 18:35	WG1588230
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	12/08/2020 18:35	WG1588230
1,2-Dibromoethane	U		0.0210	0.100	1	12/08/2020 18:35	WG1588230
Dibromomethane	U		0.0400	0.200	1	12/08/2020 18:35	WG1588230
1,2-Dichlorobenzene	U		0.0580	0.200	1	12/08/2020 18:35	WG1588230
1,3-Dichlorobenzene	U		0.0680	0.200	1	12/08/2020 18:35	WG1588230
1,4-Dichlorobenzene	U		0.0788	0.200	1	12/08/2020 18:35	WG1588230
Dichlorodifluoromethane	U		0.0327	0.100	1	12/08/2020 18:35	WG1588230
1,1-Dichloroethane	2.17		0.0230	0.100	1	12/08/2020 18:35	WG1588230
1,2-Dichloroethane	0.511		0.0190	0.100	1	12/08/2020 18:35	WG1588230
1,1-Dichloroethene	0.565		0.0200	0.100	1	12/08/2020 18:35	WG1588230
cis-1,2-Dichloroethene	36.6		0.0276	0.100	1	12/08/2020 18:35	WG1588230
trans-1,2-Dichloroethene	0.188	J	0.0572	0.200	1	12/08/2020 18:35	WG1588230
1,2-Dichloropropane	0.781		0.0508	0.200	1	12/08/2020 18:35	WG1588230

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Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,1-Dichloropropene	U		0.0280	0.100	1	12/08/2020 18:35	WG1588230
1,3-Dichloropropane	U		0.0700	0.200	1	12/08/2020 18:35	WG1588230
cis-1,3-Dichloropropene	U		0.0271	0.100	1	12/08/2020 18:35	WG1588230
trans-1,3-Dichloropropene	U		0.0612	0.200	1	12/08/2020 18:35	WG1588230
2,2-Dichloropropane	U		0.0317	0.100	1	12/08/2020 18:35	WG1588230
Di-isopropyl ether	U		0.0140	0.0400	1	12/08/2020 18:35	WG1588230
Ethylbenzene	0.0660	J	0.0212	0.100	1	12/08/2020 18:35	WG1588230
Hexachloro-1,3-butadiene	U		0.508	1.00	1	12/08/2020 18:35	WG1588230
Isopropylbenzene	U		0.0345	0.100	1	12/08/2020 18:35	WG1588230
p-Isopropyltoluene	U		0.0932	0.200	1	12/08/2020 18:35	WG1588230
2-Butanone (MEK)	U		0.500	1.00	1	12/08/2020 18:35	WG1588230
Methylene Chloride	U		0.265	1.00	1	12/08/2020 18:35	WG1588230
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	12/08/2020 18:35	WG1588230
Methyl tert-butyl ether	U		0.0118	0.0400	1	12/08/2020 18:35	WG1588230
Naphthalene	U		0.124	0.500	1	12/08/2020 18:35	WG1588230
n-Propylbenzene	U		0.0472	0.200	1	12/08/2020 18:35	WG1588230
Styrene	U		0.109	0.500	1	12/08/2020 18:35	WG1588230
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	12/08/2020 18:35	WG1588230
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	12/08/2020 18:35	WG1588230
1,1,2-Trichlorotrifluoroethane	0.321		0.0270	0.100	1	12/08/2020 18:35	WG1588230
Tetrachloroethene	39.3		0.0280	0.100	1	12/08/2020 18:35	WG1588230
Toluene	0.208		0.0500	0.200	1	12/08/2020 18:35	WG1588230
1,2,3-Trichlorobenzene	U		0.0250	0.500	1	12/08/2020 18:35	WG1588230
1,2,4-Trichlorobenzene	U		0.193	0.500	1	12/08/2020 18:35	WG1588230
1,1,1-Trichloroethane	0.164		0.0110	0.100	1	12/08/2020 18:35	WG1588230
1,1,2-Trichloroethane	U		0.0353	0.100	1	12/08/2020 18:35	WG1588230
Trichloroethene	15.6		0.0160	0.0400	1	12/08/2020 18:35	WG1588230
Trichlorofluoromethane	U		0.0200	0.100	1	12/08/2020 18:35	WG1588230
1,2,3-Trichloropropane	U		0.204	0.500	1	12/08/2020 18:35	WG1588230
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	12/08/2020 18:35	WG1588230
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	12/08/2020 18:35	WG1588230
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	12/08/2020 18:35	WG1588230
Vinyl chloride	1.47		0.0273	0.100	1	12/08/2020 18:35	WG1588230
Xylenes, Total	0.435		0.191	0.260	1	12/08/2020 18:35	WG1588230
Ethyl Ether	U		0.0170	0.100	1	12/08/2020 18:35	WG1588230
Tetrahydrofuran	U		0.0900	0.500	1	12/08/2020 18:35	WG1588230
Iodomethane	U		0.242	0.500	1	12/08/2020 18:35	WG1588230
Allyl chloride	U		0.580	1.00	1	12/08/2020 18:35	WG1588230
Trans-1,4-Dichloro-2-butene	U		0.0560	0.200	1	12/08/2020 18:35	WG1588230
(S) Toluene-d8	*99.9*			*75.0-131*		*12/08/2020 18:35*	WG1588230
(S) 4-Bromofluorobenzene	*98.3*			*67.0-138*		*12/08/2020 18:35*	WG1588230
(S) 1,2-Dichloroethane-d4	*110*			*70.0-130*		*12/08/2020 18:35*	WG1588230

JC 1/10/2021

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Sulfate	3650	J	594	5000	1	12/08/2020 10:03	WG1587718

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	1660		102	1000	1	12/04/2020 06:13	WG1585509

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	937		28.1	100	1	12/04/2020 01:27	WG1585699
Manganese	453		3.52	25.0	5	12/04/2020 07:45	WG1585699

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	318		0.287	0.678	1	12/02/2020 13:11	WG1584472
Ethane	U		0.296	1.29	1	12/02/2020 13:11	WG1584472
Ethene	U		0.422	1.27	1	12/02/2020 13:11	WG1584472

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	1.67 J+	C5	0.548	1.00	1	12/08/2020 18:54	WG1588230
Acrylonitrile	U		0.0760	0.500	1	12/08/2020 18:54	WG1588230
Benzene	U		0.0160	0.0400	1	12/08/2020 18:54	WG1588230
Bromobenzene	U		0.0420	0.500	1	12/08/2020 18:54	WG1588230
Bromodichloromethane	U		0.0315	0.100	1	12/08/2020 18:54	WG1588230
Bromoform	U		0.239	1.00	1	12/08/2020 18:54	WG1588230
Bromomethane	U		0.148	0.500	1	12/08/2020 18:54	WG1588230
n-Butylbenzene	U		0.153	0.500	1	12/08/2020 18:54	WG1588230
sec-Butylbenzene	U		0.101	0.500	1	12/08/2020 18:54	WG1588230
tert-Butylbenzene	U		0.0620	0.200	1	12/08/2020 18:54	WG1588230
Carbon tetrachloride	U		0.0432	0.200	1	12/08/2020 18:54	WG1588230
Chlorobenzene	U		0.0229	0.100	1	12/08/2020 18:54	WG1588230
Chlorodibromomethane	U		0.0180	0.100	1	12/08/2020 18:54	WG1588230
Chloroethane	1.31		0.0432	0.200	1	12/08/2020 18:54	WG1588230
Chloroform	U		0.0166	0.100	1	12/08/2020 18:54	WG1588230
Chloromethane	U		0.0556	0.500	1	12/08/2020 18:54	WG1588230
2-Chlorotoluene	U		0.0368	0.100	1	12/08/2020 18:54	WG1588230
4-Chlorotoluene	U		0.0452	0.200	1	12/08/2020 18:54	WG1588230
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	12/08/2020 18:54	WG1588230
1,2-Dibromoethane	U		0.0210	0.100	1	12/08/2020 18:54	WG1588230
Dibromomethane	U		0.0400	0.200	1	12/08/2020 18:54	WG1588230
1,2-Dichlorobenzene	U		0.0580	0.200	1	12/08/2020 18:54	WG1588230
1,3-Dichlorobenzene	U		0.0680	0.200	1	12/08/2020 18:54	WG1588230
1,4-Dichlorobenzene	U		0.0788	0.200	1	12/08/2020 18:54	WG1588230
Dichlorodifluoromethane	U		0.0327	0.100	1	12/08/2020 18:54	WG1588230
1,1-Dichloroethane	U		0.0230	0.100	1	12/08/2020 18:54	WG1588230
1,2-Dichloroethane	U		0.0190	0.100	1	12/08/2020 18:54	WG1588230
1,1-Dichloroethene	0.483		0.0200	0.100	1	12/08/2020 18:54	WG1588230
cis-1,2-Dichloroethene	43.2		0.0276	0.100	1	12/08/2020 18:54	WG1588230
trans-1,2-Dichloroethene	0.228		0.0572	0.200	1	12/08/2020 18:54	WG1588230
1,2-Dichloropropane	U		0.0508	0.200	1	12/08/2020 18:54	WG1588230

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Volatile Organic Compounds (GC/MS) by Method 8260D

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
1,1-Dichloropropene	U		0.0280	0.100	1	12/08/2020 18:54	WG1588230
1,3-Dichloropropane	U		0.0700	0.200	1	12/08/2020 18:54	WG1588230
cis-1,3-Dichloropropene	U		0.0271	0.100	1	12/08/2020 18:54	WG1588230
trans-1,3-Dichloropropene	U		0.0612	0.200	1	12/08/2020 18:54	WG1588230
2,2-Dichloropropane	U		0.0317	0.100	1	12/08/2020 18:54	WG1588230
Di-isopropyl ether	U		0.0140	0.0400	1	12/08/2020 18:54	WG1588230
Ethylbenzene	0.108		0.0212	0.100	1	12/08/2020 18:54	WG1588230
Hexachloro-1,3-butadiene	U		0.508	1.00	1	12/08/2020 18:54	WG1588230
Isopropylbenzene	U		0.0345	0.100	1	12/08/2020 18:54	WG1588230
p-Isopropyltoluene	U		0.0932	0.200	1	12/08/2020 18:54	WG1588230
2-Butanone (MEK)	U		0.500	1.00	1	12/08/2020 18:54	WG1588230
Methylene Chloride	U		0.265	1.00	1	12/08/2020 18:54	WG1588230
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	12/08/2020 18:54	WG1588230
Methyl tert-butyl ether	U		0.0118	0.0400	1	12/08/2020 18:54	WG1588230
Naphthalene	U		0.124	0.500	1	12/08/2020 18:54	WG1588230
n-Propylbenzene	U		0.0472	0.200	1	12/08/2020 18:54	WG1588230
Styrene	U		0.109	0.500	1	12/08/2020 18:54	WG1588230
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	12/08/2020 18:54	WG1588230
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	12/08/2020 18:54	WG1588230
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	12/08/2020 18:54	WG1588230
Tetrachloroethene	0.828		0.0280	0.100	1	12/08/2020 18:54	WG1588230
Toluene	0.177	J	0.0500	0.200	1	12/08/2020 18:54	WG1588230
1,2,3-Trichlorobenzene	U		0.0250	0.500	1	12/08/2020 18:54	WG1588230
1,2,4-Trichlorobenzene	U		0.193	0.500	1	12/08/2020 18:54	WG1588230
1,1,1-Trichloroethane	U		0.0110	0.100	1	12/08/2020 18:54	WG1588230
1,1,2-Trichloroethane	U		0.0353	0.100	1	12/08/2020 18:54	WG1588230
Trichloroethene	10.2		0.0160	0.0400	1	12/08/2020 18:54	WG1588230
Trichlorofluoromethane	U		0.0200	0.100	1	12/08/2020 18:54	WG1588230
1,2,3-Trichloropropane	U		0.204	0.500	1	12/08/2020 18:54	WG1588230
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	12/08/2020 18:54	WG1588230
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	12/08/2020 18:54	WG1588230
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	12/08/2020 18:54	WG1588230
Vinyl chloride	3.59		0.0273	0.100	1	12/08/2020 18:54	WG1588230
Xylenes, Total	0.827		0.191	0.260	1	12/08/2020 18:54	WG1588230
Ethyl Ether	U		0.0170	0.100	1	12/08/2020 18:54	WG1588230
Tetrahydrofuran	U		0.0900	0.500	1	12/08/2020 18:54	WG1588230
Iodomethane	U		0.242	0.500	1	12/08/2020 18:54	WG1588230
Allyl chloride	U		0.580	1.00	1	12/08/2020 18:54	WG1588230
Trans-1,4-Dichloro-2-butene	U		0.0560	0.200	1	12/08/2020 18:54	WG1588230
(S) Toluene-d8	*101*			*75.0-131*		*12/08/2020 18:54*	WG1588230
(S) 4-Bromofluorobenzene	*99.9*			*67.0-138*		*12/08/2020 18:54*	WG1588230
(S) 1,2-Dichloroethane-d4	*111*			*70.0-130*		*12/08/2020 18:54*	WG1588230

JC
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Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	829000		8450	20000	1	12/06/2020 17:06	WG1586891

Sample Narrative:

L1290835-06 WG1586891: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	14100		379	1000	1	12/01/2020 14:22	WG1584534
Nitrate	U		48.0	100	1	12/01/2020 14:22	WG1584534
Sulfate	184000		2970	25000	5	12/08/2020 04:46	WG1587718

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	15300		102	1000	1	12/04/2020 06:36	WG1585509

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	31000		1400	5000	50	12/04/2020 07:48	WG1585699
Manganese	11500		70.4	500	100	12/04/2020 08:24	WG1585699

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	U		31.6	100	1	12/07/2020 09:20	WG1587412
(S) a,a,a-Trifluorotoluene(FID)	*95.5*			*78.0-120*		*12/07/2020 09:20*	WG1587412

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	3100		0.287	0.678	1	12/02/2020 13:19	WG1584472
Ethane	16.4		0.296	1.29	1	12/02/2020 13:19	WG1584472
Ethene	U		0.422	1.27	1	12/02/2020 13:19	WG1584472

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	5.49 J+	C5	0.548	1.00	1	12/08/2020 19:13	WG1588230
Acrylonitrile	U		0.0760	0.500	1	12/08/2020 19:13	WG1588230
Benzene	0.0290	J	0.0160	0.0400	1	12/08/2020 19:13	WG1588230
Bromobenzene	U		0.0420	0.500	1	12/08/2020 19:13	WG1588230
Bromodichloromethane	U		0.0315	0.100	1	12/08/2020 19:13	WG1588230
Bromoform	U		0.239	1.00	1	12/08/2020 19:13	WG1588230
Bromomethane	U		0.148	0.500	1	12/08/2020 19:13	WG1588230
n-Butylbenzene	U		0.153	0.500	1	12/08/2020 19:13	WG1588230
sec-Butylbenzene	U		0.101	0.500	1	12/08/2020 19:13	WG1588230
tert-Butylbenzene	U		0.0620	0.200	1	12/08/2020 19:13	WG1588230
Carbon tetrachloride	U		0.0432	0.200	1	12/08/2020 19:13	WG1588230
Chlorobenzene	U		0.0229	0.100	1	12/08/2020 19:13	WG1588230
Chlorodibromomethane	U		0.0180	0.100	1	12/08/2020 19:13	WG1588230

JC 1/10/2021

MW121-113020
Collected date/time: 11/30/20 14:20

SAMPLE RESULTS - 06

L1290835

Volatile Organic Compounds (GC/MS) by Method 8260D

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Chloroethane	U		0.0432	0.200	1	12/08/2020 19:13	WG1588230
Chloroform	U		0.0166	0.100	1	12/08/2020 19:13	WG1588230
Chloromethane	U		0.0556	0.500	1	12/08/2020 19:13	WG1588230
2-Chlorotoluene	U		0.0368	0.100	1	12/08/2020 19:13	WG1588230
4-Chlorotoluene	U		0.0452	0.200	1	12/08/2020 19:13	WG1588230
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	12/08/2020 19:13	WG1588230
1,2-Dibromoethane	U		0.0210	0.100	1	12/08/2020 19:13	WG1588230
Dibromomethane	U		0.0400	0.200	1	12/08/2020 19:13	WG1588230
1,2-Dichlorobenzene	U		0.0580	0.200	1	12/08/2020 19:13	WG1588230
1,3-Dichlorobenzene	U		0.0680	0.200	1	12/08/2020 19:13	WG1588230
1,4-Dichlorobenzene	U		0.0788	0.200	1	12/08/2020 19:13	WG1588230
Dichlorodifluoromethane	U		0.0327	0.100	1	12/08/2020 19:13	WG1588230
1,1-Dichloroethane	0.0320	J	0.0230	0.100	1	12/08/2020 19:13	WG1588230
1,2-Dichloroethane	U		0.0190	0.100	1	12/08/2020 19:13	WG1588230
1,1-Dichloroethene	U		0.0200	0.100	1	12/08/2020 19:13	WG1588230
cis-1,2-Dichloroethene	0.193		0.0276	0.100	1	12/08/2020 19:13	WG1588230
trans-1,2-Dichloroethene	U		0.0572	0.200	1	12/08/2020 19:13	WG1588230
1,2-Dichloropropane	U		0.0508	0.200	1	12/08/2020 19:13	WG1588230
1,1-Dichloropropene	U		0.0280	0.100	1	12/08/2020 19:13	WG1588230
1,3-Dichloropropane	U		0.0700	0.200	1	12/08/2020 19:13	WG1588230
cis-1,3-Dichloropropene	U		0.0271	0.100	1	12/08/2020 19:13	WG1588230
trans-1,3-Dichloropropene	U		0.0612	0.200	1	12/08/2020 19:13	WG1588230
2,2-Dichloropropane	U		0.0317	0.100	1	12/08/2020 19:13	WG1588230
Di-isopropyl ether	U		0.0140	0.0400	1	12/08/2020 19:13	WG1588230
Ethylbenzene	0.0410	J	0.0212	0.100	1	12/08/2020 19:13	WG1588230
Hexachloro-1,3-butadiene	U		0.508	1.00	1	12/08/2020 19:13	WG1588230
Isopropylbenzene	U		0.0345	0.100	1	12/08/2020 19:13	WG1588230
p-Isopropyltoluene	U		0.0932	0.200	1	12/08/2020 19:13	WG1588230
2-Butanone (MEK)	U		0.500	1.00	1	12/08/2020 19:13	WG1588230
Methylene Chloride	U		0.265	1.00	1	12/08/2020 19:13	WG1588230
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	12/08/2020 19:13	WG1588230
Methyl tert-butyl ether	U		0.0118	0.0400	1	12/08/2020 19:13	WG1588230
Naphthalene	U		0.124	0.500	1	12/08/2020 19:13	WG1588230
n-Propylbenzene	U		0.0472	0.200	1	12/08/2020 19:13	WG1588230
Styrene	U		0.109	0.500	1	12/08/2020 19:13	WG1588230
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	12/08/2020 19:13	WG1588230
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	12/08/2020 19:13	WG1588230
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	12/08/2020 19:13	WG1588230
Tetrachloroethene	U		0.0280	0.100	1	12/08/2020 19:13	WG1588230
Toluene	0.0670	J	0.0500	0.200	1	12/08/2020 19:13	WG1588230
1,2,3-Trichlorobenzene	U		0.0250	0.500	1	12/08/2020 19:13	WG1588230
1,2,4-Trichlorobenzene	U		0.193	0.500	1	12/08/2020 19:13	WG1588230
1,1,1-Trichloroethane	U		0.0110	0.100	1	12/08/2020 19:13	WG1588230
1,1,2-Trichloroethane	U		0.0353	0.100	1	12/08/2020 19:13	WG1588230
Trichloroethene	U		0.0160	0.0400	1	12/08/2020 19:13	WG1588230
Trichlorofluoromethane	U		0.0200	0.100	1	12/08/2020 19:13	WG1588230
1,2,3-Trichloropropane	U		0.204	0.500	1	12/08/2020 19:13	WG1588230
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	12/08/2020 19:13	WG1588230
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	12/08/2020 19:13	WG1588230
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	12/08/2020 19:13	WG1588230
Vinyl chloride	1.73		0.0273	0.100	1	12/08/2020 19:13	WG1588230
Xylenes, Total	0.272		0.191	0.260	1	12/08/2020 19:13	WG1588230
Ethyl Ether	0.199		0.0170	0.100	1	12/08/2020 19:13	WG1588230
Tetrahydrofuran	U		0.0900	0.500	1	12/08/2020 19:13	WG1588230
Iodomethane	U		0.242	0.500	1	12/08/2020 19:13	WG1588230
Allyl chloride	U		0.580	1.00	1	12/08/2020 19:13	WG1588230

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Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Trans-1,4-Dichloro-2-butene	U		0.0560	0.200	1	12/08/2020 19:13	WG1588230
(S) Toluene-d8	*101*			*75.0-131*		*12/08/2020 19:13*	WG1588230
(S) 4-Bromofluorobenzene	*98.1*			*67.0-138*		*12/08/2020 19:13*	WG1588230
(S) 1,2-Dichloroethane-d4	*108*			*70.0-130*		*12/08/2020 19:13*	WG1588230

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MW-301-113020

Collected date/time: 11/30/20 15:35

SAMPLE RESULTS - 07

L1290835

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Alkalinity	150000		8450	20000	1	12/06/2020 17:22	WG1586891

Sample Narrative:

L1290835-07 WG1586891: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chloride	28800		379	1000	1	12/01/2020 14:35	WG1584534
Nitrate	4010		48.0	100	1	12/01/2020 14:35	WG1584534
Sulfate	25500		594	5000	1	12/01/2020 14:35	WG1584534

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
TOC (Total Organic Carbon)	2810	~~B~~	102	1000	1	12/04/2020 23:21	WG1586926

Metals (ICPMS) by Method 6020B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Iron	413 J		28.1	100	1	12/04/2020 01:33	WG1585699
Manganese	15.0 J	~~B~~	0.704	5.00	1	12/04/2020 01:33	WG1585699

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Gasoline Range Organics-NWTPH	U		31.6	100	1	12/07/2020 09:42	WG1587412
(S) a,a,a-Trifluorotoluene(FID)	*96.4*			*78.0-120*		*12/07/2020 09:42*	WG1587412

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Methane	10.4 J		0.287	0.678	1	12/02/2020 13:21	WG1584472
Ethane	U		0.296	1.29	1	12/02/2020 13:21	WG1584472
Ethene	U		0.422	1.27	1	12/02/2020 13:21	WG1584472

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	1.25 J+	C5	0.548	1.00	1	12/08/2020 19:32	WG1588230
Acrylonitrile	U		0.0760	0.500	1	12/08/2020 19:32	WG1588230
Benzene	U		0.0160	0.0400	1	12/08/2020 19:32	WG1588230
Bromobenzene	U		0.0420	0.500	1	12/08/2020 19:32	WG1588230
Bromodichloromethane	U		0.0315	0.100	1	12/08/2020 19:32	WG1588230
Bromoform	U		0.239	1.00	1	12/08/2020 19:32	WG1588230
Bromomethane	U		0.148	0.500	1	12/08/2020 19:32	WG1588230
n-Butylbenzene	U		0.153	0.500	1	12/08/2020 19:32	WG1588230
sec-Butylbenzene	U		0.101	0.500	1	12/08/2020 19:32	WG1588230
tert-Butylbenzene	U		0.0620	0.200	1	12/08/2020 19:32	WG1588230
Carbon tetrachloride	U		0.0432	0.200	1	12/08/2020 19:32	WG1588230
Chlorobenzene	U		0.0229	0.100	1	12/08/2020 19:32	WG1588230
Chlorodibromomethane	U		0.0180	0.100	1	12/08/2020 19:32	WG1588230

JC 1/10/2021

2 0 2 / 0 1 / 1 C J 1 2 0 2 / 0 1 / 1 C J

MW-301-113020

Collected date/time: 11/30/20 15:35

SAMPLE RESULTS - 07

L1290835

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloroethane	U		0.0432	0.200	1	12/08/2020 19:32	WG1588230
Chloroform	0.524		0.0166	0.100	1	12/08/2020 19:32	WG1588230
Chloromethane	U		0.0556	0.500	1	12/08/2020 19:32	WG1588230
2-Chlorotoluene	U		0.0368	0.100	1	12/08/2020 19:32	WG1588230
4-Chlorotoluene	U		0.0452	0.200	1	12/08/2020 19:32	WG1588230
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	12/08/2020 19:32	WG1588230
1,2-Dibromoethane	U		0.0210	0.100	1	12/08/2020 19:32	WG1588230
Dibromomethane	U		0.0400	0.200	1	12/08/2020 19:32	WG1588230
1,2-Dichlorobenzene	U		0.0580	0.200	1	12/08/2020 19:32	WG1588230
1,3-Dichlorobenzene	U		0.0680	0.200	1	12/08/2020 19:32	WG1588230
1,4-Dichlorobenzene	U		0.0788	0.200	1	12/08/2020 19:32	WG1588230
Dichlorodifluoromethane	U		0.0327	0.100	1	12/08/2020 19:32	WG1588230
1,1-Dichloroethane	U		0.0230	0.100	1	12/08/2020 19:32	WG1588230
1,2-Dichloroethane	U		0.0190	0.100	1	12/08/2020 19:32	WG1588230
1,1-Dichloroethene	U		0.0200	0.100	1	12/08/2020 19:32	WG1588230
cis-1,2-Dichloroethene	U		0.0276	0.100	1	12/08/2020 19:32	WG1588230
trans-1,2-Dichloroethene	U		0.0572	0.200	1	12/08/2020 19:32	WG1588230
1,2-Dichloropropane	U		0.0508	0.200	1	12/08/2020 19:32	WG1588230
1,1-Dichloropropene	U		0.0280	0.100	1	12/08/2020 19:32	WG1588230
1,3-Dichloropropane	U		0.0700	0.200	1	12/08/2020 19:32	WG1588230
cis-1,3-Dichloropropene	U		0.0271	0.100	1	12/08/2020 19:32	WG1588230
trans-1,3-Dichloropropene	U		0.0612	0.200	1	12/08/2020 19:32	WG1588230
2,2-Dichloropropane	U		0.0317	0.100	1	12/08/2020 19:32	WG1588230
Di-isopropyl ether	U		0.0140	0.0400	1	12/08/2020 19:32	WG1588230
Ethylbenzene	U		0.0212	0.100	1	12/08/2020 19:32	WG1588230
Hexachloro-1,3-butadiene	U		0.508	1.00	1	12/08/2020 19:32	WG1588230
Isopropylbenzene	U		0.0345	0.100	1	12/08/2020 19:32	WG1588230
p-Isopropyltoluene	U		0.0932	0.200	1	12/08/2020 19:32	WG1588230
2-Butanone (MEK)	U		0.500	1.00	1	12/08/2020 19:32	WG1588230
Methylene Chloride	U		0.265	1.00	1	12/08/2020 19:32	WG1588230
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	12/08/2020 19:32	WG1588230
Methyl tert-butyl ether	U		0.0118	0.0400	1	12/08/2020 19:32	WG1588230
Naphthalene	U		0.124	0.500	1	12/08/2020 19:32	WG1588230
n-Propylbenzene	U		0.0472	0.200	1	12/08/2020 19:32	WG1588230
Styrene	U		0.109	0.500	1	12/08/2020 19:32	WG1588230
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	12/08/2020 19:32	WG1588230
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	12/08/2020 19:32	WG1588230
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	12/08/2020 19:32	WG1588230
Tetrachloroethene	1.96		0.0280	0.100	1	12/08/2020 19:32	WG1588230
Toluene	U		0.0500	0.200	1	12/08/2020 19:32	WG1588230
1,2,3-Trichlorobenzene	U		0.0250	0.500	1	12/08/2020 19:32	WG1588230
1,2,4-Trichlorobenzene	U		0.193	0.500	1	12/08/2020 19:32	WG1588230
1,1,1-Trichloroethane	U		0.0110	0.100	1	12/08/2020 19:32	WG1588230
1,1,2-Trichloroethane	U		0.0353	0.100	1	12/08/2020 19:32	WG1588230
Trichloroethene	0.157		0.0160	0.0400	1	12/08/2020 19:32	WG1588230
Trichlorofluoromethane	U		0.0200	0.100	1	12/08/2020 19:32	WG1588230
1,2,3-Trichloropropane	U		0.204	0.500	1	12/08/2020 19:32	WG1588230
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	12/08/2020 19:32	WG1588230
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	12/08/2020 19:32	WG1588230
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	12/08/2020 19:32	WG1588230
Vinyl chloride	U		0.0273	0.100	1	12/08/2020 19:32	WG1588230
Xylenes, Total	0.196	J	0.191	0.260	1	12/08/2020 19:32	WG1588230
Ethyl Ether	U		0.0170	0.100	1	12/08/2020 19:32	WG1588230
Tetrahydrofuran	U		0.0900	0.500	1	12/08/2020 19:32	WG1588230
Iodomethane	U		0.242	0.500	1	12/08/2020 19:32	WG1588230
Allyl chloride	U		0.580	1.00	1	12/08/2020 19:32	WG1588230

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Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Trans-1,4-Dichloro-2-butene	U		0.0560	0.200	1	12/08/2020 19:32	WG1588230
(S) Toluene-d8	*100*			*75.0-131*		*12/08/2020 19:32*	WG1588230
(S) 4-Bromofluorobenzene	*98.8*			*67.0-138*		*12/08/2020 19:32*	WG1588230
(S) 1,2-Dichloroethane-d4	*110*			*70.0-130*		*12/08/2020 19:32*	WG1588230

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Wet Chemistry by Method 9056A

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Sulfate	U		594	5000	1	12/08/2020 06:41	WG1587718

Wet Chemistry by Method 9060A

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
TOC (Total Organic Carbon)	56200		102	1000	1	12/05/2020 06:53	WG1586926

Metals (ICPMS) by Method 6020B

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Iron	7050		140	500	5	12/04/2020 07:51	WG1585699
Manganese	976		3.52	25.0	5	12/04/2020 07:51	WG1585699

Volatile Organic Compounds (GC) by Method RSK175

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Methane	19400		2.87	6.78	10	12/03/2020 15:59	WG1586210
Ethane	106		0.296	1.29	1	12/03/2020 15:11	WG1585798
Ethene	12.7		0.422	1.27	1	12/03/2020 15:11	WG1585798

Volatile Organic Compounds (GC/MS) by Method 8260D

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Acetone	76.3 J+	C5	13.7	25.0	25	12/08/2020 20:10	WG1588230
Acrylonitrile	U		1.90	12.5	25	12/08/2020 20:10	WG1588230
Benzene	1.65		0.400	1.00	25	12/08/2020 20:10	WG1588230
Bromobenzene	U		1.05	12.5	25	12/08/2020 20:10	WG1588230
Bromodichloromethane	U		0.788	2.50	25	12/08/2020 20:10	WG1588230
Bromoform	U		5.98	25.0	25	12/08/2020 20:10	WG1588230
Bromomethane	U		3.70	12.5	25	12/08/2020 20:10	WG1588230
n-Butylbenzene	U		3.83	12.5	25	12/08/2020 20:10	WG1588230
sec-Butylbenzene	U		2.53	12.5	25	12/08/2020 20:10	WG1588230
tert-Butylbenzene	U		1.55	5.00	25	12/08/2020 20:10	WG1588230
Carbon tetrachloride	U		1.08	5.00	25	12/08/2020 20:10	WG1588230
Chlorobenzene	U		0.573	2.50	25	12/08/2020 20:10	WG1588230
Chlorodibromomethane	U		0.450	2.50	25	12/08/2020 20:10	WG1588230
Chloroethane	U		1.08	5.00	25	12/08/2020 20:10	WG1588230
Chloroform	U		0.415	2.50	25	12/08/2020 20:10	WG1588230
Chloromethane	U		1.39	12.5	25	12/08/2020 20:10	WG1588230
2-Chlorotoluene	U		0.920	2.50	25	12/08/2020 20:10	WG1588230
4-Chlorotoluene	U		1.13	5.00	25	12/08/2020 20:10	WG1588230
1,2-Dibromo-3-Chloropropane	U		5.10	25.0	25	12/08/2020 20:10	WG1588230
1,2-Dibromoethane	U		0.525	2.50	25	12/08/2020 20:10	WG1588230
Dibromomethane	U		1.00	5.00	25	12/08/2020 20:10	WG1588230
1,2-Dichlorobenzene	U		1.45	5.00	25	12/08/2020 20:10	WG1588230
1,3-Dichlorobenzene	U		1.70	5.00	25	12/08/2020 20:10	WG1588230
1,4-Dichlorobenzene	U		1.97	5.00	25	12/08/2020 20:10	WG1588230
Dichlorodifluoromethane	U		0.818	2.50	25	12/08/2020 20:10	WG1588230
1,1-Dichloroethane	U		0.575	2.50	25	12/08/2020 20:10	WG1588230
1,2-Dichloroethane	U		0.475	2.50	25	12/08/2020 20:10	WG1588230
1,1-Dichloroethene	U		0.500	2.50	25	12/08/2020 20:10	WG1588230
cis-1,2-Dichloroethene	13.3		0.690	2.50	25	12/08/2020 20:10	WG1588230
trans-1,2-Dichloroethene	5.85		1.43	5.00	25	12/08/2020 20:10	WG1588230
1,2-Dichloropropane	U		1.27	5.00	25	12/08/2020 20:10	WG1588230

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Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,1-Dichloropropene	U		0.700	2.50	25	12/08/2020 20:10	WG1588230
1,3-Dichloropropane	U		1.75	5.00	25	12/08/2020 20:10	WG1588230
cis-1,3-Dichloropropene	U		0.678	2.50	25	12/08/2020 20:10	WG1588230
trans-1,3-Dichloropropene	U		1.53	5.00	25	12/08/2020 20:10	WG1588230
2,2-Dichloropropane	U		0.793	2.50	25	12/08/2020 20:10	WG1588230
Di-isopropyl ether	U		0.350	1.00	25	12/08/2020 20:10	WG1588230
Ethylbenzene	U		0.530	2.50	25	12/08/2020 20:10	WG1588230
Hexachloro-1,3-butadiene	U		12.7	25.0	25	12/08/2020 20:10	WG1588230
Isopropylbenzene	U		0.863	2.50	25	12/08/2020 20:10	WG1588230
p-Isopropyltoluene	U		2.33	5.00	25	12/08/2020 20:10	WG1588230
2-Butanone (MEK)	32.9		12.5	25.0	25	12/08/2020 20:10	WG1588230
Methylene Chloride	U		6.63	25.0	25	12/08/2020 20:10	WG1588230
4-Methyl-2-pentanone (MIBK)	U		10.0	25.0	25	12/08/2020 20:10	WG1588230
Methyl tert-butyl ether	U		0.295	1.00	25	12/08/2020 20:10	WG1588230
Naphthalene	U		3.10	12.5	25	12/08/2020 20:10	WG1588230
n-Propylbenzene	U		1.18	5.00	25	12/08/2020 20:10	WG1588230
Styrene	U		2.73	12.5	25	12/08/2020 20:10	WG1588230
1,1,1,2-Tetrachloroethane	U		0.500	2.50	25	12/08/2020 20:10	WG1588230
1,1,2,2-Tetrachloroethane	U		0.390	2.50	25	12/08/2020 20:10	WG1588230
1,1,2-Trichlorotrifluoroethane	U		0.675	2.50	25	12/08/2020 20:10	WG1588230
Tetrachloroethene	U		0.700	2.50	25	12/08/2020 20:10	WG1588230
Toluene	4.45	J	1.25	5.00	25	12/08/2020 20:10	WG1588230
1,2,3-Trichlorobenzene	U		0.625	12.5	25	12/08/2020 20:10	WG1588230
1,2,4-Trichlorobenzene	U		4.83	12.5	25	12/08/2020 20:10	WG1588230
1,1,1-Trichloroethane	U		0.275	2.50	25	12/08/2020 20:10	WG1588230
1,1,2-Trichloroethane	U		0.883	2.50	25	12/08/2020 20:10	WG1588230
Trichloroethene	U		0.400	1.00	25	12/08/2020 20:10	WG1588230
Trichlorofluoromethane	U		0.500	2.50	25	12/08/2020 20:10	WG1588230
1,2,3-Trichloropropane	U		5.10	12.5	25	12/08/2020 20:10	WG1588230
1,2,4-Trimethylbenzene	U		1.16	5.00	25	12/08/2020 20:10	WG1588230
1,2,3-Trimethylbenzene	U		1.15	5.00	25	12/08/2020 20:10	WG1588230
1,3,5-Trimethylbenzene	U		1.08	5.00	25	12/08/2020 20:10	WG1588230
Vinyl chloride	U		0.682	2.50	25	12/08/2020 20:10	WG1588230
Xylenes, Total	4.81	J	4.78	6.50	25	12/08/2020 20:10	WG1588230
Ethyl Ether	U		0.425	2.50	25	12/08/2020 20:10	WG1588230
Tetrahydrofuran	124		2.25	12.5	25	12/08/2020 20:10	WG1588230
Iodomethane	U		6.05	12.5	25	12/08/2020 20:10	WG1588230
Allyl chloride	U		14.5	25.0	25	12/08/2020 20:10	WG1588230
Trans-1,4-Dichloro-2-butene	U		1.40	5.00	25	12/08/2020 20:10	WG1588230
(S) Toluene-d8	*101*			*75.0-131*		*12/08/2020 20:10*	WG1588230
(S) 4-Bromofluorobenzene	*97.9*			*67.0-138*		*12/08/2020 20:10*	WG1588230
(S) 1,2-Dichloroethane-d4	*111*			*70.0-130*		*12/08/2020 20:10*	WG1588230

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Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Sulfate	7400		594	5000	1	12/08/2020 06:53	WG1587718

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	2690	B	102	1000	1	12/05/2020 07:11	WG1586926

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	253		28.1	100	1	12/04/2020 11:58	WG1586355
Manganese	810	V	0.704	5.00	1	12/04/2020 11:58	WG1586355

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	167		0.287	0.678	1	12/03/2020 15:14	WG1585798
Ethane	U		0.296	1.29	1	12/03/2020 15:14	WG1585798
Ethene	U		0.422	1.27	1	12/03/2020 15:14	WG1585798

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	1.42 J+	C5	0.548	1.00	1	12/08/2020 19:51	WG1588230
Acrylonitrile	U		0.0760	0.500	1	12/08/2020 19:51	WG1588230
Benzene	U		0.0160	0.0400	1	12/08/2020 19:51	WG1588230
Bromobenzene	U		0.0420	0.500	1	12/08/2020 19:51	WG1588230
Bromodichloromethane	U		0.0315	0.100	1	12/08/2020 19:51	WG1588230
Bromoform	U		0.239	1.00	1	12/08/2020 19:51	WG1588230
Bromomethane	U		0.148	0.500	1	12/08/2020 19:51	WG1588230
n-Butylbenzene	U		0.153	0.500	1	12/08/2020 19:51	WG1588230
sec-Butylbenzene	U		0.101	0.500	1	12/08/2020 19:51	WG1588230
tert-Butylbenzene	U		0.0620	0.200	1	12/08/2020 19:51	WG1588230
Carbon tetrachloride	U		0.0432	0.200	1	12/08/2020 19:51	WG1588230
Chlorobenzene	U		0.0229	0.100	1	12/08/2020 19:51	WG1588230
Chlorodibromomethane	U		0.0180	0.100	1	12/08/2020 19:51	WG1588230
Chloroethane	1.15		0.0432	0.200	1	12/08/2020 19:51	WG1588230
Chloroform	U		0.0166	0.100	1	12/08/2020 19:51	WG1588230
Chloromethane	U		0.0556	0.500	1	12/08/2020 19:51	WG1588230
2-Chlorotoluene	U		0.0368	0.100	1	12/08/2020 19:51	WG1588230
4-Chlorotoluene	U		0.0452	0.200	1	12/08/2020 19:51	WG1588230
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	12/08/2020 19:51	WG1588230
1,2-Dibromoethane	U		0.0210	0.100	1	12/08/2020 19:51	WG1588230
Dibromomethane	U		0.0400	0.200	1	12/08/2020 19:51	WG1588230
1,2-Dichlorobenzene	U		0.0580	0.200	1	12/08/2020 19:51	WG1588230
1,3-Dichlorobenzene	U		0.0680	0.200	1	12/08/2020 19:51	WG1588230
1,4-Dichlorobenzene	U		0.0788	0.200	1	12/08/2020 19:51	WG1588230
Dichlorodifluoromethane	U		0.0327	0.100	1	12/08/2020 19:51	WG1588230
1,1-Dichloroethane	U		0.0230	0.100	1	12/08/2020 19:51	WG1588230
1,2-Dichloroethane	U		0.0190	0.100	1	12/08/2020 19:51	WG1588230
1,1-Dichloroethene	4.27		0.0200	0.100	1	12/08/2020 19:51	WG1588230
cis-1,2-Dichloroethene	84.2		0.0276	0.100	1	12/08/2020 19:51	WG1588230
trans-1,2-Dichloroethene	1.74		0.0572	0.200	1	12/08/2020 19:51	WG1588230
1,2-Dichloropropane	U		0.0508	0.200	1	12/08/2020 19:51	WG1588230

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MW-161-120120

Collected date/time: 12/01/20 07:10

SAMPLE RESULTS - 02

L1291220

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,1-Dichloropropene	U		0.0280	0.100	1	12/08/2020 19:51	WG1588230
1,3-Dichloropropane	U		0.0700	0.200	1	12/08/2020 19:51	WG1588230
cis-1,3-Dichloropropene	U		0.0271	0.100	1	12/08/2020 19:51	WG1588230
trans-1,3-Dichloropropene	U		0.0612	0.200	1	12/08/2020 19:51	WG1588230
2,2-Dichloropropane	U		0.0317	0.100	1	12/08/2020 19:51	WG1588230
Di-isopropyl ether	U		0.0140	0.0400	1	12/08/2020 19:51	WG1588230
Ethylbenzene	U		0.0212	0.100	1	12/08/2020 19:51	WG1588230
Hexachloro-1,3-butadiene	U		0.508	1.00	1	12/08/2020 19:51	WG1588230
Isopropylbenzene	U		0.0345	0.100	1	12/08/2020 19:51	WG1588230
p-Isopropyltoluene	U		0.0932	0.200	1	12/08/2020 19:51	WG1588230
2-Butanone (MEK)	U		0.500	1.00	1	12/08/2020 19:51	WG1588230
Methylene Chloride	U		0.265	1.00	1	12/08/2020 19:51	WG1588230
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	12/08/2020 19:51	WG1588230
Methyl tert-butyl ether	U		0.0118	0.0400	1	12/08/2020 19:51	WG1588230
Naphthalene	U		0.124	0.500	1	12/08/2020 19:51	WG1588230
n-Propylbenzene	U		0.0472	0.200	1	12/08/2020 19:51	WG1588230
Styrene	U		0.109	0.500	1	12/08/2020 19:51	WG1588230
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	12/08/2020 19:51	WG1588230
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	12/08/2020 19:51	WG1588230
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	12/08/2020 19:51	WG1588230
Tetrachloroethene	49.0		0.0280	0.100	1	12/08/2020 19:51	WG1588230
Toluene	0.0740	J	0.0500	0.200	1	12/08/2020 19:51	WG1588230
1,2,3-Trichlorobenzene	U		0.0250	0.500	1	12/08/2020 19:51	WG1588230
1,2,4-Trichlorobenzene	U		0.193	0.500	1	12/08/2020 19:51	WG1588230
1,1,1-Trichloroethane	U		0.0110	0.100	1	12/08/2020 19:51	WG1588230
1,1,2-Trichloroethane	U		0.0353	0.100	1	12/08/2020 19:51	WG1588230
Trichloroethene	50.3		0.0160	0.0400	1	12/08/2020 19:51	WG1588230
Trichlorofluoromethane	U		0.0200	0.100	1	12/08/2020 19:51	WG1588230
1,2,3-Trichloropropane	U		0.204	0.500	1	12/08/2020 19:51	WG1588230
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	12/08/2020 19:51	WG1588230
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	12/08/2020 19:51	WG1588230
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	12/08/2020 19:51	WG1588230
Vinyl chloride	5.47		0.0273	0.100	1	12/08/2020 19:51	WG1588230
Xylenes, Total	U		0.191	0.260	1	12/08/2020 19:51	WG1588230
Ethyl Ether	U		0.0170	0.100	1	12/08/2020 19:51	WG1588230
Tetrahydrofuran	U		0.0900	0.500	1	12/08/2020 19:51	WG1588230
Iodomethane	U		0.242	0.500	1	12/08/2020 19:51	WG1588230
Allyl chloride	U		0.580	1.00	1	12/08/2020 19:51	WG1588230
Trans-1,4-Dichloro-2-butene	U		0.0560	0.200	1	12/08/2020 19:51	WG1588230
(S) Toluene-d8	*101*			*75.0-131*		*12/08/2020 19:51*	WG1588230
(S) 4-Bromofluorobenzene	*98.9*			*67.0-138*		*12/08/2020 19:51*	WG1588230
(S) 1,2-Dichloroethane-d4	*113*			*70.0-130*		*12/08/2020 19:51*	WG1588230

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1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Sulfate	160000		2970	25000	5	12/08/2020 10:16	WG1587718

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	17300		102	1000	1	12/05/2020 08:35	WG1586926

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	6870		28.1	100	1	12/04/2020 12:21	WG1586355
Manganese	2400		0.704	5.00	1	12/04/2020 12:21	WG1586355

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	502		0.287	0.678	1	12/03/2020 15:16	WG1585798
Ethane	4.85		0.296	1.29	1	12/03/2020 15:16	WG1585798
Ethene	U		0.422	1.27	1	12/03/2020 15:16	WG1585798

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	5.51	J+ C3	0.548	1.00	1	12/13/2020 11:00	WG1590802
Acrylonitrile	U		0.0760	0.500	1	12/13/2020 11:00	WG1590802
Benzene	0.0490		0.0160	0.0400	1	12/13/2020 11:00	WG1590802
Bromobenzene	U		0.0420	0.500	1	12/13/2020 11:00	WG1590802
Bromodichloromethane	U	UJ C3	0.0315	0.100	1	12/13/2020 11:00	WG1590802
Bromoform	U		0.239	1.00	1	12/13/2020 11:00	WG1590802
Bromomethane	U		0.148	0.500	1	12/13/2020 11:00	WG1590802
n-Butylbenzene	U		0.153	0.500	1	12/13/2020 11:00	WG1590802
sec-Butylbenzene	U		0.101	0.500	1	12/13/2020 11:00	WG1590802
tert-Butylbenzene	U		0.0620	0.200	1	12/13/2020 11:00	WG1590802
Carbon tetrachloride	U	UJ C3	0.0432	0.200	1	12/13/2020 11:00	WG1590802
Chlorobenzene	U		0.0229	0.100	1	12/13/2020 11:00	WG1590802
Chlorodibromomethane	U		0.0180	0.100	1	12/13/2020 11:00	WG1590802
Chloroethane	U		0.0432	0.200	1	12/13/2020 11:00	WG1590802
Chloroform	U		0.0166	0.100	1	12/13/2020 11:00	WG1590802
Chloromethane	U		0.0556	0.500	1	12/13/2020 11:00	WG1590802
2-Chlorotoluene	U		0.0368	0.100	1	12/13/2020 11:00	WG1590802
4-Chlorotoluene	U		0.0452	0.200	1	12/13/2020 11:00	WG1590802
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	12/13/2020 11:00	WG1590802
1,2-Dibromoethane	U		0.0210	0.100	1	12/13/2020 11:00	WG1590802
Dibromomethane	U		0.0400	0.200	1	12/13/2020 11:00	WG1590802
1,2-Dichlorobenzene	U		0.0580	0.200	1	12/13/2020 11:00	WG1590802
1,3-Dichlorobenzene	U		0.0680	0.200	1	12/13/2020 11:00	WG1590802
1,4-Dichlorobenzene	U		0.0788	0.200	1	12/13/2020 11:00	WG1590802
Dichlorodifluoromethane	U	UJ C3	0.0327	0.100	1	12/13/2020 11:00	WG1590802
1,1-Dichloroethane	U		0.0230	0.100	1	12/13/2020 11:00	WG1590802
1,2-Dichloroethane	U		0.0190	0.100	1	12/13/2020 11:00	WG1590802
1,1-Dichloroethene	0.0260	J	0.0200	0.100	1	12/13/2020 11:00	WG1590802
cis-1,2-Dichloroethene	2.15		0.0276	0.100	1	12/13/2020 11:00	WG1590802
trans-1,2-Dichloroethene	U		0.0572	0.200	1	12/13/2020 11:00	WG1590802
1,2-Dichloropropane	U		0.0508	0.200	1	12/13/2020 11:00	WG1590802

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R-MW6-120120

Collected date/time: 12/01/20 09:55

SAMPLE RESULTS - 03

L1291220

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,1-Dichloropropene	U		0.0280	0.100	1	12/13/2020 11:00	WG1590802
1,3-Dichloropropane	U		0.0700	0.200	1	12/13/2020 11:00	WG1590802
cis-1,3-Dichloropropene	U		0.0271	0.100	1	12/13/2020 11:00	WG1590802
trans-1,3-Dichloropropene	U		0.0612	0.200	1	12/13/2020 11:00	WG1590802
2,2-Dichloropropane	U	UJ C3	0.0317	0.100	1	12/13/2020 11:00	WG1590802
Di-isopropyl ether	U		0.0140	0.0400	1	12/13/2020 11:00	WG1590802
Ethylbenzene	0.0670	J	0.0212	0.100	1	12/13/2020 11:00	WG1590802
Hexachloro-1,3-butadiene	U		0.508	1.00	1	12/13/2020 11:00	WG1590802
Isopropylbenzene	U		0.0345	0.100	1	12/13/2020 11:00	WG1590802
p-Isopropyltoluene	U		0.0932	0.200	1	12/13/2020 11:00	WG1590802
2-Butanone (MEK)	0.665	J	0.500	1.00	1	12/13/2020 11:00	WG1590802
Methylene Chloride	U		0.265	1.00	1	12/13/2020 11:00	WG1590802
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	12/13/2020 11:00	WG1590802
Methyl tert-butyl ether	U		0.0118	0.0400	1	12/13/2020 11:00	WG1590802
Naphthalene	U	UJ C3	0.124	0.500	1	12/13/2020 11:00	WG1590802
n-Propylbenzene	U		0.0472	0.200	1	12/13/2020 11:00	WG1590802
Styrene	U		0.109	0.500	1	12/13/2020 11:00	WG1590802
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	12/13/2020 11:00	WG1590802
1,1,2,2-Tetrachloroethane	U	UJ C3	0.0156	0.100	1	12/13/2020 11:00	WG1590802
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	12/13/2020 11:00	WG1590802
Tetrachloroethene	0.670		0.0280	0.100	1	12/13/2020 11:00	WG1590802
Toluene	0.336		0.0500	0.200	1	12/13/2020 11:00	WG1590802
1,2,3-Trichlorobenzene	U		0.0250	0.500	1	12/13/2020 11:00	WG1590802
1,2,4-Trichlorobenzene	U		0.193	0.500	1	12/13/2020 11:00	WG1590802
1,1,1-Trichloroethane	U		0.0110	0.100	1	12/13/2020 11:00	WG1590802
1,1,2-Trichloroethane	U		0.0353	0.100	1	12/13/2020 11:00	WG1590802
Trichloroethene	1.07		0.0160	0.0400	1	12/13/2020 11:00	WG1590802
Trichlorofluoromethane	U	UJ C3	0.0200	0.100	1	12/13/2020 11:00	WG1590802
1,2,3-Trichloropropane	U	UJ C3	0.204	0.500	1	12/13/2020 11:00	WG1590802
1,2,4-Trimethylbenzene	0.109	J	0.0464	0.200	1	12/13/2020 11:00	WG1590802
1,2,3-Trimethylbenzene	U	UJ C3	0.0460	0.200	1	12/13/2020 11:00	WG1590802
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	12/13/2020 11:00	WG1590802
Vinyl chloride	0.583		0.0273	0.100	1	12/13/2020 11:00	WG1590802
Xylenes, Total	0.513		0.191	0.260	1	12/13/2020 11:00	WG1590802
Ethyl Ether	U	UJ C3	0.0170	0.100	1	12/13/2020 11:00	WG1590802
Tetrahydrofuran	0.476	J	0.0900	0.500	1	12/13/2020 11:00	WG1590802
Iodomethane	U		0.242	0.500	1	12/13/2020 11:00	WG1590802
Allyl chloride	U		0.580	1.00	1	12/13/2020 11:00	WG1590802
Trans-1,4-Dichloro-2-butene	U	UJ C3	0.0560	0.200	1	12/13/2020 11:00	WG1590802
(S) Toluene-d8	*105*			*75.0-131*		*12/13/2020 11:00*	WG1590802
(S) 4-Bromofluorobenzene	*98.2*			*67.0-138*		*12/13/2020 11:00*	WG1590802
(S) 1,2-Dichloroethane-d4	*89.7*			*70.0-130*		*12/13/2020 11:00*	WG1590802

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Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	1.30	J- C3	0.548	1.00	1	12/13/2020 11:19	WG1590802
Acrylonitrile	U		0.0760	0.500	1	12/13/2020 11:19	WG1590802
Benzene	0.0200	J	0.0160	0.0400	1	12/13/2020 11:19	WG1590802
Bromobenzene	U		0.0420	0.500	1	12/13/2020 11:19	WG1590802
Bromodichloromethane	U	UJ C3	0.0315	0.100	1	12/13/2020 11:19	WG1590802
Bromoform	U		0.239	1.00	1	12/13/2020 11:19	WG1590802
Bromomethane	U		0.148	0.500	1	12/13/2020 11:19	WG1590802
n-Butylbenzene	U		0.153	0.500	1	12/13/2020 11:19	WG1590802
sec-Butylbenzene	U		0.101	0.500	1	12/13/2020 11:19	WG1590802
tert-Butylbenzene	U		0.0620	0.200	1	12/13/2020 11:19	WG1590802
Carbon tetrachloride	U	UJ C3	0.0432	0.200	1	12/13/2020 11:19	WG1590802
Chlorobenzene	U		0.0229	0.100	1	12/13/2020 11:19	WG1590802
Chlorodibromomethane	U		0.0180	0.100	1	12/13/2020 11:19	WG1590802
Chloroethane	U		0.0432	0.200	1	12/13/2020 11:19	WG1590802
Chloroform	U		0.0166	0.100	1	12/13/2020 11:19	WG1590802
Chloromethane	U		0.0556	0.500	1	12/13/2020 11:19	WG1590802
2-Chlorotoluene	U		0.0368	0.100	1	12/13/2020 11:19	WG1590802
4-Chlorotoluene	U		0.0452	0.200	1	12/13/2020 11:19	WG1590802
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	12/13/2020 11:19	WG1590802
1,2-Dibromoethane	U		0.0210	0.100	1	12/13/2020 11:19	WG1590802
Dibromomethane	U		0.0400	0.200	1	12/13/2020 11:19	WG1590802
1,2-Dichlorobenzene	U		0.0580	0.200	1	12/13/2020 11:19	WG1590802
1,3-Dichlorobenzene	U		0.0680	0.200	1	12/13/2020 11:19	WG1590802
1,4-Dichlorobenzene	U		0.0788	0.200	1	12/13/2020 11:19	WG1590802
Dichlorodifluoromethane	U	UJ C3	0.0327	0.100	1	12/13/2020 11:19	WG1590802
1,1-Dichloroethane	U		0.0230	0.100	1	12/13/2020 11:19	WG1590802
1,2-Dichloroethane	U		0.0190	0.100	1	12/13/2020 11:19	WG1590802
1,1-Dichloroethene	U		0.0200	0.100	1	12/13/2020 11:19	WG1590802
cis-1,2-Dichloroethene	U		0.0276	0.100	1	12/13/2020 11:19	WG1590802
trans-1,2-Dichloroethene	U		0.0572	0.200	1	12/13/2020 11:19	WG1590802
1,2-Dichloropropane	U		0.0508	0.200	1	12/13/2020 11:19	WG1590802
1,1-Dichloropropene	U		0.0280	0.100	1	12/13/2020 11:19	WG1590802
1,3-Dichloropropane	U		0.0700	0.200	1	12/13/2020 11:19	WG1590802
cis-1,3-Dichloropropene	U		0.0271	0.100	1	12/13/2020 11:19	WG1590802
trans-1,3-Dichloropropene	U		0.0612	0.200	1	12/13/2020 11:19	WG1590802
2,2-Dichloropropane	U	UJ C3	0.0317	0.100	1	12/13/2020 11:19	WG1590802
Di-isopropyl ether	U		0.0140	0.0400	1	12/13/2020 11:19	WG1590802
Ethylbenzene	0.127		0.0212	0.100	1	12/13/2020 11:19	WG1590802
Hexachloro-1,3-butadiene	U		0.508	1.00	1	12/13/2020 11:19	WG1590802
Isopropylbenzene	U		0.0345	0.100	1	12/13/2020 11:19	WG1590802
p-Isopropyltoluene	U		0.0932	0.200	1	12/13/2020 11:19	WG1590802
2-Butanone (MEK)	U		0.500	1.00	1	12/13/2020 11:19	WG1590802
Methylene Chloride	U		0.265	1.00	1	12/13/2020 11:19	WG1590802
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	12/13/2020 11:19	WG1590802
Methyl tert-butyl ether	U		0.0118	0.0400	1	12/13/2020 11:19	WG1590802
Naphthalene	U	UJ C3	0.124	0.500	1	12/13/2020 11:19	WG1590802
n-Propylbenzene	U		0.0472	0.200	1	12/13/2020 11:19	WG1590802
Styrene	U		0.109	0.500	1	12/13/2020 11:19	WG1590802
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	12/13/2020 11:19	WG1590802
1,1,2,2-Tetrachloroethane	U	UJ C3	0.0156	0.100	1	12/13/2020 11:19	WG1590802
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	12/13/2020 11:19	WG1590802
Tetrachloroethene	U		0.0280	0.100	1	12/13/2020 11:19	WG1590802
Toluene	0.212		0.0500	0.200	1	12/13/2020 11:19	WG1590802
1,2,3-Trichlorobenzene	U		0.0250	0.500	1	12/13/2020 11:19	WG1590802
1,2,4-Trichlorobenzene	U		0.193	0.500	1	12/13/2020 11:19	WG1590802
1,1,1-Trichloroethane	U		0.0110	0.100	1	12/13/2020 11:19	WG1590802

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Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,1,2-Trichloroethane	U		0.0353	0.100	1	12/13/2020 11:19	WG1590802
Trichloroethene	U		0.0160	0.0400	1	12/13/2020 11:19	WG1590802
Trichlorofluoromethane	U	UJ C3	0.0200	0.100	1	12/13/2020 11:19	WG1590802
1,2,3-Trichloropropane	U	UJ C3	0.204	0.500	1	12/13/2020 11:19	WG1590802
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	12/13/2020 11:19	WG1590802
1,2,3-Trimethylbenzene	U	UJ C3	0.0460	0.200	1	12/13/2020 11:19	WG1590802
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	12/13/2020 11:19	WG1590802
Vinyl chloride	U		0.0273	0.100	1	12/13/2020 11:19	WG1590802
Xylenes, Total	0.789		0.191	0.260	1	12/13/2020 11:19	WG1590802
Ethyl Ether	U	UJ C3	0.0170	0.100	1	12/13/2020 11:19	WG1590802
Tetrahydrofuran	U		0.0900	0.500	1	12/13/2020 11:19	WG1590802
Iodomethane	U		0.242	0.500	1	12/13/2020 11:19	WG1590802
Allyl chloride	U		0.580	1.00	1	12/13/2020 11:19	WG1590802
Trans-1,4-Dichloro-2-butene	U	UJ C3	0.0560	0.200	1	12/13/2020 11:19	WG1590802
(S) Toluene-d8	*104*			*75.0-131*		*12/13/2020 11:19*	WG1590802
(S) 4-Bromofluorobenzene	*102*			*67.0-138*		*12/13/2020 11:19*	WG1590802
(S) 1,2-Dichloroethane-d4	*97.6*			*70.0-130*		*12/13/2020 11:19*	WG1590802

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Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	0.741	U ~~C3 J~~	0.548	1.00	1	12/13/2020 11:38	WG1590802
Acrylonitrile	U		0.0760	0.500	1	12/13/2020 11:38	WG1590802
Benzene	U		0.0160	0.0400	1	12/13/2020 11:38	WG1590802
Bromobenzene	U		0.0420	0.500	1	12/13/2020 11:38	WG1590802
Bromodichloromethane	U	UJ C3	0.0315	0.100	1	12/13/2020 11:38	WG1590802
Bromoform	U		0.239	1.00	1	12/13/2020 11:38	WG1590802
Bromomethane	U		0.148	0.500	1	12/13/2020 11:38	WG1590802
n-Butylbenzene	U		0.153	0.500	1	12/13/2020 11:38	WG1590802
sec-Butylbenzene	U		0.101	0.500	1	12/13/2020 11:38	WG1590802
tert-Butylbenzene	U		0.0620	0.200	1	12/13/2020 11:38	WG1590802
Carbon tetrachloride	U	UJ C3	0.0432	0.200	1	12/13/2020 11:38	WG1590802
Chlorobenzene	U		0.0229	0.100	1	12/13/2020 11:38	WG1590802
Chlorodibromomethane	U		0.0180	0.100	1	12/13/2020 11:38	WG1590802
Chloroethane	U		0.0432	0.200	1	12/13/2020 11:38	WG1590802
Chloroform	U		0.0166	0.100	1	12/13/2020 11:38	WG1590802
Chloromethane	U		0.0556	0.500	1	12/13/2020 11:38	WG1590802
2-Chlorotoluene	U		0.0368	0.100	1	12/13/2020 11:38	WG1590802
4-Chlorotoluene	U		0.0452	0.200	1	12/13/2020 11:38	WG1590802
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	12/13/2020 11:38	WG1590802
1,2-Dibromoethane	U		0.0210	0.100	1	12/13/2020 11:38	WG1590802
Dibromomethane	U		0.0400	0.200	1	12/13/2020 11:38	WG1590802
1,2-Dichlorobenzene	U		0.0580	0.200	1	12/13/2020 11:38	WG1590802
1,3-Dichlorobenzene	U		0.0680	0.200	1	12/13/2020 11:38	WG1590802
1,4-Dichlorobenzene	U		0.0788	0.200	1	12/13/2020 11:38	WG1590802
Dichlorodifluoromethane	U	UJ C3	0.0327	0.100	1	12/13/2020 11:38	WG1590802
1,1-Dichloroethane	U		0.0230	0.100	1	12/13/2020 11:38	WG1590802
1,2-Dichloroethane	U		0.0190	0.100	1	12/13/2020 11:38	WG1590802
1,1-Dichloroethene	U		0.0200	0.100	1	12/13/2020 11:38	WG1590802
cis-1,2-Dichloroethene	U		0.0276	0.100	1	12/13/2020 11:38	WG1590802
trans-1,2-Dichloroethene	U		0.0572	0.200	1	12/13/2020 11:38	WG1590802
1,2-Dichloropropane	U		0.0508	0.200	1	12/13/2020 11:38	WG1590802
1,1-Dichloropropene	U		0.0280	0.100	1	12/13/2020 11:38	WG1590802
1,3-Dichloropropane	U		0.0700	0.200	1	12/13/2020 11:38	WG1590802
cis-1,3-Dichloropropene	U		0.0271	0.100	1	12/13/2020 11:38	WG1590802
trans-1,3-Dichloropropene	U		0.0612	0.200	1	12/13/2020 11:38	WG1590802
2,2-Dichloropropane	U	UJ C3	0.0317	0.100	1	12/13/2020 11:38	WG1590802
Di-isopropyl ether	U		0.0140	0.0400	1	12/13/2020 11:38	WG1590802
Ethylbenzene	0.113		0.0212	0.100	1	12/13/2020 11:38	WG1590802
Hexachloro-1,3-butadiene	U		0.508	1.00	1	12/13/2020 11:38	WG1590802
Isopropylbenzene	U		0.0345	0.100	1	12/13/2020 11:38	WG1590802
p-Isopropyltoluene	U		0.0932	0.200	1	12/13/2020 11:38	WG1590802
2-Butanone (MEK)	U		0.500	1.00	1	12/13/2020 11:38	WG1590802
Methylene Chloride	U		0.265	1.00	1	12/13/2020 11:38	WG1590802
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	12/13/2020 11:38	WG1590802
Methyl tert-butyl ether	U		0.0118	0.0400	1	12/13/2020 11:38	WG1590802
Naphthalene	U	UJ C3	0.124	0.500	1	12/13/2020 11:38	WG1590802
n-Propylbenzene	U		0.0472	0.200	1	12/13/2020 11:38	WG1590802
Styrene	U		0.109	0.500	1	12/13/2020 11:38	WG1590802
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	12/13/2020 11:38	WG1590802
1,1,2,2-Tetrachloroethane	U	UJ C3	0.0156	0.100	1	12/13/2020 11:38	WG1590802
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	12/13/2020 11:38	WG1590802
Tetrachloroethene	U		0.0280	0.100	1	12/13/2020 11:38	WG1590802
Toluene	0.215		0.0500	0.200	1	12/13/2020 11:38	WG1590802
1,2,3-Trichlorobenzene	U		0.0250	0.500	1	12/13/2020 11:38	WG1590802
1,2,4-Trichlorobenzene	U		0.193	0.500	1	12/13/2020 11:38	WG1590802
1,1,1-Trichloroethane	U		0.0110	0.100	1	12/13/2020 11:38	WG1590802

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Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,1,2-Trichloroethane	U		0.0353	0.100	1	12/13/2020 11:38	WG1590802
Trichloroethene	U		0.0160	0.0400	1	12/13/2020 11:38	WG1590802
Trichlorofluoromethane	U	UJ C3	0.0200	0.100	1	12/13/2020 11:38	WG1590802
1,2,3-Trichloropropane	U	UJ C3	0.204	0.500	1	12/13/2020 11:38	WG1590802
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	12/13/2020 11:38	WG1590802
1,2,3-Trimethylbenzene	U	UJ C3	0.0460	0.200	1	12/13/2020 11:38	WG1590802
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	12/13/2020 11:38	WG1590802
Vinyl chloride	U		0.0273	0.100	1	12/13/2020 11:38	WG1590802
Xylenes, Total	0.801		0.191	0.260	1	12/13/2020 11:38	WG1590802
Ethyl Ether	U	UJ C3	0.0170	0.100	1	12/13/2020 11:38	WG1590802
Tetrahydrofuran	U		0.0900	0.500	1	12/13/2020 11:38	WG1590802
Iodomethane	U		0.242	0.500	1	12/13/2020 11:38	WG1590802
Allyl chloride	U		0.580	1.00	1	12/13/2020 11:38	WG1590802
Trans-1,4-Dichloro-2-butene	U	UJ C3	0.0560	0.200	1	12/13/2020 11:38	WG1590802
(S) Toluene-d8	*105*			*75.0-131*		*12/13/2020 11:38*	WG1590802
(S) 4-Bromofluorobenzene	*99.4*			*67.0-138*		*12/13/2020 11:38*	WG1590802
(S) 1,2-Dichloroethane-d4	*88.6*			*70.0-130*		*12/13/2020 11:38*	WG1590802

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MEMORANDUM

TO:	Project File	**DATE:**	January 8, 2021
FROM:	Jessie Compeau		
SUBJECT:	Laboratory Data Validation Review		
PROJECT:	American Linen Data Validation		
PROJECT #:	1413.001.02.501G and 1413.001.05.601		
TASK:	EIM Data Validation Level EPA2A for 4th Quarter Monitoring – Groundwater Samples – Group 3		
LAB:	Pace Sample Delivery Groups (SDGs): L1286095, L1288012, and L1290496		

Thirty-two (32) groundwater samples including one field duplicate, one equipment blank, and two trip blanks were collected as part of the 4th Quarterly Monitoring Round for 2020 for the ongoing Remedial Investigation (RI) sampling at the Former American Linen Supply Site, in Seattle, Washington on November 13, 17, 18, 23, and 24, 2020. The samples were shipped and delivered to Pace Lab Sciences (Pace) of Mount Juliet, TN for laboratory analysis. Selected samples were analyzed for the following:

- Volatile organic compounds (VOCs) by United States Environmental Protection Agency (USEPA) Method 8260D;
- Total petroleum hydrocarbons as gasoline (TPH-Gx) by NWTPH-Gx per analytical method stipulated by Washington State Department of Ecology;
- VOCs (dissolved gases – methane, ethane, and ethene) by EPA SOP RSK 175;
- Anion (sulfate) by USEPA Method 9056A;
- Total Organic Carbon (TOC) by USEPA Method 9060A; and
- Metals (iron and manganese) by USEPA Method 6020B.

Results are reported in multiple SDGs from Pace. Pace SDGs are reviewed in small groups for each data validation report. Group 3 analytical results are reported in SDGs L1286095, L1288012, and L1290496. The quality assurance review of the laboratory data associated with Group 3 is summarized below.

DATA QUALIFICATIONS

Guidelines established by USEPA for a limited data validation review of analytical data along with Pace control limit criteria were used to validate the data. The comments presented in this memorandum refer to the laboratory's performance in meeting the quality control criteria outlined in the USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (USEPA, 2017) and USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Superfund Methods Data Review

(USEPA, 2017). Following Guidelines, non-project-specific laboratory duplicates and matrix spike results were not evaluated as part of this data validation.

DATA VALIDATION

Completeness

All samples were collected and analyzed as requested with a minor exception:

- SDG L1286095: Sample MW-127-111320 is reported by Pace as MW127-111320. No action is taken other than to note this.

Sample Collection and Preservation

Samples were collected in laboratory-supplied sample containers preserved as appropriate for the individual analyses conducted. The samples were packed on ice in coolers and delivered by courier to the analytical laboratory. The laboratory reported that the coolers were received at a cooler temperature less than the recommended temperature preservation of 6°C. Overall, samples were received in good condition. No data were qualified based upon the sample collection and preservation information.

Holding Times

USEPA Method 8260D:
All samples were analyzed for VOCs within the EPA recommended holding time of fourteen days for preserved waters from the date of collection. All holding time criteria are met.

NWTPH-Gx Method:
All samples were analyzed within the WA State recommended holding time of fourteen days for preserved waters from the date of sample collection. All holding time criteria are met.

Dissolved Gases (Methane, Ethane, and Ethene) by RSK 175:
All samples were analyzed within the WA State recommended holding time of fourteen days for preserved waters from the date of sample collection. All holding time criteria are met.

USEPA Method 6020B:
All samples were analyzed within the USEPA recommended holding time for iron and manganese of 180 days for preserved waters from the date of sample collection. All holding time criteria are met.

General Chemistry (Sulfate and TOC):
All samples were analyzed within the USEPA recommended holding time for sulfate (28 days), and TOC (28 days) for preserved waters from the date of sample collection. All holding time criteria are met.

Initial and Continuing Calibration

Calibration data for this project are not required for this deliverable however Pace's notes indicate the following:

- Multiple SDGs - *USEPA Method 8260D:* Continuing calibration verification (CCV) issues were noted by Pace for multiple compounds associated with analytical batches in each SDG. These compounds are qualified by the laboratory "C3" to indicate that percent difference CCV is below laboratory acceptance criteria and showing low bias. **Associated sample results with laboratory qualified (C3) results are estimated and qualified (J-/UJ). Results reported below the RDL are estimated (J) and bias is not assigned.**

- Multiple SDGs - *USEPA Method 8260D:* Continuing calibration verification (CCV) issues were noted by Pace for multiple compounds associated with analytical batches in each SDG. These compounds are qualified by the laboratory "C4" to indicate that percent difference CCV is below laboratory acceptance criteria and showing low bias. **Associated sample results with laboratory qualified (C4) results are estimated and qualified (J-/UJ). Results reported below the RDL are estimated (J) and bias is not assigned.**

- Multiple SDGs - *USEPA Method 8260D:* Continuing calibration verification (CCV) issues were noted by Pace for multiple compounds associated with analytical batches in each SDG. These compounds are qualified by the laboratory "C5" to indicate that percent difference CCV is above laboratory acceptance criteria and showing high bias. **Associated sample results with laboratory qualified (C5) positively detected results are estimated and qualified (J+). Results reported below the RDL are estimated (J) and bias is not assigned.**

Method Blank Results

USEPA Method 8260D:
Laboratory method blanks were included with the analytical batches per method requirement. The target analytes were not detected in the method blanks at or above the reporting detection limits (RDLs) with the following exceptions:

- SDG L1286095 - Analytical batch WG1580676: Low levels (below the RDL) of naphthalene, 1,2,3-trichlorobenzene, and 1,2,4-trimethylbenzene were detected in the method blank. No action is needed since these compounds are not detected in the associated samples.

- SDG L1288012 - Analytical batch WG1583236: A low level (below the RDL) of 2-Butanone (MEK) was detected in the method blank. No action is needed since these compounds are not detected in the associated samples.

- SDG L1290496 - Analytical batch WG1588230: A low level (below the RDL) of tetrahydrofuran was detected in the method blank. Tetrahydrofuran was not detected in 6 of the 7 associated samples since tetrahydrofuran was not detected. No action was taken for tetrahydrofuran detection in sample MW-142-112420 because the result is above the RDL.

NWTPH-Gx Method:
Laboratory method blanks were included with the analytical batches per method requirement. The target analyte (gasoline) was not detected in the method blanks at or above the RDLs with the following exceptions:

- SDG L1288012 – Analytical batch WG1583434: A low level of gasoline was detected below the RDL in the method blank and trip blank. **A low level of gasoline is detected in sample R-MW5-111820 and is qualified as not detected (U) due to blank contamination.**

Dissolved Gases (Methane, Ethane, and Ethene) by RSK 175:
Laboratory method blanks were included with the analytical batches per method requirement. The target analytes (dissolved gases) are not detected in the method blanks at or above the RDLs.

USEPA Method 6020B and General Chemistry (Sulfate and TOC):
Laboratory method blanks were included with the analytical batches per method requirement. The target analytes were detected in the method blanks below the RDLs. Per Guidance, no action is taken for blank detections less than the RDL when associated sample detections are greater than the RDL. No target analytes were detected in the associated method blanks.

Trip Blank Results

USEPA Method 8260D and NWTPH-Gx:
Two trip blanks (TB-111820 (SDG L1288012) and TB-112420 (SDG L1290496) were collected and analyzed for VOCs and gasoline. The target analytes were not detected in the associated samples with the following exceptions:

- SDG L1288012: Low levels of gasoline and acetone were detected in the trip blank (TB-111820). Gasoline was also detected in the associated method blank. **A low level of gasoline is detected in sample R-MW5-111820 and is qualified as not detected (U) due to blank contamination.** No action was taken for acetone since it was not detected in the associated samples.

- SDG L1290496: Acetone was detected in the trip blank (TB-112420) above the RDL and in the associated equipment blank**.** No action was taken for acetone detections above the RDL.

Field, Rinsate, or Equipment Blank Results

All Analytical Methods:
One equipment blank associated with Group 3 was collected and analyzed. Details are as follows:

Equipment blank (EQ-112420 with SDG L1290496) is associated with all the samples on this report were collected with a bladder pump except the following samples: MW-343-112420, SCL-MW101-112420, MW-9-112420, and the trip blank (TB-112420) on November 24, 2020. Low levels of acetone, benzene, ethylbenzene, toluene and total xylenes are detected in the equipment blank. Actions are as follows:

- Benzene results for samples MW-157-112320 and MW-158A-112320 are detected below the RDL. **These benzene results are qualified as not detected (U) due to equipment blank contamination.**
- Ethylbenzene results for samples FMW-137-112420, MW-142-112420, MW-143-112420, and MW-943-112420 are detected below the RDL. **These ethylbenzene results are qualified as not detected (U) due to equipment blank contamination.**
- Toluene results for samples FMW-137-112420, MW-142-112420, MW-144R-112320, MW-145R-112320, MW-158A-112320, MW-322-112420, MW-323-112420, and MW-943-112420 are detected below the RDL. **These toluene results are qualified as not detected (U) due to equipment blank contamination.**
- Total xylene result for sample MW-142-112420 is detected below the RDL. **The total xylene result is qualified as not detected (U) due to equipment blank contamination.**

Field Duplicate Analyses

Field duplicate pairs were submitted and analyzed. Field duplicate sample pair is as follows:

- SDG L1290496: MW-142-112420 is a field duplicate of MW-943-112420

Target analyte results are comparable and within a relative percent difference (RPD) of 30% (± 1x RDL for groundwater results <5X the RDL) for the field duplicate pairs with the following exception:

- Ethene (also known as ethylene) results (MW-142-112420 and MW-943-112420) are qualified as estimated (UJ/J) due to absolute value difference exceedance (± 1x RDL for groundwater results <5X the RDL).

Laboratory Duplicate Analyses

USEPA Method 8260D:
Laboratory duplicate samples were not analyzed. Refer to laboratory control sample/sample duplicate (LCS/LCSD) or matrix spike/matrix spike duplicate (MS/MSD) results for precision data.

NWTPH-Gx Method:
Laboratory duplicate samples were not analyzed. Refer to MS/MSD results associated with SDG L1288012 for precision data.

Dissolved Gases (Methane, Ethane, and Ethene) by RSK 175:

Laboratory duplicate sample analyses were performed on client and non-client samples within the analytical batches. The primary/duplicate RPDs for dissolved gas analyses are within the laboratory control limit of 20%.

USEPA Method 6020B:
Laboratory duplicate samples were not analyzed. Precision data are not available for Refer to MS/MSD results for precision data.

General Chemistry (Sulfate and TOC):
Laboratory duplicate sample analyses were performed on client samples and/or on non-client samples. The primary/duplicate RPDs for general chemistry parameters are within the laboratory control RPD limits or ± 1x RDL for groundwater results <5X the RDL with the following discussion:

- SDG L1290496:   TOC laboratory duplicate was performed on sample MW-145R-112320. RPD value is greater than 20% but no action is taken since the detections are less than 5X the RDL and absolute difference is less than the RDL.

Surrogate Recoveries

USEPA Method 8260D:
The surrogate recovery results for the samples, laboratory control samples, matrix spike samples, and the method blanks are within the laboratory surrogate control limits for all the analyses with the following exception:

- SDG L1286095: Sample MW127-111320 surrogate 1,2-dichloroethane-d4 (analytical batch WG1581939) recovery is above criteria. **Associated positive detection for 1,1,2-trichlorotrifluoroethane (CFC-113) in sample MW127-111320 is estimated and qualified (J).**

NWTPH-Gx Method:
The surrogate recovery results for the samples, laboratory control samples, matrix spike samples, and the method blanks are within the laboratory surrogate control limits for all analyses with the following discussion:

- SDG L1288012 - Analytical batch WG1583434: MS/MSD analyses were performed on a non-client sample. Surrogate a,a,a-trifluorotoluene was recovered low in the associated MS/MSD samples. No action is taken since the spike was performed on a non-client sample.

Laboratory Control Samples

USEPA Method 8260D:
Laboratory control sample/laboratory control sample duplicate (LCS/LCSD) or laboratory control sample (LCS) were analyzed by USEPA Method 8260D method. The LCS % Rs or LCS/LCSD % Rs and RPDs for the all target compounds are within the laboratory control criteria for waters with the following discussion:

- SDG L1286095 - Analytical batch WG1580676: LCS/LCSD % recoveries for bromomethane are above laboratory acceptance criteria and laboratory qualified (J4). LCS/LCSD RPD for dichlorodifluoromethane exceeded criteria and is laboratory qualified (J3). No action is needed in either case since these compounds were not detected in the associated sample.

- SDG L1288012 - Analytical batch WG1583236: LCS/LCSD % recoveries for 2,2-dichloropropane are above laboratory acceptance criteria and laboratory qualified (J4). LCS/LCSD RPD for trans-1,4-dichloro-2-butene exceeded criteria and is laboratory qualified (J3). No action is needed in either case since these compounds were not detected in the associated samples.

NWTPH-Gx Method:
The LCS % Rs for the target compound (gasoline) are within the laboratory control criteria for waters. No measure of precision is provided with the analytical batch associated with sample R-MW5-111820. No action is taken other than to note this.

Dissolved Gases (Methane, Ethane, and Ethene) by RSK 175:
The LCS/LCSD % Rs and RPDs for the target compound (dissolved gases) are within the laboratory control criteria for waters.

USEPA Method 6020B:
The LCS % R or LCS/LCSD % Rs and RPDs for the target compound (iron and manganese) are within the laboratory control criteria for waters.

General Chemistry (Sulfate and TOC):
The LCS % Rs for general chemistry parameters are within the laboratory control criteria for waters.

Matrix Spike/Matrix Spike Duplicates

USEPA Method 8260D:
MS/MSD analyses were not performed. Refer to LCS results. No action was taken other than to note this.

NWTPH-Gx Method:
MS/MSD analyses were performed on a non-client sample within the analytical batch. The MS/MSD % Rs and RPD were acceptable and within laboratory control limit criteria for water samples with the following exceptions:

- SDG L1288012 - Analytical batch WG1583434: MS/MSD analyses were performed on a non-client sample. The MS/MSD RPD exceeds laboratory criteria. No action is taken since the spike was performed on a non-client sample.

Dissolved Gases (Methane, Ethane, and Ethene) by RSK 175:
MS/MSD analyses were not performed. Refer to LCS results and field duplicate sample for accuracy and precision data.

USEPA Method 6020B:
MS/MSD analyses were performed on non-client samples within the analytical batches. The MS/MSD % Rs and RPD were acceptable and within laboratory control limit criteria for water samples.

General Chemistry (Sulfate and TOC):
MS or MS/MSD analyses were performed on client and/or non-client samples within the analytical batches. In cases where MS/MSD spike analyses are not performed refer to LCS/LCSD or laboratory duplicate data for accuracy and precision data. The MS/MSD % Rs and RPDs are acceptable and within laboratory control limit criteria for water samples.

Other Quality Control Issues

No laboratory quality control issues were identified in the laboratory report with the following discussions:

- Electronic data deliverables (EDDs) for these SDGs were provided by the laboratory and data validator qualifiers were entered. In some cases, different chemical synonyms are used between the EDD and the hardcopy however associated Chemical Abstracts Service (CAS) numbers are provided in the EDD to confirm chemical identifications.

Compound Quantitation Limits

Results of the analyses were reported based on laboratory RDLs for all compounds. RDLs for selected compounds are elevated due to method-required dilutions. No action is taken other than to note the following exception:

- SDG L1288012: Sample BB-8-111720 sulfate result was reported twice, sulfate results are reported at 1X and 5X dilution factors. The sulfate result at 1X is laboratory qualified (E) to indicate that the upper limit of the calibration range. **This sulfate result is rejected (R) in favor of the 5X sulfate result.**

Data Assessment

The laboratory data reported for this project were reviewed based on the criteria outlined in:

- USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (USEPA, 2017); and
- USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Superfund Methods Data Review (USEPA, 2017).

Data qualifiers are assigned and laboratory report pages with qualifiers are attached. All data, including qualified data, are judged to be acceptable for their intended use with the following exception:

- SDG L1288012: Sample BB-8-111720 sulfate result was reported twice, sulfate results are reported at 1X and 5X dilution factors. The sulfate result at 1X is laboratory qualified

(E) to indicate that the upper limit of the calibration range. **This sulfate result is rejected (R) in favor of the 5X sulfate result.**

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l		Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	0.607	J	C3 J	0.548	1.00	1	11/22/2020 14:36	WG1580676
Acrylonitrile	U	UJ	C3	0.0760	0.500	1	11/22/2020 14:36	WG1580676
Benzene	44.1			0.0160	0.0400	1	11/22/2020 14:36	WG1580676
Bromobenzene	U			0.0420	0.500	1	11/22/2020 14:36	WG1580676
Bromodichloromethane	U			0.0315	0.100	1	11/22/2020 14:36	WG1580676
Bromoform	U			0.239	1.00	1	11/22/2020 14:36	WG1580676
Bromomethane	U		~~J4~~	0.148	0.500	1	11/22/2020 14:36	WG1580676
n-Butylbenzene	U			0.153	0.500	1	11/22/2020 14:36	WG1580676
sec-Butylbenzene	U			0.101	0.500	1	11/22/2020 14:36	WG1580676
tert-Butylbenzene	U			0.0620	0.200	1	11/22/2020 14:36	WG1580676
Carbon tetrachloride	U			0.0432	0.200	1	11/22/2020 14:36	WG1580676
Chlorobenzene	U			0.0229	0.100	1	11/22/2020 14:36	WG1580676
Chlorodibromomethane	U			0.0180	0.100	1	11/22/2020 14:36	WG1580676
Chloroethane	U			0.0432	0.200	1	11/22/2020 14:36	WG1580676
Chloroform	U			0.0166	0.100	1	11/22/2020 14:36	WG1580676
Chloromethane	U	UJ	C3	0.0556	0.500	1	11/22/2020 14:36	WG1580676
2-Chlorotoluene	U			0.0368	0.100	1	11/22/2020 14:36	WG1580676
4-Chlorotoluene	U			0.0452	0.200	1	11/22/2020 14:36	WG1580676
1,2-Dibromo-3-Chloropropane	U			0.204	1.00	1	11/22/2020 14:36	WG1580676
1,2-Dibromoethane	U			0.0210	0.100	1	11/22/2020 14:36	WG1580676
Dibromomethane	U			0.0400	0.200	1	11/22/2020 14:36	WG1580676
1,2-Dichlorobenzene	U			0.0580	0.200	1	11/22/2020 14:36	WG1580676
1,3-Dichlorobenzene	U			0.0680	0.200	1	11/22/2020 14:36	WG1580676
1,4-Dichlorobenzene	U			0.0788	0.200	1	11/22/2020 14:36	WG1580676
Dichlorodifluoromethane	U		~~J3~~	0.0327	0.100	1	11/22/2020 14:36	WG1580676
1,1-Dichloroethane	0.279			0.0230	0.100	1	11/22/2020 14:36	WG1580676
1,2-Dichloroethane	0.478			0.0190	0.100	1	11/22/2020 14:36	WG1580676
1,1-Dichloroethene	U	UJ	C3	0.0200	0.100	1	11/22/2020 14:36	WG1580676
cis-1,2-Dichloroethene	6.15			0.0276	0.100	1	11/22/2020 14:36	WG1580676
trans-1,2-Dichloroethene	0.0665		J	0.0572	0.200	1	11/22/2020 14:36	WG1580676
1,2-Dichloropropane	0.110		J	0.0508	0.200	1	11/22/2020 14:36	WG1580676
1,1-Dichloropropene	U			0.0280	0.100	1	11/22/2020 14:36	WG1580676
1,3-Dichloropropane	U			0.0700	0.200	1	11/22/2020 14:36	WG1580676
cis-1,3-Dichloropropene	U			0.0271	0.100	1	11/22/2020 14:36	WG1580676
trans-1,3-Dichloropropene	U			0.0612	0.200	1	11/22/2020 14:36	WG1580676
2,2-Dichloropropane	U			0.0317	0.100	1	11/22/2020 14:36	WG1580676
Di-isopropyl ether	0.189	J-	C3	0.0140	0.0400	1	11/22/2020 14:36	WG1580676
Ethylbenzene	U			0.0212	0.100	1	11/22/2020 14:36	WG1580676
Hexachloro-1,3-butadiene	U			0.508	1.00	1	11/22/2020 14:36	WG1580676
Isopropylbenzene	U			0.0345	0.100	1	11/22/2020 14:36	WG1580676
p-Isopropyltoluene	U			0.0932	0.200	1	11/22/2020 14:36	WG1580676
2-Butanone (MEK)	U	UJ	C3	0.500	1.00	1	11/22/2020 14:36	WG1580676
Methylene Chloride	U			0.265	1.00	1	11/22/2020 14:36	WG1580676
4-Methyl-2-pentanone (MIBK)	U	UJ	C3	0.400	1.00	1	11/22/2020 14:36	WG1580676
Methyl tert-butyl ether	U			0.0118	0.0400	1	11/22/2020 14:36	WG1580676
Naphthalene	U			0.124	0.500	1	11/22/2020 14:36	WG1580676
n-Propylbenzene	U			0.0472	0.200	1	11/22/2020 14:36	WG1580676
Styrene	U			0.109	0.500	1	11/22/2020 14:36	WG1580676
1,1,1,2-Tetrachloroethane	U			0.0200	0.100	1	11/22/2020 14:36	WG1580676
1,1,2,2-Tetrachloroethane	U			0.0156	0.100	1	11/22/2020 14:36	WG1580676
1,1,2-Trichlorotrifluoroethane	U			0.0270	0.100	1	11/24/2020 18:00	WG1581939
Tetrachloroethene	U			0.0280	0.100	1	11/22/2020 14:36	WG1580676
Toluene	0.147		J	0.0500	0.200	1	11/22/2020 14:36	WG1580676
1,2,3-Trichlorobenzene	U			0.0250	0.500	1	11/22/2020 14:36	WG1580676
1,2,4-Trichlorobenzene	U			0.193	0.500	1	11/22/2020 14:36	WG1580676
1,1,1-Trichloroethane	U			0.0110	0.100	1	11/22/2020 14:36	WG1580676

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Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,1,2-Trichloroethane	U		0.0353	0.100	1	11/22/2020 14:36	WG1580676
Trichloroethene	U		0.0160	0.0400	1	11/22/2020 14:36	WG1580676
Trichlorofluoromethane	U		0.0200	0.100	1	11/22/2020 14:36	WG1580676
1,2,3-Trichloropropane	U		0.204	0.500	1	11/22/2020 14:36	WG1580676
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	11/22/2020 14:36	WG1580676
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	11/22/2020 14:36	WG1580676
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	11/22/2020 14:36	WG1580676
Vinyl chloride	30.8		0.0273	0.100	1	11/22/2020 14:36	WG1580676
Xylenes, Total	U		0.191	0.260	1	11/22/2020 14:36	WG1580676
Ethyl Ether	0.394		0.0170	0.100	1	11/22/2020 14:36	WG1580676
Tetrahydrofuran	U UJ	C3	0.0900	0.500	1	11/22/2020 14:36	WG1580676
Iodomethane	U		0.242	0.500	1	11/22/2020 14:36	WG1580676
Allyl chloride	U		0.580	1.00	1	11/22/2020 14:36	WG1580676
Trans-1,4-Dichloro-2-butene	U UJ	C3	0.0560	0.200	1	11/22/2020 14:36	WG1580676
(S) Toluene-d8	*99.2*			*75.0-131*		*11/22/2020 14:36*	WG1580676
(S) Toluene-d8	*102*			*75.0-131*		*11/24/2020 18:00*	WG1581939
(S) 4-Bromofluorobenzene	*101*			*67.0-138*		*11/22/2020 14:36*	WG1580676
(S) 4-Bromofluorobenzene	*106*			*67.0-138*		*11/24/2020 18:00*	WG1581939
(S) 1,2-Dichloroethane-d4	*92.8*			*70.0-130*		*11/22/2020 14:36*	WG1580676
(S) 1,2-Dichloroethane-d4	*129*			*70.0-130*		*11/24/2020 18:00*	WG1581939

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MW-324-111320

Collected date/time: 11/13/20 10:20

SAMPLE RESULTS - 02

L1286095

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U	UJ C3	27.4	50.0	50	11/22/2020 18:00	WG1580676
Acrylonitrile	U	UJ C3	3.80	25.0	50	11/22/2020 18:00	WG1580676
Benzene	2.51		0.800	2.00	50	11/22/2020 18:00	WG1580676
Bromobenzene	U		2.10	25.0	50	11/22/2020 18:00	WG1580676
Bromodichloromethane	U		1.58	5.00	50	11/22/2020 18:00	WG1580676
Bromoform	U		12.0	50.0	50	11/22/2020 18:00	WG1580676
Bromomethane	U	~~J4~~	7.40	25.0	50	11/22/2020 18:00	WG1580676
n-Butylbenzene	U		7.65	25.0	50	11/22/2020 18:00	WG1580676
sec-Butylbenzene	U		5.05	25.0	50	11/22/2020 18:00	WG1580676
tert-Butylbenzene	U		3.10	10.0	50	11/22/2020 18:00	WG1580676
Carbon tetrachloride	U		2.16	10.0	50	11/22/2020 18:00	WG1580676
Chlorobenzene	U		1.15	5.00	50	11/22/2020 18:00	WG1580676
Chlorodibromomethane	U		0.900	5.00	50	11/22/2020 18:00	WG1580676
Chloroethane	U		2.16	10.0	50	11/22/2020 18:00	WG1580676
Chloroform	U		0.830	5.00	50	11/22/2020 18:00	WG1580676
Chloromethane	U	UJ C3	2.78	25.0	50	11/22/2020 18:00	WG1580676
2-Chlorotoluene	U		1.84	5.00	50	11/22/2020 18:00	WG1580676
4-Chlorotoluene	U		2.26	10.0	50	11/22/2020 18:00	WG1580676
1,2-Dibromo-3-Chloropropane	U		10.2	50.0	50	11/22/2020 18:00	WG1580676
1,2-Dibromoethane	U		1.05	5.00	50	11/22/2020 18:00	WG1580676
Dibromomethane	U		2.00	10.0	50	11/22/2020 18:00	WG1580676
1,2-Dichlorobenzene	U		2.90	10.0	50	11/22/2020 18:00	WG1580676
1,3-Dichlorobenzene	U		3.40	10.0	50	11/22/2020 18:00	WG1580676
1,4-Dichlorobenzene	U		3.94	10.0	50	11/22/2020 18:00	WG1580676
Dichlorodifluoromethane	U	~~J3~~	1.64	5.00	50	11/22/2020 18:00	WG1580676
1,1-Dichloroethane	U		1.15	5.00	50	11/22/2020 18:00	WG1580676
1,2-Dichloroethane	U		0.950	5.00	50	11/22/2020 18:00	WG1580676
1,1-Dichloroethene	7.97	J- C3	1.00	5.00	50	11/22/2020 18:00	WG1580676
cis-1,2-Dichloroethene	7210		1.38	5.00	50	11/22/2020 18:00	WG1580676
trans-1,2-Dichloroethene	13.7		2.86	10.0	50	11/22/2020 18:00	WG1580676
1,2-Dichloropropane	U		2.54	10.0	50	11/22/2020 18:00	WG1580676
1,1-Dichloropropene	U		1.40	5.00	50	11/22/2020 18:00	WG1580676
1,3-Dichloropropane	U		3.50	10.0	50	11/22/2020 18:00	WG1580676
cis-1,3-Dichloropropene	U		1.36	5.00	50	11/22/2020 18:00	WG1580676
trans-1,3-Dichloropropene	U		3.06	10.0	50	11/22/2020 18:00	WG1580676
2,2-Dichloropropane	U		1.59	5.00	50	11/22/2020 18:00	WG1580676
Di-isopropyl ether	U	UJ C3	0.700	2.00	50	11/22/2020 18:00	WG1580676
Ethylbenzene	U		1.06	5.00	50	11/22/2020 18:00	WG1580676
Hexachloro-1,3-butadiene	U		25.4	50.0	50	11/22/2020 18:00	WG1580676
Isopropylbenzene	U		1.73	5.00	50	11/22/2020 18:00	WG1580676
p-Isopropyltoluene	U		4.66	10.0	50	11/22/2020 18:00	WG1580676
2-Butanone (MEK)	U	UJ C3	25.0	50.0	50	11/22/2020 18:00	WG1580676
Methylene Chloride	U		13.3	50.0	50	11/22/2020 18:00	WG1580676
4-Methyl-2-pentanone (MIBK)	U	UJ C3	20.0	50.0	50	11/22/2020 18:00	WG1580676
Methyl tert-butyl ether	U		0.590	2.00	50	11/22/2020 18:00	WG1580676
Naphthalene	U		6.20	25.0	50	11/22/2020 18:00	WG1580676
n-Propylbenzene	U		2.36	10.0	50	11/22/2020 18:00	WG1580676
Styrene	U		5.45	25.0	50	11/22/2020 18:00	WG1580676
1,1,1,2-Tetrachloroethane	U		1.00	5.00	50	11/22/2020 18:00	WG1580676
1,1,2,2-Tetrachloroethane	U		0.780	5.00	50	11/22/2020 18:00	WG1580676
1,1,2-Trichlorotrifluoroethane	U		1.35	5.00	50	11/24/2020 21:10	WG1581939
Tetrachloroethene	U		1.40	5.00	50	11/22/2020 18:00	WG1580676
Toluene	U		2.50	10.0	50	11/22/2020 18:00	WG1580676
1,2,3-Trichlorobenzene	U		1.25	25.0	50	11/22/2020 18:00	WG1580676
1,2,4-Trichlorobenzene	U		9.65	25.0	50	11/22/2020 18:00	WG1580676
1,1,1-Trichloroethane	U		0.550	5.00	50	11/22/2020 18:00	WG1580676

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Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,1,2-Trichloroethane	U		1.77	5.00	50	11/22/2020 18:00	WG1580676
Trichloroethene	U		0.800	2.00	50	11/22/2020 18:00	WG1580676
Trichlorofluoromethane	U		1.00	5.00	50	11/22/2020 18:00	WG1580676
1,2,3-Trichloropropane	U		10.2	25.0	50	11/22/2020 18:00	WG1580676
1,2,4-Trimethylbenzene	U		2.32	10.0	50	11/22/2020 18:00	WG1580676
1,2,3-Trimethylbenzene	U		2.30	10.0	50	11/22/2020 18:00	WG1580676
1,3,5-Trimethylbenzene	U		2.16	10.0	50	11/22/2020 18:00	WG1580676
Vinyl chloride	184		1.36	5.00	50	11/22/2020 18:00	WG1580676
Xylenes, Total	U		9.55	13.0	50	11/22/2020 18:00	WG1580676
Ethyl Ether	U		0.850	5.00	50	11/22/2020 18:00	WG1580676
Tetrahydrofuran	U	UJ C3	4.50	25.0	50	11/22/2020 18:00	WG1580676
Iodomethane	U		12.1	25.0	50	11/22/2020 18:00	WG1580676
Allyl chloride	U		29.0	50.0	50	11/22/2020 18:00	WG1580676
Trans-1,4-Dichloro-2-butene	U	UJ C3	2.80	10.0	50	11/22/2020 18:00	WG1580676
(S) Toluene-d8	*101*			*75.0-131*		*11/22/2020 18:00*	WG1580676
(S) Toluene-d8	*103*			*75.0-131*		*11/24/2020 21:10*	WG1581939
(S) 4-Bromofluorobenzene	*101*			*67.0-138*		*11/22/2020 18:00*	WG1580676
(S) 4-Bromofluorobenzene	*99.7*			*67.0-138*		*11/24/2020 21:10*	WG1581939
(S) 1,2-Dichloroethane-d4	*94.4*			*70.0-130*		*11/22/2020 18:00*	WG1580676
(S) 1,2-Dichloroethane-d4	*128*			*70.0-130*		*11/24/2020 21:10*	WG1581939

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Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U	UJ C3	0.548	1.00	1	11/22/2020 14:57	WG1580676
Acrylonitrile	U	UJ C3	0.0760	0.500	1	11/22/2020 14:57	WG1580676
Benzene	0.0453		0.0160	0.0400	1	11/22/2020 14:57	WG1580676
Bromobenzene	U		0.0420	0.500	1	11/22/2020 14:57	WG1580676
Bromodichloromethane	U		0.0315	0.100	1	11/22/2020 14:57	WG1580676
Bromoform	U		0.239	1.00	1	11/22/2020 14:57	WG1580676
Bromomethane	U	~~J4~~	0.148	0.500	1	11/22/2020 14:57	WG1580676
n-Butylbenzene	U		0.153	0.500	1	11/22/2020 14:57	WG1580676
sec-Butylbenzene	U		0.101	0.500	1	11/22/2020 14:57	WG1580676
tert-Butylbenzene	U		0.0620	0.200	1	11/22/2020 14:57	WG1580676
Carbon tetrachloride	U		0.0432	0.200	1	11/22/2020 14:57	WG1580676
Chlorobenzene	U		0.0229	0.100	1	11/22/2020 14:57	WG1580676
Chlorodibromomethane	U		0.0180	0.100	1	11/22/2020 14:57	WG1580676
Chloroethane	U		0.0432	0.200	1	11/22/2020 14:57	WG1580676
Chloroform	U		0.0166	0.100	1	11/22/2020 14:57	WG1580676
Chloromethane	U	UJ C3	0.0556	0.500	1	11/22/2020 14:57	WG1580676
2-Chlorotoluene	U		0.0368	0.100	1	11/22/2020 14:57	WG1580676
4-Chlorotoluene	U		0.0452	0.200	1	11/22/2020 14:57	WG1580676
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	11/22/2020 14:57	WG1580676
1,2-Dibromoethane	U		0.0210	0.100	1	11/22/2020 14:57	WG1580676
Dibromomethane	U		0.0400	0.200	1	11/22/2020 14:57	WG1580676
1,2-Dichlorobenzene	U		0.0580	0.200	1	11/22/2020 14:57	WG1580676
1,3-Dichlorobenzene	U		0.0680	0.200	1	11/22/2020 14:57	WG1580676
1,4-Dichlorobenzene	U		0.0788	0.200	1	11/22/2020 14:57	WG1580676
Dichlorodifluoromethane	U	~~J3~~	0.0327	0.100	1	11/22/2020 14:57	WG1580676
1,1-Dichloroethane	0.366		0.0230	0.100	1	11/22/2020 14:57	WG1580676
1,2-Dichloroethane	U		0.0190	0.100	1	11/22/2020 14:57	WG1580676
1,1-Dichloroethene	U	UJ C3	0.0200	0.100	1	11/22/2020 14:57	WG1580676
cis-1,2-Dichloroethene	0.898		0.0276	0.100	1	11/22/2020 14:57	WG1580676
trans-1,2-Dichloroethene	U		0.0572	0.200	1	11/22/2020 14:57	WG1580676
1,2-Dichloropropane	0.0576	J	0.0508	0.200	1	11/22/2020 14:57	WG1580676
1,1-Dichloropropene	U		0.0280	0.100	1	11/22/2020 14:57	WG1580676
1,3-Dichloropropane	U		0.0700	0.200	1	11/22/2020 14:57	WG1580676
cis-1,3-Dichloropropene	U		0.0271	0.100	1	11/22/2020 14:57	WG1580676
trans-1,3-Dichloropropene	U		0.0612	0.200	1	11/22/2020 14:57	WG1580676
2,2-Dichloropropane	U		0.0317	0.100	1	11/22/2020 14:57	WG1580676
Di-isopropyl ether	U	UJ C3	0.0140	0.0400	1	11/22/2020 14:57	WG1580676
Ethylbenzene	U		0.0212	0.100	1	11/22/2020 14:57	WG1580676
Hexachloro-1,3-butadiene	U		0.508	1.00	1	11/22/2020 14:57	WG1580676
Isopropylbenzene	U		0.0345	0.100	1	11/22/2020 14:57	WG1580676
p-Isopropyltoluene	U		0.0932	0.200	1	11/22/2020 14:57	WG1580676
2-Butanone (MEK)	U	UJ C3	0.500	1.00	1	11/22/2020 14:57	WG1580676
Methylene Chloride	U		0.265	1.00	1	11/22/2020 14:57	WG1580676
4-Methyl-2-pentanone (MIBK)	U	UJ C3	0.400	1.00	1	11/22/2020 14:57	WG1580676
Methyl tert-butyl ether	U		0.0118	0.0400	1	11/22/2020 14:57	WG1580676
Naphthalene	U		0.124	0.500	1	11/22/2020 14:57	WG1580676
n-Propylbenzene	U		0.0472	0.200	1	11/22/2020 14:57	WG1580676
Styrene	U		0.109	0.500	1	11/22/2020 14:57	WG1580676
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	11/22/2020 14:57	WG1580676
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	11/22/2020 14:57	WG1580676
1,1,2-Trichlorotrifluoroethane	0.458	J	0.0270	0.100	1	11/24/2020 18:19	WG1581939
Tetrachloroethene	U		0.0280	0.100	1	11/22/2020 14:57	WG1580676
Toluene	0.0726	J	0.0500	0.200	1	11/22/2020 14:57	WG1580676
1,2,3-Trichlorobenzene	U		0.0250	0.500	1	11/22/2020 14:57	WG1580676
1,2,4-Trichlorobenzene	U		0.193	0.500	1	11/22/2020 14:57	WG1580676
1,1,1-Trichloroethane	0.0917	J	0.0110	0.100	1	11/22/2020 14:57	WG1580676

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Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l		Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,1,2-Trichloroethane	U			0.0353	0.100	1	11/22/2020 14:57	WG1580676
Trichloroethene	U			0.0160	0.0400	1	11/22/2020 14:57	WG1580676
Trichlorofluoromethane	U			0.0200	0.100	1	11/22/2020 14:57	WG1580676
1,2,3-Trichloropropane	U			0.204	0.500	1	11/22/2020 14:57	WG1580676
1,2,4-Trimethylbenzene	U			0.0464	0.200	1	11/22/2020 14:57	WG1580676
1,2,3-Trimethylbenzene	U			0.0460	0.200	1	11/22/2020 14:57	WG1580676
1,3,5-Trimethylbenzene	U			0.0432	0.200	1	11/22/2020 14:57	WG1580676
Vinyl chloride	U			0.0273	0.100	1	11/22/2020 14:57	WG1580676
Xylenes, Total	U			0.191	0.260	1	11/22/2020 14:57	WG1580676
Ethyl Ether	U			0.0170	0.100	1	11/22/2020 14:57	WG1580676
Tetrahydrofuran	U	UJ	C3	0.0900	0.500	1	11/22/2020 14:57	WG1580676
Iodomethane	U			0.242	0.500	1	11/22/2020 14:57	WG1580676
Allyl chloride	U			0.580	1.00	1	11/22/2020 14:57	WG1580676
Trans-1,4-Dichloro-2-butene	U	UJ	C3	0.0560	0.200	1	11/22/2020 14:57	WG1580676
(S) Toluene-d8	*100*				*75.0-131*		*11/22/2020 14:57*	WG1580676
(S) Toluene-d8	*95.4*				*75.0-131*		*11/24/2020 18:19*	WG1581939
(S) 4-Bromofluorobenzene	*103*				*67.0-138*		*11/22/2020 14:57*	WG1580676
(S) 4-Bromofluorobenzene	*108*				*67.0-138*		*11/24/2020 18:19*	WG1581939
(S) 1,2-Dichloroethane-d4	*95.3*				*70.0-130*		*11/22/2020 14:57*	WG1580676
(S) 1,2-Dichloroethane-d4	*134*		J1		*70.0-130*		*11/24/2020 18:19*	WG1581939

1202/7/1 CJ

Wet Chemistry by Method 9056A

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Sulfate	913	J	594	5000	1	12/01/2020 03:19	WG1584160

Wet Chemistry by Method 9060A

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
TOC (Total Organic Carbon)	7620		102	1000	1	11/27/2020 18:26	WG1583149

Metals (ICPMS) by Method 6020B

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Iron	9910		28.1	100	1	11/26/2020 00:46	WG1581599
Manganese	3370		14.1	100	20	11/26/2020 09:00	WG1581599

Volatile Organic Compounds (GC) by Method RSK175

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Methane	5490		0.287	0.678	1	11/23/2020 15:10	WG1579664
Ethane	U		0.296	1.29	1	11/23/2020 15:10	WG1579664
Ethene	U		0.422	1.27	1	11/23/2020 15:10	WG1579664

Volatile Organic Compounds (GC/MS) by Method 8260D

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Acetone	U		0.548	1.00	1	11/30/2020 00:03	WG1583236
Acrylonitrile	U		0.0760	0.500	1	11/30/2020 00:03	WG1583236
Benzene	U		0.0160	0.0400	1	11/30/2020 00:03	WG1583236
Bromobenzene	U		0.0420	0.500	1	11/30/2020 00:03	WG1583236
Bromodichloromethane	U		0.0315	0.100	1	11/30/2020 00:03	WG1583236
Bromoform	U		0.239	1.00	1	11/30/2020 00:03	WG1583236
Bromomethane	U		0.148	0.500	1	11/30/2020 00:03	WG1583236
n-Butylbenzene	U		0.153	0.500	1	11/30/2020 00:03	WG1583236
sec-Butylbenzene	U		0.101	0.500	1	11/30/2020 00:03	WG1583236
tert-Butylbenzene	U		0.0620	0.200	1	11/30/2020 00:03	WG1583236
Carbon tetrachloride	U		0.0432	0.200	1	11/30/2020 00:03	WG1583236
Chlorobenzene	U		0.0229	0.100	1	11/30/2020 00:03	WG1583236
Chlorodibromomethane	U		0.0180	0.100	1	11/30/2020 00:03	WG1583236
Chloroethane	U		0.0432	0.200	1	11/30/2020 00:03	WG1583236
Chloroform	U		0.0166	0.100	1	11/30/2020 00:03	WG1583236
Chloromethane	U		0.0556	0.500	1	11/30/2020 00:03	WG1583236
2-Chlorotoluene	U		0.0368	0.100	1	11/30/2020 00:03	WG1583236
4-Chlorotoluene	U		0.0452	0.200	1	11/30/2020 00:03	WG1583236
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	11/30/2020 00:03	WG1583236
1,2-Dibromoethane	U		0.0210	0.100	1	11/30/2020 00:03	WG1583236
Dibromomethane	U		0.0400	0.200	1	11/30/2020 00:03	WG1583236
1,2-Dichlorobenzene	U		0.0580	0.200	1	11/30/2020 00:03	WG1583236
1,3-Dichlorobenzene	U		0.0680	0.200	1	11/30/2020 00:03	WG1583236
1,4-Dichlorobenzene	U		0.0788	0.200	1	11/30/2020 00:03	WG1583236
Dichlorodifluoromethane	U		0.0327	0.100	1	11/30/2020 00:03	WG1583236
1,1-Dichloroethane	U		0.0230	0.100	1	11/30/2020 00:03	WG1583236
1,2-Dichloroethane	U		0.0190	0.100	1	11/30/2020 00:03	WG1583236
1,1-Dichloroethene	U		0.0200	0.100	1	11/30/2020 00:03	WG1583236
cis-1,2-Dichloroethene	U		0.0276	0.100	1	11/30/2020 00:03	WG1583236
trans-1,2-Dichloroethene	U		0.0572	0.200	1	11/30/2020 00:03	WG1583236
1,2-Dichloropropane	U		0.0508	0.200	1	11/30/2020 00:03	WG1583236

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Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,1-Dichloropropene	U		0.0280	0.100	1	11/30/2020 00:03	WG1583236
1,3-Dichloropropane	U		0.0700	0.200	1	11/30/2020 00:03	WG1583236
cis-1,3-Dichloropropene	U		0.0271	0.100	1	11/30/2020 00:03	WG1583236
trans-1,3-Dichloropropene	U		0.0612	0.200	1	11/30/2020 00:03	WG1583236
2,2-Dichloropropane	U	~~J4~~	0.0317	0.100	1	11/30/2020 00:03	WG1583236
Di-isopropyl ether	U		0.0140	0.0400	1	11/30/2020 00:03	WG1583236
Ethylbenzene	U		0.0212	0.100	1	11/30/2020 00:03	WG1583236
Hexachloro-1,3-butadiene	U		0.508	1.00	1	11/30/2020 00:03	WG1583236
Isopropylbenzene	U		0.0345	0.100	1	11/30/2020 00:03	WG1583236
p-Isopropyltoluene	U		0.0932	0.200	1	11/30/2020 00:03	WG1583236
2-Butanone (MEK)	U	UJ C3	0.500	1.00	1	11/30/2020 00:03	WG1583236
Methylene Chloride	U		0.265	1.00	1	11/30/2020 00:03	WG1583236
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	11/30/2020 00:03	WG1583236
Methyl tert-butyl ether	U		0.0118	0.0400	1	11/30/2020 00:03	WG1583236
Naphthalene	0.478	J	0.124	0.500	1	11/30/2020 00:03	WG1583236
n-Propylbenzene	U		0.0472	0.200	1	11/30/2020 00:03	WG1583236
Styrene	U		0.109	0.500	1	11/30/2020 00:03	WG1583236
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	11/30/2020 00:03	WG1583236
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	11/30/2020 00:03	WG1583236
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	11/30/2020 00:03	WG1583236
Tetrachloroethene	U		0.0280	0.100	1	11/30/2020 00:03	WG1583236
Toluene	0.0910	J	0.0500	0.200	1	11/30/2020 00:03	WG1583236
1,2,3-Trichlorobenzene	U	UJ C4	0.0250	0.500	1	11/30/2020 00:03	WG1583236
1,2,4-Trichlorobenzene	U		0.193	0.500	1	11/30/2020 00:03	WG1583236
1,1,1-Trichloroethane	U		0.0110	0.100	1	11/30/2020 00:03	WG1583236
1,1,2-Trichloroethane	U		0.0353	0.100	1	11/30/2020 00:03	WG1583236
Trichloroethene	U		0.0160	0.0400	1	11/30/2020 00:03	WG1583236
Trichlorofluoromethane	U		0.0200	0.100	1	11/30/2020 00:03	WG1583236
1,2,3-Trichloropropane	U		0.204	0.500	1	11/30/2020 00:03	WG1583236
1,2,4-Trimethylbenzene	0.169	J	0.0464	0.200	1	11/30/2020 00:03	WG1583236
1,2,3-Trimethylbenzene	0.110	J	0.0460	0.200	1	11/30/2020 00:03	WG1583236
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	11/30/2020 00:03	WG1583236
Vinyl chloride	U		0.0273	0.100	1	11/30/2020 00:03	WG1583236
Xylenes, Total	U		0.191	0.260	1	11/30/2020 00:03	WG1583236
Ethyl Ether	U		0.0170	0.100	1	11/30/2020 00:03	WG1583236
Tetrahydrofuran	U	UJ C3	0.0900	0.500	1	11/30/2020 00:03	WG1583236
Iodomethane	U		0.242	0.500	1	11/30/2020 00:03	WG1583236
Allyl chloride	U		0.580	1.00	1	11/30/2020 00:03	WG1583236
Trans-1,4-Dichloro-2-butene	U	~~J3~~	0.0560	0.200	1	11/30/2020 00:03	WG1583236
(S) Toluene-d8	*106*			*75.0-131*		*11/30/2020 00:03*	WG1583236
(S) 4-Bromofluorobenzene	*105*			*67.0-138*		*11/30/2020 00:03*	WG1583236
(S) 1,2-Dichloroethane-d4	*89.1*			*70.0-130*		*11/30/2020 00:03*	WG1583236

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Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U		0.548	1.00	1	11/30/2020 00:22	WG1583236
Acrylonitrile	U		0.0760	0.500	1	11/30/2020 00:22	WG1583236
Benzene	U		0.0160	0.0400	1	11/30/2020 00:22	WG1583236
Bromobenzene	U		0.0420	0.500	1	11/30/2020 00:22	WG1583236
Bromodichloromethane	U		0.0315	0.100	1	11/30/2020 00:22	WG1583236
Bromoform	U		0.239	1.00	1	11/30/2020 00:22	WG1583236
Bromomethane	U		0.148	0.500	1	11/30/2020 00:22	WG1583236
n-Butylbenzene	U		0.153	0.500	1	11/30/2020 00:22	WG1583236
sec-Butylbenzene	U		0.101	0.500	1	11/30/2020 00:22	WG1583236
tert-Butylbenzene	U		0.0620	0.200	1	11/30/2020 00:22	WG1583236
Carbon tetrachloride	U		0.0432	0.200	1	11/30/2020 00:22	WG1583236
Chlorobenzene	U		0.0229	0.100	1	11/30/2020 00:22	WG1583236
Chlorodibromomethane	U		0.0180	0.100	1	11/30/2020 00:22	WG1583236
Chloroethane	U		0.0432	0.200	1	11/30/2020 00:22	WG1583236
Chloroform	U		0.0166	0.100	1	11/30/2020 00:22	WG1583236
Chloromethane	U		0.0556	0.500	1	11/30/2020 00:22	WG1583236
2-Chlorotoluene	U		0.0368	0.100	1	11/30/2020 00:22	WG1583236
4-Chlorotoluene	U		0.0452	0.200	1	11/30/2020 00:22	WG1583236
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	11/30/2020 00:22	WG1583236
1,2-Dibromoethane	U		0.0210	0.100	1	11/30/2020 00:22	WG1583236
Dibromomethane	U		0.0400	0.200	1	11/30/2020 00:22	WG1583236
1,2-Dichlorobenzene	U		0.0580	0.200	1	11/30/2020 00:22	WG1583236
1,3-Dichlorobenzene	U		0.0680	0.200	1	11/30/2020 00:22	WG1583236
1,4-Dichlorobenzene	U		0.0788	0.200	1	11/30/2020 00:22	WG1583236
Dichlorodifluoromethane	U		0.0327	0.100	1	11/30/2020 00:22	WG1583236
1,1-Dichloroethane	U		0.0230	0.100	1	11/30/2020 00:22	WG1583236
1,2-Dichloroethane	U		0.0190	0.100	1	11/30/2020 00:22	WG1583236
1,1-Dichloroethene	U		0.0200	0.100	1	11/30/2020 00:22	WG1583236
cis-1,2-Dichloroethene	U		0.0276	0.100	1	11/30/2020 00:22	WG1583236
trans-1,2-Dichloroethene	U		0.0572	0.200	1	11/30/2020 00:22	WG1583236
1,2-Dichloropropane	U		0.0508	0.200	1	11/30/2020 00:22	WG1583236
1,1-Dichloropropene	U		0.0280	0.100	1	11/30/2020 00:22	WG1583236
1,3-Dichloropropane	U		0.0700	0.200	1	11/30/2020 00:22	WG1583236
cis-1,3-Dichloropropene	U		0.0271	0.100	1	11/30/2020 00:22	WG1583236
trans-1,3-Dichloropropene	U		0.0612	0.200	1	11/30/2020 00:22	WG1583236
2,2-Dichloropropane	U	~~J4~~	0.0317	0.100	1	11/30/2020 00:22	WG1583236
Di-isopropyl ether	U		0.0140	0.0400	1	11/30/2020 00:22	WG1583236
Ethylbenzene	U		0.0212	0.100	1	11/30/2020 00:22	WG1583236
Hexachloro-1,3-butadiene	U		0.508	1.00	1	11/30/2020 00:22	WG1583236
Isopropylbenzene	U		0.0345	0.100	1	11/30/2020 00:22	WG1583236
p-Isopropyltoluene	U		0.0932	0.200	1	11/30/2020 00:22	WG1583236
2-Butanone (MEK)	U	UJ C3	0.500	1.00	1	11/30/2020 00:22	WG1583236
Methylene Chloride	U		0.265	1.00	1	11/30/2020 00:22	WG1583236
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	11/30/2020 00:22	WG1583236
Methyl tert-butyl ether	U		0.0118	0.0400	1	11/30/2020 00:22	WG1583236
Naphthalene	U		0.124	0.500	1	11/30/2020 00:22	WG1583236
n-Propylbenzene	U		0.0472	0.200	1	11/30/2020 00:22	WG1583236
Styrene	U		0.109	0.500	1	11/30/2020 00:22	WG1583236
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	11/30/2020 00:22	WG1583236
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	11/30/2020 00:22	WG1583236
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	11/30/2020 00:22	WG1583236
Tetrachloroethene	U		0.0280	0.100	1	11/30/2020 00:22	WG1583236
Toluene	0.0750	J	0.0500	0.200	1	11/30/2020 00:22	WG1583236
1,2,3-Trichlorobenzene	U	UJ C4	0.0250	0.500	1	11/30/2020 00:22	WG1583236
1,2,4-Trichlorobenzene	U		0.193	0.500	1	11/30/2020 00:22	WG1583236
1,1,1-Trichloroethane	U		0.0110	0.100	1	11/30/2020 00:22	WG1583236

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MW-303-111720

Collected date/time: 11/17/20 10:15

SAMPLE RESULTS - 02

L1288012

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,1,2-Trichloroethane	U		0.0353	0.100	1	11/30/2020 00:22	WG1583236
Trichloroethene	U		0.0160	0.0400	1	11/30/2020 00:22	WG1583236
Trichlorofluoromethane	U		0.0200	0.100	1	11/30/2020 00:22	WG1583236
1,2,3-Trichloropropane	U		0.204	0.500	1	11/30/2020 00:22	WG1583236
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	11/30/2020 00:22	WG1583236
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	11/30/2020 00:22	WG1583236
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	11/30/2020 00:22	WG1583236
Vinyl chloride	U		0.0273	0.100	1	11/30/2020 00:22	WG1583236
Xylenes, Total	U		0.191	0.260	1	11/30/2020 00:22	WG1583236
Ethyl Ether	U		0.0170	0.100	1	11/30/2020 00:22	WG1583236
Tetrahydrofuran	U	UJ C3	0.0900	0.500	1	11/30/2020 00:22	WG1583236
Iodomethane	U		0.242	0.500	1	11/30/2020 00:22	WG1583236
Allyl chloride	U		0.580	1.00	1	11/30/2020 00:22	WG1583236
Trans-1,4-Dichloro-2-butene	U	~~J3~~	0.0560	0.200	1	11/30/2020 00:22	WG1583236
(S) Toluene-d8	*106*			*75.0-131*		*11/30/2020 00:22*	WG1583236
(S) 4-Bromofluorobenzene	*103*			*67.0-138*		*11/30/2020 00:22*	WG1583236
(S) 1,2-Dichloroethane-d4	*90.0*			*70.0-130*		*11/30/2020 00:22*	WG1583236

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

JC 1/7/2021

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U		0.548	1.00	1	11/30/2020 00:41	WG1583236
Acrylonitrile	U		0.0760	0.500	1	11/30/2020 00:41	WG1583236
Benzene	0.0480		0.0160	0.0400	1	11/30/2020 00:41	WG1583236
Bromobenzene	U		0.0420	0.500	1	11/30/2020 00:41	WG1583236
Bromodichloromethane	U		0.0315	0.100	1	11/30/2020 00:41	WG1583236
Bromoform	U		0.239	1.00	1	11/30/2020 00:41	WG1583236
Bromomethane	U		0.148	0.500	1	11/30/2020 00:41	WG1583236
n-Butylbenzene	U		0.153	0.500	1	11/30/2020 00:41	WG1583236
sec-Butylbenzene	U		0.101	0.500	1	11/30/2020 00:41	WG1583236
tert-Butylbenzene	U		0.0620	0.200	1	11/30/2020 00:41	WG1583236
Carbon tetrachloride	U		0.0432	0.200	1	11/30/2020 00:41	WG1583236
Chlorobenzene	U		0.0229	0.100	1	11/30/2020 00:41	WG1583236
Chlorodibromomethane	U		0.0180	0.100	1	11/30/2020 00:41	WG1583236
Chloroethane	U		0.0432	0.200	1	11/30/2020 00:41	WG1583236
Chloroform	U		0.0166	0.100	1	11/30/2020 00:41	WG1583236
Chloromethane	U		0.0556	0.500	1	11/30/2020 00:41	WG1583236
2-Chlorotoluene	U		0.0368	0.100	1	11/30/2020 00:41	WG1583236
4-Chlorotoluene	U		0.0452	0.200	1	11/30/2020 00:41	WG1583236
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	11/30/2020 00:41	WG1583236
1,2-Dibromoethane	U		0.0210	0.100	1	11/30/2020 00:41	WG1583236
Dibromomethane	U		0.0400	0.200	1	11/30/2020 00:41	WG1583236
1,2-Dichlorobenzene	U		0.0580	0.200	1	11/30/2020 00:41	WG1583236
1,3-Dichlorobenzene	U		0.0680	0.200	1	11/30/2020 00:41	WG1583236
1,4-Dichlorobenzene	U		0.0788	0.200	1	11/30/2020 00:41	WG1583236
Dichlorodifluoromethane	U		0.0327	0.100	1	11/30/2020 00:41	WG1583236
1,1-Dichloroethane	U		0.0230	0.100	1	11/30/2020 00:41	WG1583236
1,2-Dichloroethane	U		0.0190	0.100	1	11/30/2020 00:41	WG1583236
1,1-Dichloroethene	U		0.0200	0.100	1	11/30/2020 00:41	WG1583236
cis-1,2-Dichloroethene	U		0.0276	0.100	1	11/30/2020 00:41	WG1583236
trans-1,2-Dichloroethene	U		0.0572	0.200	1	11/30/2020 00:41	WG1583236
1,2-Dichloropropane	U		0.0508	0.200	1	11/30/2020 00:41	WG1583236
1,1-Dichloropropene	U		0.0280	0.100	1	11/30/2020 00:41	WG1583236
1,3-Dichloropropane	U		0.0700	0.200	1	11/30/2020 00:41	WG1583236
cis-1,3-Dichloropropene	U		0.0271	0.100	1	11/30/2020 00:41	WG1583236
trans-1,3-Dichloropropene	U		0.0612	0.200	1	11/30/2020 00:41	WG1583236
2,2-Dichloropropane	U	~~J4~~	0.0317	0.100	1	11/30/2020 00:41	WG1583236
Di-isopropyl ether	U		0.0140	0.0400	1	11/30/2020 00:41	WG1583236
Ethylbenzene	0.0600	J	0.0212	0.100	1	11/30/2020 00:41	WG1583236
Hexachloro-1,3-butadiene	U		0.508	1.00	1	11/30/2020 00:41	WG1583236
Isopropylbenzene	U		0.0345	0.100	1	11/30/2020 00:41	WG1583236
p-Isopropyltoluene	U		0.0932	0.200	1	11/30/2020 00:41	WG1583236
2-Butanone (MEK)	U	UJ C3	0.500	1.00	1	11/30/2020 00:41	WG1583236
Methylene Chloride	U		0.265	1.00	1	11/30/2020 00:41	WG1583236
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	11/30/2020 00:41	WG1583236
Methyl tert-butyl ether	U		0.0118	0.0400	1	11/30/2020 00:41	WG1583236
Naphthalene	U		0.124	0.500	1	11/30/2020 00:41	WG1583236
n-Propylbenzene	U		0.0472	0.200	1	11/30/2020 00:41	WG1583236
Styrene	U		0.109	0.500	1	11/30/2020 00:41	WG1583236
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	11/30/2020 00:41	WG1583236
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	11/30/2020 00:41	WG1583236
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	11/30/2020 00:41	WG1583236
Tetrachloroethene	U		0.0280	0.100	1	11/30/2020 00:41	WG1583236
Toluene	0.743		0.0500	0.200	1	11/30/2020 00:41	WG1583236
1,2,3-Trichlorobenzene	U	UJ C4	0.0250	0.500	1	11/30/2020 00:41	WG1583236
1,2,4-Trichlorobenzene	U		0.193	0.500	1	11/30/2020 00:41	WG1583236
1,1,1-Trichloroethane	U		0.0110	0.100	1	11/30/2020 00:41	WG1583236

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Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,1,2-Trichloroethane	U		0.0353	0.100	1	11/30/2020 00:41	WG1583236
Trichloroethene	U		0.0160	0.0400	1	11/30/2020 00:41	WG1583236
Trichlorofluoromethane	U		0.0200	0.100	1	11/30/2020 00:41	WG1583236
1,2,3-Trichloropropane	U		0.204	0.500	1	11/30/2020 00:41	WG1583236
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	11/30/2020 00:41	WG1583236
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	11/30/2020 00:41	WG1583236
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	11/30/2020 00:41	WG1583236
Vinyl chloride	U		0.0273	0.100	1	11/30/2020 00:41	WG1583236
Xylenes, Total	0.243	J	0.191	0.260	1	11/30/2020 00:41	WG1583236
Ethyl Ether	U		0.0170	0.100	1	11/30/2020 00:41	WG1583236
Tetrahydrofuran	U	UJ C3	0.0900	0.500	1	11/30/2020 00:41	WG1583236
Iodomethane	U		0.242	0.500	1	11/30/2020 00:41	WG1583236
Allyl chloride	U		0.580	1.00	1	11/30/2020 00:41	WG1583236
Trans-1,4-Dichloro-2-butene	U	~~J3~~	0.0560	0.200	1	11/30/2020 00:41	WG1583236
(S) Toluene-d8	*106*			*75.0-131*		*11/30/2020 00:41*	WG1583236
(S) 4-Bromofluorobenzene	*107*			*67.0-138*		*11/30/2020 00:41*	WG1583236
(S) 1,2-Dichloroethane-d4	*88.6*			*70.0-130*		*11/30/2020 00:41*	WG1583236

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

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1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Wet Chemistry by Method 9056A

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Sulfate	128000 R	E	594	5000	1	12/01/2020 03:32	WG1584160
Sulfate	123000		2970	25000	5	12/01/2020 22:08	WG1584534

Wet Chemistry by Method 9060A

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
TOC (Total Organic Carbon)	2470		102	1000	1	11/27/2020 19:03	WG1583149

Metals (ICPMS) by Method 6020B

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Iron	4910		28.1	100	1	11/26/2020 00:50	WG1581599
Manganese	971		3.52	25.0	5	11/26/2020 09:04	WG1581599

Volatile Organic Compounds (GC) by Method RSK175

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Methane	55.5		0.287	0.678	1	11/23/2020 15:19	WG1579664
Ethane	U		0.296	1.29	1	11/23/2020 15:19	WG1579664
Ethene	U		0.422	1.27	1	11/23/2020 15:19	WG1579664

Volatile Organic Compounds (GC/MS) by Method 8260D

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Acetone	U		0.548	1.00	1	11/30/2020 01:00	WG1583236
Acrylonitrile	U		0.0760	0.500	1	11/30/2020 01:00	WG1583236
Benzene	0.0950		0.0160	0.0400	1	11/30/2020 01:00	WG1583236
Bromobenzene	U		0.0420	0.500	1	11/30/2020 01:00	WG1583236
Bromodichloromethane	U		0.0315	0.100	1	11/30/2020 01:00	WG1583236
Bromoform	U		0.239	1.00	1	11/30/2020 01:00	WG1583236
Bromomethane	U		0.148	0.500	1	11/30/2020 01:00	WG1583236
n-Butylbenzene	U		0.153	0.500	1	11/30/2020 01:00	WG1583236
sec-Butylbenzene	U		0.101	0.500	1	11/30/2020 01:00	WG1583236
tert-Butylbenzene	U		0.0620	0.200	1	11/30/2020 01:00	WG1583236
Carbon tetrachloride	U		0.0432	0.200	1	11/30/2020 01:00	WG1583236
Chlorobenzene	U		0.0229	0.100	1	11/30/2020 01:00	WG1583236
Chlorodibromomethane	U		0.0180	0.100	1	11/30/2020 01:00	WG1583236
Chloroethane	U		0.0432	0.200	1	11/30/2020 01:00	WG1583236
Chloroform	U		0.0166	0.100	1	11/30/2020 01:00	WG1583236
Chloromethane	U		0.0556	0.500	1	11/30/2020 01:00	WG1583236
2-Chlorotoluene	U		0.0368	0.100	1	11/30/2020 01:00	WG1583236
4-Chlorotoluene	U		0.0452	0.200	1	11/30/2020 01:00	WG1583236
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	11/30/2020 01:00	WG1583236
1,2-Dibromoethane	U		0.0210	0.100	1	11/30/2020 01:00	WG1583236
Dibromomethane	U		0.0400	0.200	1	11/30/2020 01:00	WG1583236
1,2-Dichlorobenzene	U		0.0580	0.200	1	11/30/2020 01:00	WG1583236
1,3-Dichlorobenzene	U		0.0680	0.200	1	11/30/2020 01:00	WG1583236
1,4-Dichlorobenzene	U		0.0788	0.200	1	11/30/2020 01:00	WG1583236
Dichlorodifluoromethane	U		0.0327	0.100	1	11/30/2020 01:00	WG1583236
1,1-Dichloroethane	U		0.0230	0.100	1	11/30/2020 01:00	WG1583236
1,2-Dichloroethane	U		0.0190	0.100	1	11/30/2020 01:00	WG1583236
1,1-Dichloroethene	0.553		0.0200	0.100	1	11/30/2020 01:00	WG1583236
cis-1,2-Dichloroethene	101		0.276	1.00	10	12/01/2020 16:09	WG1584570
trans-1,2-Dichloroethene	0.802		0.0572	0.200	1	11/30/2020 01:00	WG1583236

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Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,2-Dichloropropane	U		0.0508	0.200	1	11/30/2020 01:00	WG1583236
1,1-Dichloropropene	U		0.0280	0.100	1	11/30/2020 01:00	WG1583236
1,3-Dichloropropane	U		0.0700	0.200	1	11/30/2020 01:00	WG1583236
cis-1,3-Dichloropropene	U		0.0271	0.100	1	11/30/2020 01:00	WG1583236
trans-1,3-Dichloropropene	U		0.0612	0.200	1	11/30/2020 01:00	WG1583236
2,2-Dichloropropane	U	~~J4~~	0.0317	0.100	1	11/30/2020 01:00	WG1583236
Di-isopropyl ether	U		0.0140	0.0400	1	11/30/2020 01:00	WG1583236
Ethylbenzene	U		0.0212	0.100	1	11/30/2020 01:00	WG1583236
Hexachloro-1,3-butadiene	U		0.508	1.00	1	11/30/2020 01:00	WG1583236
Isopropylbenzene	U		0.0345	0.100	1	11/30/2020 01:00	WG1583236
p-Isopropyltoluene	U		0.0932	0.200	1	11/30/2020 01:00	WG1583236
2-Butanone (MEK)	U	UJ C3	0.500	1.00	1	11/30/2020 01:00	WG1583236
Methylene Chloride	U		0.265	1.00	1	11/30/2020 01:00	WG1583236
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	11/30/2020 01:00	WG1583236
Methyl tert-butyl ether	U		0.0118	0.0400	1	11/30/2020 01:00	WG1583236
Naphthalene	U		0.124	0.500	1	11/30/2020 01:00	WG1583236
n-Propylbenzene	U		0.0472	0.200	1	11/30/2020 01:00	WG1583236
Styrene	U		0.109	0.500	1	11/30/2020 01:00	WG1583236
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	11/30/2020 01:00	WG1583236
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	11/30/2020 01:00	WG1583236
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	11/30/2020 01:00	WG1583236
Tetrachloroethene	215		0.280	1.00	10	12/01/2020 16:09	WG1584570
Toluene	0.339		0.0500	0.200	1	11/30/2020 01:00	WG1583236
1,2,3-Trichlorobenzene	U	UJ C4	0.0250	0.500	1	11/30/2020 01:00	WG1583236
1,2,4-Trichlorobenzene	U		0.193	0.500	1	11/30/2020 01:00	WG1583236
1,1,1-Trichloroethane	U		0.0110	0.100	1	11/30/2020 01:00	WG1583236
1,1,2-Trichloroethane	U		0.0353	0.100	1	11/30/2020 01:00	WG1583236
Trichloroethene	107	J+ C5	0.160	0.400	10	12/01/2020 16:09	WG1584570
Trichlorofluoromethane	U		0.0200	0.100	1	11/30/2020 01:00	WG1583236
1,2,3-Trichloropropane	U		0.204	0.500	1	11/30/2020 01:00	WG1583236
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	11/30/2020 01:00	WG1583236
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	11/30/2020 01:00	WG1583236
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	11/30/2020 01:00	WG1583236
Vinyl chloride	0.302		0.0273	0.100	1	11/30/2020 01:00	WG1583236
Xylenes, Total	U		0.191	0.260	1	11/30/2020 01:00	WG1583236
Ethyl Ether	U		0.0170	0.100	1	11/30/2020 01:00	WG1583236
Tetrahydrofuran	U	UJ C3	0.0900	0.500	1	11/30/2020 01:00	WG1583236
Iodomethane	U		0.242	0.500	1	11/30/2020 01:00	WG1583236
Allyl chloride	U		0.580	1.00	1	11/30/2020 01:00	WG1583236
Trans-1,4-Dichloro-2-butene	U	~~J3~~	0.0560	0.200	1	11/30/2020 01:00	WG1583236
(S) Toluene-d8	*107*			*75.0-131*		*11/30/2020 01:00*	WG1583236
(S) Toluene-d8	*109*			*75.0-131*		*12/01/2020 16:09*	WG1584570
(S) 4-Bromofluorobenzene	*106*			*67.0-138*		*11/30/2020 01:00*	WG1583236
(S) 4-Bromofluorobenzene	*109*			*67.0-138*		*12/01/2020 16:09*	WG1584570
(S) 1,2-Dichloroethane-d4	*90.8*			*70.0-130*		*11/30/2020 01:00*	WG1583236
(S) 1,2-Dichloroethane-d4	*98.3*			*70.0-130*		*12/01/2020 16:09*	WG1584570

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

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Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Sulfate	5710		594	5000	1	12/01/2020 04:49	WG1584160

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	1940		102	1000	1	11/27/2020 19:18	WG1583149

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	2200		28.1	100	1	11/26/2020 00:53	WG1581599
Manganese	622		3.52	25.0	5	11/26/2020 09:07	WG1581599

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	135		0.287	0.678	1	11/23/2020 15:23	WG1579664
Ethane	U		0.296	1.29	1	11/23/2020 15:23	WG1579664
Ethene	U		0.422	1.27	1	11/23/2020 15:23	WG1579664

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U		0.548	1.00	1	11/30/2020 01:19	WG1583236
Acrylonitrile	U		0.0760	0.500	1	11/30/2020 01:19	WG1583236
Benzene	U		0.0160	0.0400	1	11/30/2020 01:19	WG1583236
Bromobenzene	U		0.0420	0.500	1	11/30/2020 01:19	WG1583236
Bromodichloromethane	U		0.0315	0.100	1	11/30/2020 01:19	WG1583236
Bromoform	U		0.239	1.00	1	11/30/2020 01:19	WG1583236
Bromomethane	U		0.148	0.500	1	11/30/2020 01:19	WG1583236
n-Butylbenzene	U		0.153	0.500	1	11/30/2020 01:19	WG1583236
sec-Butylbenzene	U		0.101	0.500	1	11/30/2020 01:19	WG1583236
tert-Butylbenzene	U		0.0620	0.200	1	11/30/2020 01:19	WG1583236
Carbon tetrachloride	U		0.0432	0.200	1	11/30/2020 01:19	WG1583236
Chlorobenzene	U		0.0229	0.100	1	11/30/2020 01:19	WG1583236
Chlorodibromomethane	U		0.0180	0.100	1	11/30/2020 01:19	WG1583236
Chloroethane	0.551		0.0432	0.200	1	11/30/2020 01:19	WG1583236
Chloroform	U		0.0166	0.100	1	11/30/2020 01:19	WG1583236
Chloromethane	U		0.0556	0.500	1	11/30/2020 01:19	WG1583236
2-Chlorotoluene	U		0.0368	0.100	1	11/30/2020 01:19	WG1583236
4-Chlorotoluene	U		0.0452	0.200	1	11/30/2020 01:19	WG1583236
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	11/30/2020 01:19	WG1583236
1,2-Dibromoethane	U		0.0210	0.100	1	11/30/2020 01:19	WG1583236
Dibromomethane	U		0.0400	0.200	1	11/30/2020 01:19	WG1583236
1,2-Dichlorobenzene	U		0.0580	0.200	1	11/30/2020 01:19	WG1583236
1,3-Dichlorobenzene	U		0.0680	0.200	1	11/30/2020 01:19	WG1583236
1,4-Dichlorobenzene	U		0.0788	0.200	1	11/30/2020 01:19	WG1583236
Dichlorodifluoromethane	U		0.0327	0.100	1	11/30/2020 01:19	WG1583236
1,1-Dichloroethane	U		0.0230	0.100	1	11/30/2020 01:19	WG1583236
1,2-Dichloroethane	U		0.0190	0.100	1	11/30/2020 01:19	WG1583236
1,1-Dichloroethene	2.80		0.0200	0.100	1	11/30/2020 01:19	WG1583236
cis-1,2-Dichloroethene	28.6		0.0276	0.100	1	12/01/2020 16:28	WG1584570
trans-1,2-Dichloroethene	1.61		0.0572	0.200	1	11/30/2020 01:19	WG1583236
1,2-Dichloropropane	U		0.0508	0.200	1	11/30/2020 01:19	WG1583236

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Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,1-Dichloropropene	U		0.0280	0.100	1	11/30/2020 01:19	WG1583236
1,3-Dichloropropane	U		0.0700	0.200	1	11/30/2020 01:19	WG1583236
cis-1,3-Dichloropropene	U		0.0271	0.100	1	11/30/2020 01:19	WG1583236
trans-1,3-Dichloropropene	U		0.0612	0.200	1	11/30/2020 01:19	WG1583236
2,2-Dichloropropane	U	~~J4~~	0.0317	0.100	1	11/30/2020 01:19	WG1583236
Di-isopropyl ether	U		0.0140	0.0400	1	11/30/2020 01:19	WG1583236
Ethylbenzene	U		0.0212	0.100	1	11/30/2020 01:19	WG1583236
Hexachloro-1,3-butadiene	U		0.508	1.00	1	11/30/2020 01:19	WG1583236
Isopropylbenzene	U		0.0345	0.100	1	11/30/2020 01:19	WG1583236
p-Isopropyltoluene	U		0.0932	0.200	1	11/30/2020 01:19	WG1583236
2-Butanone (MEK)	U	UJ C3	0.500	1.00	1	11/30/2020 01:19	WG1583236
Methylene Chloride	U		0.265	1.00	1	11/30/2020 01:19	WG1583236
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	11/30/2020 01:19	WG1583236
Methyl tert-butyl ether	U		0.0118	0.0400	1	11/30/2020 01:19	WG1583236
Naphthalene	U		0.124	0.500	1	11/30/2020 01:19	WG1583236
n-Propylbenzene	U		0.0472	0.200	1	11/30/2020 01:19	WG1583236
Styrene	U		0.109	0.500	1	11/30/2020 01:19	WG1583236
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	11/30/2020 01:19	WG1583236
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	11/30/2020 01:19	WG1583236
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	11/30/2020 01:19	WG1583236
Tetrachloroethene	10.6		0.0280	0.100	1	12/01/2020 16:28	WG1584570
Toluene	0.0730	J	0.0500	0.200	1	11/30/2020 01:19	WG1583236
1,2,3-Trichlorobenzene	U	UJ C4	0.0250	0.500	1	11/30/2020 01:19	WG1583236
1,2,4-Trichlorobenzene	U		0.193	0.500	1	11/30/2020 01:19	WG1583236
1,1,1-Trichloroethane	U		0.0110	0.100	1	11/30/2020 01:19	WG1583236
1,1,2-Trichloroethane	U		0.0353	0.100	1	11/30/2020 01:19	WG1583236
Trichloroethene	59.5	J+ C5	0.0160	0.0400	1	12/01/2020 16:28	WG1584570
Trichlorofluoromethane	U		0.0200	0.100	1	11/30/2020 01:19	WG1583236
1,2,3-Trichloropropane	U		0.204	0.500	1	11/30/2020 01:19	WG1583236
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	11/30/2020 01:19	WG1583236
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	11/30/2020 01:19	WG1583236
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	11/30/2020 01:19	WG1583236
Vinyl chloride	4.68		0.0273	0.100	1	11/30/2020 01:19	WG1583236
Xylenes, Total	U		0.191	0.260	1	11/30/2020 01:19	WG1583236
Ethyl Ether	U		0.0170	0.100	1	11/30/2020 01:19	WG1583236
Tetrahydrofuran	2.43	J- C3	0.0900	0.500	1	11/30/2020 01:19	WG1583236
Iodomethane	U		0.242	0.500	1	11/30/2020 01:19	WG1583236
Allyl chloride	U		0.580	1.00	1	11/30/2020 01:19	WG1583236
Trans-1,4-Dichloro-2-butene	U	~~J3~~	0.0560	0.200	1	11/30/2020 01:19	WG1583236
(S) Toluene-d8	*106*			*75.0-131*		*11/30/2020 01:19*	WG1583236
(S) Toluene-d8	*110*			*75.0-131*		*12/01/2020 16:28*	WG1584570
(S) 4-Bromofluorobenzene	*107*			*67.0-138*		*11/30/2020 01:19*	WG1583236
(S) 4-Bromofluorobenzene	*111*			*67.0-138*		*12/01/2020 16:28*	WG1584570
(S) 1,2-Dichloroethane-d4	*88.8*			*70.0-130*		*11/30/2020 01:19*	WG1583236
(S) 1,2-Dichloroethane-d4	*101*			*70.0-130*		*12/01/2020 16:28*	WG1584570

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

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Wet Chemistry by Method 9056A

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Sulfate	14500		594	5000	1	12/01/2020 05:01	WG1584160

Wet Chemistry by Method 9060A

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
TOC (Total Organic Carbon)	2550		102	1000	1	11/27/2020 20:25	WG1583149

Metals (ICPMS) by Method 6020B

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Iron	10800		28.1	100	1	11/26/2020 01:07	WG1581599
Manganese	1050		3.52	25.0	5	11/26/2020 09:10	WG1581599

Volatile Organic Compounds (GC) by Method RSK175

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Methane	38.5		0.287	0.678	1	11/23/2020 15:25	WG1579664
Ethane	U		0.296	1.29	1	11/23/2020 15:25	WG1579664
Ethene	U		0.422	1.27	1	11/23/2020 15:25	WG1579664

Volatile Organic Compounds (GC/MS) by Method 8260D

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Acetone	U		0.548	1.00	1	11/30/2020 01:38	WG1583236
Acrylonitrile	U		0.0760	0.500	1	11/30/2020 01:38	WG1583236
Benzene	U		0.0160	0.0400	1	11/30/2020 01:38	WG1583236
Bromobenzene	U		0.0420	0.500	1	11/30/2020 01:38	WG1583236
Bromodichloromethane	U		0.0315	0.100	1	11/30/2020 01:38	WG1583236
Bromoform	U		0.239	1.00	1	11/30/2020 01:38	WG1583236
Bromomethane	U		0.148	0.500	1	11/30/2020 01:38	WG1583236
n-Butylbenzene	U		0.153	0.500	1	11/30/2020 01:38	WG1583236
sec-Butylbenzene	U		0.101	0.500	1	11/30/2020 01:38	WG1583236
tert-Butylbenzene	U		0.0620	0.200	1	11/30/2020 01:38	WG1583236
Carbon tetrachloride	U		0.0432	0.200	1	11/30/2020 01:38	WG1583236
Chlorobenzene	U		0.0229	0.100	1	11/30/2020 01:38	WG1583236
Chlorodibromomethane	U		0.0180	0.100	1	11/30/2020 01:38	WG1583236
Chloroethane	U		0.0432	0.200	1	11/30/2020 01:38	WG1583236
Chloroform	U		0.0166	0.100	1	11/30/2020 01:38	WG1583236
Chloromethane	U		0.0556	0.500	1	11/30/2020 01:38	WG1583236
2-Chlorotoluene	U		0.0368	0.100	1	11/30/2020 01:38	WG1583236
4-Chlorotoluene	U		0.0452	0.200	1	11/30/2020 01:38	WG1583236
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	11/30/2020 01:38	WG1583236
1,2-Dibromoethane	U		0.0210	0.100	1	11/30/2020 01:38	WG1583236
Dibromomethane	U		0.0400	0.200	1	11/30/2020 01:38	WG1583236
1,2-Dichlorobenzene	U		0.0580	0.200	1	11/30/2020 01:38	WG1583236
1,3-Dichlorobenzene	U		0.0680	0.200	1	11/30/2020 01:38	WG1583236
1,4-Dichlorobenzene	U		0.0788	0.200	1	11/30/2020 01:38	WG1583236
Dichlorodifluoromethane	U		0.0327	0.100	1	11/30/2020 01:38	WG1583236
1,1-Dichloroethane	U		0.0230	0.100	1	11/30/2020 01:38	WG1583236
1,2-Dichloroethane	U		0.0190	0.100	1	11/30/2020 01:38	WG1583236
1,1-Dichloroethene	0.961		0.0200	0.100	1	11/30/2020 01:38	WG1583236
cis-1,2-Dichloroethene	4.83		0.0276	0.100	1	12/01/2020 16:47	WG1584570
trans-1,2-Dichloroethene	0.248		0.0572	0.200	1	11/30/2020 01:38	WG1583236
1,2-Dichloropropane	U		0.0508	0.200	1	11/30/2020 01:38	WG1583236

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Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,1-Dichloropropene	U		0.0280	0.100	1	11/30/2020 01:38	WG1583236
1,3-Dichloropropane	U		0.0700	0.200	1	11/30/2020 01:38	WG1583236
cis-1,3-Dichloropropene	U		0.0271	0.100	1	11/30/2020 01:38	WG1583236
trans-1,3-Dichloropropene	U		0.0612	0.200	1	11/30/2020 01:38	WG1583236
2,2-Dichloropropane	U	~~J4~~	0.0317	0.100	1	11/30/2020 01:38	WG1583236
Di-isopropyl ether	U		0.0140	0.0400	1	11/30/2020 01:38	WG1583236
Ethylbenzene	U		0.0212	0.100	1	11/30/2020 01:38	WG1583236
Hexachloro-1,3-butadiene	U		0.508	1.00	1	11/30/2020 01:38	WG1583236
Isopropylbenzene	U		0.0345	0.100	1	11/30/2020 01:38	WG1583236
p-Isopropyltoluene	U		0.0932	0.200	1	11/30/2020 01:38	WG1583236
2-Butanone (MEK)	U	UJ C3	0.500	1.00	1	11/30/2020 01:38	WG1583236
Methylene Chloride	U		0.265	1.00	1	11/30/2020 01:38	WG1583236
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	11/30/2020 01:38	WG1583236
Methyl tert-butyl ether	U		0.0118	0.0400	1	11/30/2020 01:38	WG1583236
Naphthalene	U		0.124	0.500	1	11/30/2020 01:38	WG1583236
n-Propylbenzene	U		0.0472	0.200	1	11/30/2020 01:38	WG1583236
Styrene	U		0.109	0.500	1	11/30/2020 01:38	WG1583236
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	11/30/2020 01:38	WG1583236
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	11/30/2020 01:38	WG1583236
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	11/30/2020 01:38	WG1583236
Tetrachloroethene	0.553		0.0280	0.100	1	12/01/2020 16:47	WG1584570
Toluene	0.139	J	0.0500	0.200	1	11/30/2020 01:38	WG1583236
1,2,3-Trichlorobenzene	U	UJ C4	0.0250	0.500	1	11/30/2020 01:38	WG1583236
1,2,4-Trichlorobenzene	U		0.193	0.500	1	11/30/2020 01:38	WG1583236
1,1,1-Trichloroethane	U		0.0110	0.100	1	11/30/2020 01:38	WG1583236
1,1,2-Trichloroethane	U		0.0353	0.100	1	11/30/2020 01:38	WG1583236
Trichloroethene	4.95	J+ C5	0.0160	0.0400	1	12/01/2020 16:47	WG1584570
Trichlorofluoromethane	U		0.0200	0.100	1	11/30/2020 01:38	WG1583236
1,2,3-Trichloropropane	U		0.204	0.500	1	11/30/2020 01:38	WG1583236
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	11/30/2020 01:38	WG1583236
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	11/30/2020 01:38	WG1583236
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	11/30/2020 01:38	WG1583236
Vinyl chloride	0.150		0.0273	0.100	1	11/30/2020 01:38	WG1583236
Xylenes, Total	U		0.191	0.260	1	11/30/2020 01:38	WG1583236
Ethyl Ether	U		0.0170	0.100	1	11/30/2020 01:38	WG1583236
Tetrahydrofuran	U	UJ C3	0.0900	0.500	1	11/30/2020 01:38	WG1583236
Iodomethane	U		0.242	0.500	1	11/30/2020 01:38	WG1583236
Allyl chloride	U		0.580	1.00	1	11/30/2020 01:38	WG1583236
Trans-1,4-Dichloro-2-butene	U	~~J3~~	0.0560	0.200	1	11/30/2020 01:38	WG1583236
(S) Toluene-d8	*106*			*75.0-131*		*11/30/2020 01:38*	WG1583236
(S) Toluene-d8	*109*			*75.0-131*		*12/01/2020 16:47*	WG1584570
(S) 4-Bromofluorobenzene	*103*			*67.0-138*		*11/30/2020 01:38*	WG1583236
(S) 4-Bromofluorobenzene	*110*			*67.0-138*		*12/01/2020 16:47*	WG1584570
(S) 1,2-Dichloroethane-d4	*90.6*			*70.0-130*		*11/30/2020 01:38*	WG1583236
(S) 1,2-Dichloroethane-d4	*102*			*70.0-130*		*12/01/2020 16:47*	WG1584570

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Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U		0.548	1.00	1	11/30/2020 01:57	WG1583236
Acrylonitrile	U		0.0760	0.500	1	11/30/2020 01:57	WG1583236
Benzene	0.113		0.0160	0.0400	1	11/30/2020 01:57	WG1583236
Bromobenzene	U		0.0420	0.500	1	11/30/2020 01:57	WG1583236
Bromodichloromethane	U		0.0315	0.100	1	11/30/2020 01:57	WG1583236
Bromoform	U		0.239	1.00	1	11/30/2020 01:57	WG1583236
Bromomethane	U		0.148	0.500	1	11/30/2020 01:57	WG1583236
n-Butylbenzene	U		0.153	0.500	1	11/30/2020 01:57	WG1583236
sec-Butylbenzene	U		0.101	0.500	1	11/30/2020 01:57	WG1583236
tert-Butylbenzene	U		0.0620	0.200	1	11/30/2020 01:57	WG1583236
Carbon tetrachloride	U		0.0432	0.200	1	11/30/2020 01:57	WG1583236
Chlorobenzene	U		0.0229	0.100	1	11/30/2020 01:57	WG1583236
Chlorodibromomethane	U		0.0180	0.100	1	11/30/2020 01:57	WG1583236
Chloroethane	U		0.0432	0.200	1	11/30/2020 01:57	WG1583236
Chloroform	U		0.0166	0.100	1	11/30/2020 01:57	WG1583236
Chloromethane	U		0.0556	0.500	1	11/30/2020 01:57	WG1583236
2-Chlorotoluene	U		0.0368	0.100	1	11/30/2020 01:57	WG1583236
4-Chlorotoluene	U		0.0452	0.200	1	11/30/2020 01:57	WG1583236
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	11/30/2020 01:57	WG1583236
1,2-Dibromoethane	U		0.0210	0.100	1	11/30/2020 01:57	WG1583236
Dibromomethane	U		0.0400	0.200	1	11/30/2020 01:57	WG1583236
1,2-Dichlorobenzene	U		0.0580	0.200	1	11/30/2020 01:57	WG1583236
1,3-Dichlorobenzene	U		0.0680	0.200	1	11/30/2020 01:57	WG1583236
1,4-Dichlorobenzene	U		0.0788	0.200	1	11/30/2020 01:57	WG1583236
Dichlorodifluoromethane	U		0.0327	0.100	1	11/30/2020 01:57	WG1583236
1,1-Dichloroethane	U		0.0230	0.100	1	11/30/2020 01:57	WG1583236
1,2-Dichloroethane	U		0.0190	0.100	1	11/30/2020 01:57	WG1583236
1,1-Dichloroethene	U		0.0200	0.100	1	11/30/2020 01:57	WG1583236
cis-1,2-Dichloroethene	1.22		0.0276	0.100	1	12/01/2020 17:06	WG1584570
trans-1,2-Dichloroethene	U		0.0572	0.200	1	11/30/2020 01:57	WG1583236
1,2-Dichloropropane	U		0.0508	0.200	1	11/30/2020 01:57	WG1583236
1,1-Dichloropropene	U		0.0280	0.100	1	11/30/2020 01:57	WG1583236
1,3-Dichloropropane	U		0.0700	0.200	1	11/30/2020 01:57	WG1583236
cis-1,3-Dichloropropene	U		0.0271	0.100	1	11/30/2020 01:57	WG1583236
trans-1,3-Dichloropropene	U		0.0612	0.200	1	11/30/2020 01:57	WG1583236
2,2-Dichloropropane	U	~~J4~~	0.0317	0.100	1	11/30/2020 01:57	WG1583236
Di-isopropyl ether	U		0.0140	0.0400	1	11/30/2020 01:57	WG1583236
Ethylbenzene	U		0.0212	0.100	1	11/30/2020 01:57	WG1583236
Hexachloro-1,3-butadiene	U		0.508	1.00	1	11/30/2020 01:57	WG1583236
Isopropylbenzene	U		0.0345	0.100	1	11/30/2020 01:57	WG1583236
p-Isopropyltoluene	U		0.0932	0.200	1	11/30/2020 01:57	WG1583236
2-Butanone (MEK)	U	UJ C3	0.500	1.00	1	11/30/2020 01:57	WG1583236
Methylene Chloride	U		0.265	1.00	1	11/30/2020 01:57	WG1583236
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	11/30/2020 01:57	WG1583236
Methyl tert-butyl ether	U		0.0118	0.0400	1	11/30/2020 01:57	WG1583236
Naphthalene	U		0.124	0.500	1	11/30/2020 01:57	WG1583236
n-Propylbenzene	U		0.0472	0.200	1	11/30/2020 01:57	WG1583236
Styrene	U		0.109	0.500	1	11/30/2020 01:57	WG1583236
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	11/30/2020 01:57	WG1583236
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	11/30/2020 01:57	WG1583236
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	11/30/2020 01:57	WG1583236
Tetrachloroethene	U		0.0280	0.100	1	11/30/2020 01:57	WG1583236
Toluene	U		0.0500	0.200	1	11/30/2020 01:57	WG1583236
1,2,3-Trichlorobenzene	U	UJ C4	0.0250	0.500	1	11/30/2020 01:57	WG1583236
1,2,4-Trichlorobenzene	U		0.193	0.500	1	11/30/2020 01:57	WG1583236
1,1,1-Trichloroethane	U		0.0110	0.100	1	11/30/2020 01:57	WG1583236

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MW-342-111720

Collected date/time: 11/17/20 14:05

SAMPLE RESULTS - 07

L1288012

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,1,2-Trichloroethane	U		0.0353	0.100	1	11/30/2020 01:57	WG1583236
Trichloroethene	U		0.0160	0.0400	1	11/30/2020 01:57	WG1583236
Trichlorofluoromethane	U		0.0200	0.100	1	11/30/2020 01:57	WG1583236
1,2,3-Trichloropropane	U		0.204	0.500	1	11/30/2020 01:57	WG1583236
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	11/30/2020 01:57	WG1583236
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	11/30/2020 01:57	WG1583236
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	11/30/2020 01:57	WG1583236
Vinyl chloride	1.87		0.0273	0.100	1	11/30/2020 01:57	WG1583236
Xylenes, Total	U		0.191	0.260	1	11/30/2020 01:57	WG1583236
Ethyl Ether	U		0.0170	0.100	1	11/30/2020 01:57	WG1583236
Tetrahydrofuran	U	UJ C3	0.0900	0.500	1	11/30/2020 01:57	WG1583236
Iodomethane	U		0.242	0.500	1	11/30/2020 01:57	WG1583236
Allyl chloride	U		0.580	1.00	1	11/30/2020 01:57	WG1583236
Trans-1,4-Dichloro-2-butene	U	~~J3~~	0.0560	0.200	1	11/30/2020 01:57	WG1583236
(S) Toluene-d8	*107*			*75.0-131*		*11/30/2020 01:57*	WG1583236
(S) Toluene-d8	*109*			*75.0-131*		*12/01/2020 17:06*	WG1584570
(S) 4-Bromofluorobenzene	*105*			*67.0-138*		*11/30/2020 01:57*	WG1583236
(S) 4-Bromofluorobenzene	*109*			*67.0-138*		*12/01/2020 17:06*	WG1584570
(S) 1,2-Dichloroethane-d4	*91.3*			*70.0-130*		*11/30/2020 01:57*	WG1583236
(S) 1,2-Dichloroethane-d4	*99.5*			*70.0-130*		*12/01/2020 17:06*	WG1584570

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Wet Chemistry by Method 9056A

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Sulfate	32700		594	5000	1	12/01/2020 05:14	WG1584160

Wet Chemistry by Method 9060A

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
TOC (Total Organic Carbon)	1610		102	1000	1	11/27/2020 22:29	WG1583149

Metals (ICPMS) by Method 6020B

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Iron	3780		28.1	100	1	11/26/2020 01:10	WG1581599
Manganese	210		0.704	5.00	1	11/26/2020 01:10	WG1581599

Volatile Organic Compounds (GC) by Method RSK175

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Methane	121		0.287	0.678	1	11/23/2020 15:29	WG1579664
Ethane	U		0.296	1.29	1	11/23/2020 15:29	WG1579664
Ethene	U		0.422	1.27	1	11/23/2020 15:29	WG1579664

Volatile Organic Compounds (GC/MS) by Method 8260D

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Acetone	U		0.548	1.00	1	11/30/2020 02:15	WG1583236
Acrylonitrile	U		0.0760	0.500	1	11/30/2020 02:15	WG1583236
Benzene	0.0270	J	0.0160	0.0400	1	11/30/2020 02:15	WG1583236
Bromobenzene	U		0.0420	0.500	1	11/30/2020 02:15	WG1583236
Bromodichloromethane	U		0.0315	0.100	1	11/30/2020 02:15	WG1583236
Bromoform	U		0.239	1.00	1	11/30/2020 02:15	WG1583236
Bromomethane	U		0.148	0.500	1	11/30/2020 02:15	WG1583236
n-Butylbenzene	U		0.153	0.500	1	11/30/2020 02:15	WG1583236
sec-Butylbenzene	U		0.101	0.500	1	11/30/2020 02:15	WG1583236
tert-Butylbenzene	U		0.0620	0.200	1	11/30/2020 02:15	WG1583236
Carbon tetrachloride	U		0.0432	0.200	1	11/30/2020 02:15	WG1583236
Chlorobenzene	U		0.0229	0.100	1	11/30/2020 02:15	WG1583236
Chlorodibromomethane	U		0.0180	0.100	1	11/30/2020 02:15	WG1583236
Chloroethane	U		0.0432	0.200	1	11/30/2020 02:15	WG1583236
Chloroform	U		0.0166	0.100	1	11/30/2020 02:15	WG1583236
Chloromethane	U		0.0556	0.500	1	11/30/2020 02:15	WG1583236
2-Chlorotoluene	U		0.0368	0.100	1	11/30/2020 02:15	WG1583236
4-Chlorotoluene	U		0.0452	0.200	1	11/30/2020 02:15	WG1583236
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	11/30/2020 02:15	WG1583236
1,2-Dibromoethane	U		0.0210	0.100	1	11/30/2020 02:15	WG1583236
Dibromomethane	U		0.0400	0.200	1	11/30/2020 02:15	WG1583236
1,2-Dichlorobenzene	U		0.0580	0.200	1	11/30/2020 02:15	WG1583236
1,3-Dichlorobenzene	U		0.0680	0.200	1	11/30/2020 02:15	WG1583236
1,4-Dichlorobenzene	U		0.0788	0.200	1	11/30/2020 02:15	WG1583236
Dichlorodifluoromethane	U		0.0327	0.100	1	11/30/2020 02:15	WG1583236
1,1-Dichloroethane	U		0.0230	0.100	1	11/30/2020 02:15	WG1583236
1,2-Dichloroethane	U		0.0190	0.100	1	11/30/2020 02:15	WG1583236
1,1-Dichloroethene	U		0.0200	0.100	1	11/30/2020 02:15	WG1583236
cis-1,2-Dichloroethene	U		0.0276	0.100	1	12/01/2020 17:25	WG1584570
trans-1,2-Dichloroethene	U		0.0572	0.200	1	11/30/2020 02:15	WG1583236
1,2-Dichloropropane	U		0.0508	0.200	1	11/30/2020 02:15	WG1583236

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Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,1-Dichloropropene	U		0.0280	0.100	1	11/30/2020 02:15	WG1583236
1,3-Dichloropropane	U		0.0700	0.200	1	11/30/2020 02:15	WG1583236
cis-1,3-Dichloropropene	U		0.0271	0.100	1	11/30/2020 02:15	WG1583236
trans-1,3-Dichloropropene	U		0.0612	0.200	1	11/30/2020 02:15	WG1583236
2,2-Dichloropropane	U	~~J4~~	0.0317	0.100	1	11/30/2020 02:15	WG1583236
Di-isopropyl ether	U		0.0140	0.0400	1	11/30/2020 02:15	WG1583236
Ethylbenzene	U		0.0212	0.100	1	11/30/2020 02:15	WG1583236
Hexachloro-1,3-butadiene	U		0.508	1.00	1	11/30/2020 02:15	WG1583236
Isopropylbenzene	U		0.0345	0.100	1	11/30/2020 02:15	WG1583236
p-Isopropyltoluene	U		0.0932	0.200	1	11/30/2020 02:15	WG1583236
2-Butanone (MEK)	U	UJ C3	0.500	1.00	1	11/30/2020 02:15	WG1583236
Methylene Chloride	U		0.265	1.00	1	11/30/2020 02:15	WG1583236
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	11/30/2020 02:15	WG1583236
Methyl tert-butyl ether	U		0.0118	0.0400	1	11/30/2020 02:15	WG1583236
Naphthalene	U		0.124	0.500	1	11/30/2020 02:15	WG1583236
n-Propylbenzene	U		0.0472	0.200	1	11/30/2020 02:15	WG1583236
Styrene	U		0.109	0.500	1	11/30/2020 02:15	WG1583236
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	11/30/2020 02:15	WG1583236
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	11/30/2020 02:15	WG1583236
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	11/30/2020 02:15	WG1583236
Tetrachloroethene	U		0.0280	0.100	1	11/30/2020 02:15	WG1583236
Toluene	0.322		0.0500	0.200	1	11/30/2020 02:15	WG1583236
1,2,3-Trichlorobenzene	U UJ	C4	0.0250	0.500	1	11/30/2020 02:15	WG1583236
1,2,4-Trichlorobenzene	U		0.193	0.500	1	11/30/2020 02:15	WG1583236
1,1,1-Trichloroethane	U		0.0110	0.100	1	11/30/2020 02:15	WG1583236
1,1,2-Trichloroethane	U		0.0353	0.100	1	11/30/2020 02:15	WG1583236
Trichloroethene	U		0.0160	0.0400	1	11/30/2020 02:15	WG1583236
Trichlorofluoromethane	U		0.0200	0.100	1	11/30/2020 02:15	WG1583236
1,2,3-Trichloropropane	U		0.204	0.500	1	11/30/2020 02:15	WG1583236
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	11/30/2020 02:15	WG1583236
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	11/30/2020 02:15	WG1583236
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	11/30/2020 02:15	WG1583236
Vinyl chloride	U		0.0273	0.100	1	11/30/2020 02:15	WG1583236
Xylenes, Total	U		0.191	0.260	1	11/30/2020 02:15	WG1583236
Ethyl Ether	U		0.0170	0.100	1	11/30/2020 02:15	WG1583236
Tetrahydrofuran	U	UJ C3	0.0900	0.500	1	11/30/2020 02:15	WG1583236
Iodomethane	U		0.242	0.500	1	11/30/2020 02:15	WG1583236
Allyl chloride	U		0.580	1.00	1	11/30/2020 02:15	WG1583236
Trans-1,4-Dichloro-2-butene	U	~~J3~~	0.0560	0.200	1	11/30/2020 02:15	WG1583236
(S) Toluene-d8	*106*			*75.0-131*		*11/30/2020 02:15*	WG1583236
(S) Toluene-d8	*110*			*75.0-131*		*12/01/2020 17:25*	WG1584570
(S) 4-Bromofluorobenzene	*102*			*67.0-138*		*11/30/2020 02:15*	WG1583236
(S) 4-Bromofluorobenzene	*109*			*67.0-138*		*12/01/2020 17:25*	WG1584570
(S) 1,2-Dichloroethane-d4	*91.4*			*70.0-130*		*11/30/2020 02:15*	WG1583236
(S) 1,2-Dichloroethane-d4	*100*			*70.0-130*		*12/01/2020 17:25*	WG1584570

JC 1/7/2021

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Wet Chemistry by Method 9056A

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Sulfate	42200		594	5000	1	12/01/2020 05:27	WG1584160

Wet Chemistry by Method 9060A

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
TOC (Total Organic Carbon)	1750		102	1000	1	11/27/2020 22:53	WG1583149

Metals (ICPMS) by Method 6020B

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Iron	750		28.1	100	1	11/26/2020 01:14	WG1581599
Manganese	675		3.52	25.0	5	11/26/2020 09:14	WG1581599

Volatile Organic Compounds (GC) by Method RSK175

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Methane	89.1		0.287	0.678	1	11/23/2020 15:32	WG1579664
Ethane	U		0.296	1.29	1	11/23/2020 15:32	WG1579664
Ethene	28.9		0.422	1.27	1	11/23/2020 15:32	WG1579664

Volatile Organic Compounds (GC/MS) by Method 8260D

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Acetone	U		0.548	1.00	1	11/30/2020 02:34	WG1583236
Acrylonitrile	U		0.0760	0.500	1	11/30/2020 02:34	WG1583236
Benzene	U		0.0160	0.0400	1	11/30/2020 02:34	WG1583236
Bromobenzene	U		0.0420	0.500	1	11/30/2020 02:34	WG1583236
Bromodichloromethane	U		0.0315	0.100	1	11/30/2020 02:34	WG1583236
Bromoform	U		0.239	1.00	1	11/30/2020 02:34	WG1583236
Bromomethane	U		0.148	0.500	1	11/30/2020 02:34	WG1583236
n-Butylbenzene	U		0.153	0.500	1	11/30/2020 02:34	WG1583236
sec-Butylbenzene	U		0.101	0.500	1	11/30/2020 02:34	WG1583236
tert-Butylbenzene	U		0.0620	0.200	1	11/30/2020 02:34	WG1583236
Carbon tetrachloride	U		0.0432	0.200	1	11/30/2020 02:34	WG1583236
Chlorobenzene	U		0.0229	0.100	1	11/30/2020 02:34	WG1583236
Chlorodibromomethane	U		0.0180	0.100	1	11/30/2020 02:34	WG1583236
Chloroethane	0.287		0.0432	0.200	1	11/30/2020 02:34	WG1583236
Chloroform	U		0.0166	0.100	1	11/30/2020 02:34	WG1583236
Chloromethane	U		0.0556	0.500	1	11/30/2020 02:34	WG1583236
2-Chlorotoluene	U		0.0368	0.100	1	11/30/2020 02:34	WG1583236
4-Chlorotoluene	U		0.0452	0.200	1	11/30/2020 02:34	WG1583236
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	11/30/2020 02:34	WG1583236
1,2-Dibromoethane	U		0.0210	0.100	1	11/30/2020 02:34	WG1583236
Dibromomethane	U		0.0400	0.200	1	11/30/2020 02:34	WG1583236
1,2-Dichlorobenzene	U		0.0580	0.200	1	11/30/2020 02:34	WG1583236
1,3-Dichlorobenzene	U		0.0680	0.200	1	11/30/2020 02:34	WG1583236
1,4-Dichlorobenzene	U		0.0788	0.200	1	11/30/2020 02:34	WG1583236
Dichlorodifluoromethane	U		0.0327	0.100	1	11/30/2020 02:34	WG1583236
1,1-Dichloroethane	U		0.0230	0.100	1	11/30/2020 02:34	WG1583236
1,2-Dichloroethane	U		0.0190	0.100	1	11/30/2020 02:34	WG1583236
1,1-Dichloroethene	U		0.0200	0.100	1	11/30/2020 02:34	WG1583236
cis-1,2-Dichloroethene	0.0910	J	0.0276	0.100	1	11/30/2020 02:34	WG1583236
trans-1,2-Dichloroethene	U		0.0572	0.200	1	11/30/2020 02:34	WG1583236
1,2-Dichloropropane	U		0.0508	0.200	1	11/30/2020 02:34	WG1583236

JC 1/7/2021

MW-189-111720

Collected date/time: 11/17/20 14:35

SAMPLE RESULTS - 09

L1288012

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,1-Dichloropropene	U		0.0280	0.100	1	11/30/2020 02:34	WG1583236
1,3-Dichloropropane	U		0.0700	0.200	1	11/30/2020 02:34	WG1583236
cis-1,3-Dichloropropene	U		0.0271	0.100	1	11/30/2020 02:34	WG1583236
trans-1,3-Dichloropropene	U		0.0612	0.200	1	11/30/2020 02:34	WG1583236
2,2-Dichloropropane	U	~~J4~~	0.0317	0.100	1	11/30/2020 02:34	WG1583236
Di-isopropyl ether	U		0.0140	0.0400	1	11/30/2020 02:34	WG1583236
Ethylbenzene	U		0.0212	0.100	1	11/30/2020 02:34	WG1583236
Hexachloro-1,3-butadiene	U		0.508	1.00	1	11/30/2020 02:34	WG1583236
Isopropylbenzene	U		0.0345	0.100	1	11/30/2020 02:34	WG1583236
p-Isopropyltoluene	U		0.0932	0.200	1	11/30/2020 02:34	WG1583236
2-Butanone (MEK)	U	UJ C3	0.500	1.00	1	11/30/2020 02:34	WG1583236
Methylene Chloride	U		0.265	1.00	1	11/30/2020 02:34	WG1583236
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	11/30/2020 02:34	WG1583236
Methyl tert-butyl ether	U		0.0118	0.0400	1	11/30/2020 02:34	WG1583236
Naphthalene	U		0.124	0.500	1	11/30/2020 02:34	WG1583236
n-Propylbenzene	U		0.0472	0.200	1	11/30/2020 02:34	WG1583236
Styrene	U		0.109	0.500	1	11/30/2020 02:34	WG1583236
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	11/30/2020 02:34	WG1583236
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	11/30/2020 02:34	WG1583236
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	11/30/2020 02:34	WG1583236
Tetrachloroethene	U		0.0280	0.100	1	11/30/2020 02:34	WG1583236
Toluene	0.0620	J	0.0500	0.200	1	11/30/2020 02:34	WG1583236
1,2,3-Trichlorobenzene	U	UJ C4	0.0250	0.500	1	11/30/2020 02:34	WG1583236
1,2,4-Trichlorobenzene	U		0.193	0.500	1	11/30/2020 02:34	WG1583236
1,1,1-Trichloroethane	U		0.0110	0.100	1	11/30/2020 02:34	WG1583236
1,1,2-Trichloroethane	U		0.0353	0.100	1	11/30/2020 02:34	WG1583236
Trichloroethene	U		0.0160	0.0400	1	11/30/2020 02:34	WG1583236
Trichlorofluoromethane	U		0.0200	0.100	1	11/30/2020 02:34	WG1583236
1,2,3-Trichloropropane	U		0.204	0.500	1	11/30/2020 02:34	WG1583236
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	11/30/2020 02:34	WG1583236
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	11/30/2020 02:34	WG1583236
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	11/30/2020 02:34	WG1583236
Vinyl chloride	1.13		0.0273	0.100	1	11/30/2020 02:34	WG1583236
Xylenes, Total	U		0.191	0.260	1	11/30/2020 02:34	WG1583236
Ethyl Ether	U		0.0170	0.100	1	11/30/2020 02:34	WG1583236
Tetrahydrofuran	U	UJ C3	0.0900	0.500	1	11/30/2020 02:34	WG1583236
Iodomethane	U		0.242	0.500	1	11/30/2020 02:34	WG1583236
Allyl chloride	U		0.580	1.00	1	11/30/2020 02:34	WG1583236
Trans-1,4-Dichloro-2-butene	U	~~J3~~	0.0560	0.200	1	11/30/2020 02:34	WG1583236
(S) Toluene-d8	*106*			*75.0-131*		*11/30/2020 02:34*	WG1583236
(S) 4-Bromofluorobenzene	*105*			*67.0-138*		*11/30/2020 02:34*	WG1583236
(S) 1,2-Dichloroethane-d4	*92.1*			*70.0-130*		*11/30/2020 02:34*	WG1583236

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

JC 1/7/2021

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Sulfate	8270		594	5000	1	12/01/2020 05:39	WG1584160

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	2370		102	1000	1	11/27/2020 23:10	WG1583149

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	6640		28.1	100	1	11/26/2020 01:17	WG1581599
Manganese	1260		7.04	50.0	10	11/26/2020 09:17	WG1581599

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	43.8	U ~~B J~~	31.6	100	1	11/30/2020 01:37	WG1583619
(S) a,a,a-Trifluorotoluene(FID)	*96.5*			*78.0-120*		*11/30/2020 01:37*	WG1583619

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	182		0.287	0.678	1	11/23/2020 15:34	WG1579664
Ethane	U		0.296	1.29	1	11/23/2020 15:34	WG1579664
Ethene	U		0.422	1.27	1	11/23/2020 15:34	WG1579664

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U		0.548	1.00	1	11/30/2020 21:04	WG1584116
Acrylonitrile	U		0.0760	0.500	1	11/30/2020 21:04	WG1584116
Benzene	U		0.0160	0.0400	1	11/30/2020 21:04	WG1584116
Bromobenzene	U		0.0420	0.500	1	11/30/2020 21:04	WG1584116
Bromodichloromethane	U		0.0315	0.100	1	11/30/2020 21:04	WG1584116
Bromoform	U		0.239	1.00	1	11/30/2020 21:04	WG1584116
Bromomethane	U		0.148	0.500	1	11/30/2020 21:04	WG1584116
n-Butylbenzene	U		0.153	0.500	1	11/30/2020 21:04	WG1584116
sec-Butylbenzene	U		0.101	0.500	1	11/30/2020 21:04	WG1584116
tert-Butylbenzene	U		0.0620	0.200	1	11/30/2020 21:04	WG1584116
Carbon tetrachloride	U		0.0432	0.200	1	11/30/2020 21:04	WG1584116
Chlorobenzene	U		0.0229	0.100	1	11/30/2020 21:04	WG1584116
Chlorodibromomethane	U		0.0180	0.100	1	11/30/2020 21:04	WG1584116
Chloroethane	U		0.0432	0.200	1	11/30/2020 21:04	WG1584116
Chloroform	U		0.0166	0.100	1	11/30/2020 21:04	WG1584116
Chloromethane	U		0.0556	0.500	1	11/30/2020 21:04	WG1584116
2-Chlorotoluene	U		0.0368	0.100	1	11/30/2020 21:04	WG1584116
4-Chlorotoluene	U		0.0452	0.200	1	11/30/2020 21:04	WG1584116
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	11/30/2020 21:04	WG1584116
1,2-Dibromoethane	U		0.0210	0.100	1	11/30/2020 21:04	WG1584116
Dibromomethane	U		0.0400	0.200	1	11/30/2020 21:04	WG1584116
1,2-Dichlorobenzene	U		0.0580	0.200	1	11/30/2020 21:04	WG1584116
1,3-Dichlorobenzene	U		0.0680	0.200	1	11/30/2020 21:04	WG1584116

1 2 0 2 / 7 / 1 C J

R-MW5-111820

Collected date/time: 11/18/20 10:05

SAMPLE RESULTS - 10

L1288012

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,4-Dichlorobenzene	U		0.0788	0.200	1	11/30/2020 21:04	WG1584116
Dichlorodifluoromethane	U		0.0327	0.100	1	11/30/2020 21:04	WG1584116
1,1-Dichloroethane	U		0.0230	0.100	1	11/30/2020 21:04	WG1584116
1,2-Dichloroethane	U		0.0190	0.100	1	11/30/2020 21:04	WG1584116
1,1-Dichloroethene	U		0.0200	0.100	1	11/30/2020 21:04	WG1584116
cis-1,2-Dichloroethene	0.505		0.0276	0.100	1	11/30/2020 21:04	WG1584116
trans-1,2-Dichloroethene	U		0.0572	0.200	1	11/30/2020 21:04	WG1584116
1,2-Dichloropropane	U		0.0508	0.200	1	11/30/2020 21:04	WG1584116
1,1-Dichloropropene	U		0.0280	0.100	1	11/30/2020 21:04	WG1584116
1,3-Dichloropropane	U		0.0700	0.200	1	11/30/2020 21:04	WG1584116
cis-1,3-Dichloropropene	U		0.0271	0.100	1	11/30/2020 21:04	WG1584116
trans-1,3-Dichloropropene	U		0.0612	0.200	1	11/30/2020 21:04	WG1584116
2,2-Dichloropropane	U		0.0317	0.100	1	11/30/2020 21:04	WG1584116
Di-isopropyl ether	U		0.0140	0.0400	1	11/30/2020 21:04	WG1584116
Ethylbenzene	U		0.0212	0.100	1	11/30/2020 21:04	WG1584116
Hexachloro-1,3-butadiene	U		0.508	1.00	1	11/30/2020 21:04	WG1584116
Isopropylbenzene	U		0.0345	0.100	1	11/30/2020 21:04	WG1584116
p-Isopropyltoluene	U		0.0932	0.200	1	11/30/2020 21:04	WG1584116
2-Butanone (MEK)	U		0.500	1.00	1	11/30/2020 21:04	WG1584116
Methylene Chloride	U		0.265	1.00	1	11/30/2020 21:04	WG1584116
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	11/30/2020 21:04	WG1584116
Methyl tert-butyl ether	U		0.0118	0.0400	1	11/30/2020 21:04	WG1584116
Naphthalene	U UJ	C3	0.124	0.500	1	11/30/2020 21:04	WG1584116
n-Propylbenzene	U		0.0472	0.200	1	11/30/2020 21:04	WG1584116
Styrene	U		0.109	0.500	1	11/30/2020 21:04	WG1584116
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	11/30/2020 21:04	WG1584116
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	11/30/2020 21:04	WG1584116
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	11/30/2020 21:04	WG1584116
Tetrachloroethene	0.607		0.0280	0.100	1	11/30/2020 21:04	WG1584116
Toluene	0.205		0.0500	0.200	1	11/30/2020 21:04	WG1584116
1,2,3-Trichlorobenzene	U UJ	C4	0.0250	0.500	1	11/30/2020 21:04	WG1584116
1,2,4-Trichlorobenzene	U		0.193	0.500	1	11/30/2020 21:04	WG1584116
1,1,1-Trichloroethane	U		0.0110	0.100	1	11/30/2020 21:04	WG1584116
1,1,2-Trichloroethane	U		0.0353	0.100	1	11/30/2020 21:04	WG1584116
Trichloroethene	0.318		0.0160	0.0400	1	11/30/2020 21:04	WG1584116
Trichlorofluoromethane	U		0.0200	0.100	1	11/30/2020 21:04	WG1584116
1,2,3-Trichloropropane	U		0.204	0.500	1	11/30/2020 21:04	WG1584116
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	11/30/2020 21:04	WG1584116
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	11/30/2020 21:04	WG1584116
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	11/30/2020 21:04	WG1584116
Vinyl chloride	U		0.0273	0.100	1	11/30/2020 21:04	WG1584116
Xylenes, Total	U		0.191	0.260	1	11/30/2020 21:04	WG1584116
Ethyl Ether	U		0.0170	0.100	1	11/30/2020 21:04	WG1584116
Tetrahydrofuran	0.166	J	0.0900	0.500	1	11/30/2020 21:04	WG1584116
Iodomethane	U		0.242	0.500	1	11/30/2020 21:04	WG1584116
Allyl chloride	U		0.580	1.00	1	11/30/2020 21:04	WG1584116
Trans-1,4-Dichloro-2-butene	U		0.0560	0.200	1	11/30/2020 21:04	WG1584116
(S) Toluene-d8	*102*			*75.0-131*		*11/30/2020 21:04*	WG1584116
(S) 4-Bromofluorobenzene	*92.3*			*67.0-138*		*11/30/2020 21:04*	WG1584116
(S) 1,2-Dichloroethane-d4	*115*			*70.0-130*		*11/30/2020 21:04*	WG1584116

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Wet Chemistry by Method 9056A

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Sulfate	45900		594	5000	1	12/01/2020 05:52	WG1584160

Wet Chemistry by Method 9060A

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
TOC (Total Organic Carbon)	948	J	102	1000	1	11/27/2020 23:25	WG1583149

Metals (ICPMS) by Method 6020B

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Iron	4630		28.1	100	1	11/26/2020 01:21	WG1581599
Manganese	452		3.52	25.0	5	11/26/2020 09:20	WG1581599

Volatile Organic Compounds (GC) by Method RSK175

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Methane	16.8		0.287	0.678	1	11/23/2020 15:36	WG1579664
Ethane	U		0.296	1.29	1	11/23/2020 15:36	WG1579664
Ethene	U		0.422	1.27	1	11/23/2020 15:36	WG1579664

Volatile Organic Compounds (GC/MS) by Method 8260D

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Acetone	U		0.548	1.00	1	11/30/2020 21:23	WG1584116
Acrylonitrile	U		0.0760	0.500	1	11/30/2020 21:23	WG1584116
Benzene	U		0.0160	0.0400	1	11/30/2020 21:23	WG1584116
Bromobenzene	U		0.0420	0.500	1	11/30/2020 21:23	WG1584116
Bromodichloromethane	U		0.0315	0.100	1	11/30/2020 21:23	WG1584116
Bromoform	U		0.239	1.00	1	11/30/2020 21:23	WG1584116
Bromomethane	U		0.148	0.500	1	11/30/2020 21:23	WG1584116
n-Butylbenzene	U		0.153	0.500	1	11/30/2020 21:23	WG1584116
sec-Butylbenzene	U		0.101	0.500	1	11/30/2020 21:23	WG1584116
tert-Butylbenzene	U		0.0620	0.200	1	11/30/2020 21:23	WG1584116
Carbon tetrachloride	U		0.0432	0.200	1	11/30/2020 21:23	WG1584116
Chlorobenzene	U		0.0229	0.100	1	11/30/2020 21:23	WG1584116
Chlorodibromomethane	U		0.0180	0.100	1	11/30/2020 21:23	WG1584116
Chloroethane	U		0.0432	0.200	1	11/30/2020 21:23	WG1584116
Chloroform	U		0.0166	0.100	1	11/30/2020 21:23	WG1584116
Chloromethane	U		0.0556	0.500	1	11/30/2020 21:23	WG1584116
2-Chlorotoluene	U		0.0368	0.100	1	11/30/2020 21:23	WG1584116
4-Chlorotoluene	U		0.0452	0.200	1	11/30/2020 21:23	WG1584116
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	11/30/2020 21:23	WG1584116
1,2-Dibromoethane	U		0.0210	0.100	1	11/30/2020 21:23	WG1584116
Dibromomethane	U		0.0400	0.200	1	11/30/2020 21:23	WG1584116
1,2-Dichlorobenzene	U		0.0580	0.200	1	11/30/2020 21:23	WG1584116
1,3-Dichlorobenzene	U		0.0680	0.200	1	11/30/2020 21:23	WG1584116
1,4-Dichlorobenzene	U		0.0788	0.200	1	11/30/2020 21:23	WG1584116
Dichlorodifluoromethane	U		0.0327	0.100	1	11/30/2020 21:23	WG1584116
1,1-Dichloroethane	U		0.0230	0.100	1	11/30/2020 21:23	WG1584116
1,2-Dichloroethane	U		0.0190	0.100	1	11/30/2020 21:23	WG1584116
1,1-Dichloroethene	U		0.0200	0.100	1	11/30/2020 21:23	WG1584116
cis-1,2-Dichloroethene	U		0.0276	0.100	1	11/30/2020 21:23	WG1584116
trans-1,2-Dichloroethene	U		0.0572	0.200	1	11/30/2020 21:23	WG1584116
1,2-Dichloropropane	U		0.0508	0.200	1	11/30/2020 21:23	WG1584116

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Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,1-Dichloropropene	U		0.0280	0.100	1	11/30/2020 21:23	WG1584116
1,3-Dichloropropane	U		0.0700	0.200	1	11/30/2020 21:23	WG1584116
cis-1,3-Dichloropropene	U		0.0271	0.100	1	11/30/2020 21:23	WG1584116
trans-1,3-Dichloropropene	U		0.0612	0.200	1	11/30/2020 21:23	WG1584116
2,2-Dichloropropane	U		0.0317	0.100	1	11/30/2020 21:23	WG1584116
Di-isopropyl ether	U		0.0140	0.0400	1	11/30/2020 21:23	WG1584116
Ethylbenzene	U		0.0212	0.100	1	11/30/2020 21:23	WG1584116
Hexachloro-1,3-butadiene	U		0.508	1.00	1	11/30/2020 21:23	WG1584116
Isopropylbenzene	U		0.0345	0.100	1	11/30/2020 21:23	WG1584116
p-Isopropyltoluene	U		0.0932	0.200	1	11/30/2020 21:23	WG1584116
2-Butanone (MEK)	U		0.500	1.00	1	11/30/2020 21:23	WG1584116
Methylene Chloride	U		0.265	1.00	1	11/30/2020 21:23	WG1584116
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	11/30/2020 21:23	WG1584116
Methyl tert-butyl ether	U		0.0118	0.0400	1	11/30/2020 21:23	WG1584116
Naphthalene	U	UJ C3	0.124	0.500	1	11/30/2020 21:23	WG1584116
n-Propylbenzene	U		0.0472	0.200	1	11/30/2020 21:23	WG1584116
Styrene	U		0.109	0.500	1	11/30/2020 21:23	WG1584116
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	11/30/2020 21:23	WG1584116
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	11/30/2020 21:23	WG1584116
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	11/30/2020 21:23	WG1584116
Tetrachloroethene	U		0.0280	0.100	1	11/30/2020 21:23	WG1584116
Toluene	U		0.0500	0.200	1	11/30/2020 21:23	WG1584116
1,2,3-Trichlorobenzene	U	UJ C4	0.0250	0.500	1	11/30/2020 21:23	WG1584116
1,2,4-Trichlorobenzene	U		0.193	0.500	1	11/30/2020 21:23	WG1584116
1,1,1-Trichloroethane	U		0.0110	0.100	1	11/30/2020 21:23	WG1584116
1,1,2-Trichloroethane	U		0.0353	0.100	1	11/30/2020 21:23	WG1584116
Trichloroethene	U		0.0160	0.0400	1	11/30/2020 21:23	WG1584116
Trichlorofluoromethane	U		0.0200	0.100	1	11/30/2020 21:23	WG1584116
1,2,3-Trichloropropane	U		0.204	0.500	1	11/30/2020 21:23	WG1584116
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	11/30/2020 21:23	WG1584116
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	11/30/2020 21:23	WG1584116
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	11/30/2020 21:23	WG1584116
Vinyl chloride	U		0.0273	0.100	1	11/30/2020 21:23	WG1584116
Xylenes, Total	U		0.191	0.260	1	11/30/2020 21:23	WG1584116
Ethyl Ether	U		0.0170	0.100	1	11/30/2020 21:23	WG1584116
Tetrahydrofuran	U		0.0900	0.500	1	11/30/2020 21:23	WG1584116
Iodomethane	U		0.242	0.500	1	11/30/2020 21:23	WG1584116
Allyl chloride	U		0.580	1.00	1	11/30/2020 21:23	WG1584116
Trans-1,4-Dichloro-2-butene	U		0.0560	0.200	1	11/30/2020 21:23	WG1584116
(S) Toluene-d8	*106*			*75.0-131*		*11/30/2020 21:23*	WG1584116
(S) 4-Bromofluorobenzene	*89.1*			*67.0-138*		*11/30/2020 21:23*	WG1584116
(S) 1,2-Dichloroethane-d4	*113*			*70.0-130*		*11/30/2020 21:23*	WG1584116

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Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Sulfate	51900		594	5000	1	12/01/2020 06:05	WG1584160

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	3080		102	1000	1	11/27/2020 23:59	WG1583149

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	1600		28.1	100	1	11/26/2020 01:24	WG1581599
Manganese	1010		3.52	25.0	5	11/26/2020 09:24	WG1581599

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	95.6		0.287	0.678	1	11/23/2020 15:39	WG1579664
Ethane	U		0.296	1.29	1	11/23/2020 15:39	WG1579664
Ethene	37.6		0.422	1.27	1	11/23/2020 15:39	WG1579664

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U		0.548	1.00	1	11/30/2020 21:42	WG1584116
Acrylonitrile	U		0.0760	0.500	1	11/30/2020 21:42	WG1584116
Benzene	U		0.0160	0.0400	1	11/30/2020 21:42	WG1584116
Bromobenzene	U		0.0420	0.500	1	11/30/2020 21:42	WG1584116
Bromodichloromethane	U		0.0315	0.100	1	11/30/2020 21:42	WG1584116
Bromoform	U		0.239	1.00	1	11/30/2020 21:42	WG1584116
Bromomethane	U		0.148	0.500	1	11/30/2020 21:42	WG1584116
n-Butylbenzene	U		0.153	0.500	1	11/30/2020 21:42	WG1584116
sec-Butylbenzene	U		0.101	0.500	1	11/30/2020 21:42	WG1584116
tert-Butylbenzene	U		0.0620	0.200	1	11/30/2020 21:42	WG1584116
Carbon tetrachloride	U		0.0432	0.200	1	11/30/2020 21:42	WG1584116
Chlorobenzene	U		0.0229	0.100	1	11/30/2020 21:42	WG1584116
Chlorodibromomethane	U		0.0180	0.100	1	11/30/2020 21:42	WG1584116
Chloroethane	U		0.0432	0.200	1	11/30/2020 21:42	WG1584116
Chloroform	U		0.0166	0.100	1	11/30/2020 21:42	WG1584116
Chloromethane	U		0.0556	0.500	1	11/30/2020 21:42	WG1584116
2-Chlorotoluene	U		0.0368	0.100	1	11/30/2020 21:42	WG1584116
4-Chlorotoluene	U		0.0452	0.200	1	11/30/2020 21:42	WG1584116
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	11/30/2020 21:42	WG1584116
1,2-Dibromoethane	U		0.0210	0.100	1	11/30/2020 21:42	WG1584116
Dibromomethane	U		0.0400	0.200	1	11/30/2020 21:42	WG1584116
1,2-Dichlorobenzene	U		0.0580	0.200	1	11/30/2020 21:42	WG1584116
1,3-Dichlorobenzene	U		0.0680	0.200	1	11/30/2020 21:42	WG1584116
1,4-Dichlorobenzene	U		0.0788	0.200	1	11/30/2020 21:42	WG1584116
Dichlorodifluoromethane	U		0.0327	0.100	1	11/30/2020 21:42	WG1584116
1,1-Dichloroethane	U		0.0230	0.100	1	11/30/2020 21:42	WG1584116
1,2-Dichloroethane	U		0.0190	0.100	1	11/30/2020 21:42	WG1584116
1,1-Dichloroethene	0.0430	J	0.0200	0.100	1	11/30/2020 21:42	WG1584116
cis-1,2-Dichloroethene	21.8		0.0276	0.100	1	11/30/2020 21:42	WG1584116
trans-1,2-Dichloroethene	U		0.0572	0.200	1	11/30/2020 21:42	WG1584116
1,2-Dichloropropane	U		0.0508	0.200	1	11/30/2020 21:42	WG1584116

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MW-190-111820
Collected date/time: 11/18/20 12:50

SAMPLE RESULTS - 12

L1288012

Volatile Organic Compounds (GC/MS) by Method 8260D

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,1-Dichloropropene	U		0.0280	0.100	1	11/30/2020 21:42	WG1584116
1,3-Dichloropropane	U		0.0700	0.200	1	11/30/2020 21:42	WG1584116
cis-1,3-Dichloropropene	U		0.0271	0.100	1	11/30/2020 21:42	WG1584116
trans-1,3-Dichloropropene	U		0.0612	0.200	1	11/30/2020 21:42	WG1584116
2,2-Dichloropropane	U		0.0317	0.100	1	11/30/2020 21:42	WG1584116
Di-isopropyl ether	U		0.0140	0.0400	1	11/30/2020 21:42	WG1584116
Ethylbenzene	U		0.0212	0.100	1	11/30/2020 21:42	WG1584116
Hexachloro-1,3-butadiene	U		0.508	1.00	1	11/30/2020 21:42	WG1584116
Isopropylbenzene	U		0.0345	0.100	1	11/30/2020 21:42	WG1584116
p-Isopropyltoluene	U		0.0932	0.200	1	11/30/2020 21:42	WG1584116
2-Butanone (MEK)	U		0.500	1.00	1	11/30/2020 21:42	WG1584116
Methylene Chloride	U		0.265	1.00	1	11/30/2020 21:42	WG1584116
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	11/30/2020 21:42	WG1584116
Methyl tert-butyl ether	U		0.0118	0.0400	1	11/30/2020 21:42	WG1584116
Naphthalene	U	UJ C3	0.124	0.500	1	11/30/2020 21:42	WG1584116
n-Propylbenzene	U		0.0472	0.200	1	11/30/2020 21:42	WG1584116
Styrene	U		0.109	0.500	1	11/30/2020 21:42	WG1584116
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	11/30/2020 21:42	WG1584116
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	11/30/2020 21:42	WG1584116
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	11/30/2020 21:42	WG1584116
Tetrachloroethene	U		0.0280	0.100	1	11/30/2020 21:42	WG1584116
Toluene	0.0820	J	0.0500	0.200	1	11/30/2020 21:42	WG1584116
1,2,3-Trichlorobenzene	U	UJ C4	0.0250	0.500	1	11/30/2020 21:42	WG1584116
1,2,4-Trichlorobenzene	U		0.193	0.500	1	11/30/2020 21:42	WG1584116
1,1,1-Trichloroethane	U		0.0110	0.100	1	11/30/2020 21:42	WG1584116
1,1,2-Trichloroethane	U		0.0353	0.100	1	11/30/2020 21:42	WG1584116
Trichloroethene	U		0.0160	0.0400	1	11/30/2020 21:42	WG1584116
Trichlorofluoromethane	U		0.0200	0.100	1	11/30/2020 21:42	WG1584116
1,2,3-Trichloropropane	U		0.204	0.500	1	11/30/2020 21:42	WG1584116
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	11/30/2020 21:42	WG1584116
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	11/30/2020 21:42	WG1584116
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	11/30/2020 21:42	WG1584116
Vinyl chloride	64.9		0.0273	0.100	1	11/30/2020 21:42	WG1584116
Xylenes, Total	U		0.191	0.260	1	11/30/2020 21:42	WG1584116
Ethyl Ether	U		0.0170	0.100	1	11/30/2020 21:42	WG1584116
Tetrahydrofuran	U		0.0900	0.500	1	11/30/2020 21:42	WG1584116
Iodomethane	U		0.242	0.500	1	11/30/2020 21:42	WG1584116
Allyl chloride	U		0.580	1.00	1	11/30/2020 21:42	WG1584116
Trans-1,4-Dichloro-2-butene	U		0.0560	0.200	1	11/30/2020 21:42	WG1584116
(S) Toluene-d8	*102*			*75.0-131*		*11/30/2020 21:42*	WG1584116
(S) 4-Bromofluorobenzene	*94.5*			*67.0-138*		*11/30/2020 21:42*	WG1584116
(S) 1,2-Dichloroethane-d4	*112*			*70.0-130*		*11/30/2020 21:42*	WG1584116

JC 1/7/2021

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U		0.548	1.00	1	11/30/2020 22:01	WG1584116
Acrylonitrile	U		0.0760	0.500	1	11/30/2020 22:01	WG1584116
Benzene	U		0.0160	0.0400	1	11/30/2020 22:01	WG1584116
Bromobenzene	U		0.0420	0.500	1	11/30/2020 22:01	WG1584116
Bromodichloromethane	U		0.0315	0.100	1	11/30/2020 22:01	WG1584116
Bromoform	U		0.239	1.00	1	11/30/2020 22:01	WG1584116
Bromomethane	U		0.148	0.500	1	11/30/2020 22:01	WG1584116
n-Butylbenzene	U		0.153	0.500	1	11/30/2020 22:01	WG1584116
sec-Butylbenzene	U		0.101	0.500	1	11/30/2020 22:01	WG1584116
tert-Butylbenzene	U		0.0620	0.200	1	11/30/2020 22:01	WG1584116
Carbon tetrachloride	U		0.0432	0.200	1	11/30/2020 22:01	WG1584116
Chlorobenzene	U		0.0229	0.100	1	11/30/2020 22:01	WG1584116
Chlorodibromomethane	U		0.0180	0.100	1	11/30/2020 22:01	WG1584116
Chloroethane	U		0.0432	0.200	1	11/30/2020 22:01	WG1584116
Chloroform	U		0.0166	0.100	1	11/30/2020 22:01	WG1584116
Chloromethane	U		0.0556	0.500	1	11/30/2020 22:01	WG1584116
2-Chlorotoluene	U		0.0368	0.100	1	11/30/2020 22:01	WG1584116
4-Chlorotoluene	U		0.0452	0.200	1	11/30/2020 22:01	WG1584116
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	11/30/2020 22:01	WG1584116
1,2-Dibromoethane	U		0.0210	0.100	1	11/30/2020 22:01	WG1584116
Dibromomethane	U		0.0400	0.200	1	11/30/2020 22:01	WG1584116
1,2-Dichlorobenzene	U		0.0580	0.200	1	11/30/2020 22:01	WG1584116
1,3-Dichlorobenzene	U		0.0680	0.200	1	11/30/2020 22:01	WG1584116
1,4-Dichlorobenzene	U		0.0788	0.200	1	11/30/2020 22:01	WG1584116
Dichlorodifluoromethane	U		0.0327	0.100	1	11/30/2020 22:01	WG1584116
1,1-Dichloroethane	U		0.0230	0.100	1	11/30/2020 22:01	WG1584116
1,2-Dichloroethane	U		0.0190	0.100	1	11/30/2020 22:01	WG1584116
1,1-Dichloroethene	U		0.0200	0.100	1	11/30/2020 22:01	WG1584116
cis-1,2-Dichloroethene	U		0.0276	0.100	1	11/30/2020 22:01	WG1584116
trans-1,2-Dichloroethene	U		0.0572	0.200	1	11/30/2020 22:01	WG1584116
1,2-Dichloropropane	U		0.0508	0.200	1	11/30/2020 22:01	WG1584116
1,1-Dichloropropene	U		0.0280	0.100	1	11/30/2020 22:01	WG1584116
1,3-Dichloropropane	U		0.0700	0.200	1	11/30/2020 22:01	WG1584116
cis-1,3-Dichloropropene	U		0.0271	0.100	1	11/30/2020 22:01	WG1584116
trans-1,3-Dichloropropene	U		0.0612	0.200	1	11/30/2020 22:01	WG1584116
2,2-Dichloropropane	U		0.0317	0.100	1	11/30/2020 22:01	WG1584116
Di-isopropyl ether	U		0.0140	0.0400	1	11/30/2020 22:01	WG1584116
Ethylbenzene	U		0.0212	0.100	1	11/30/2020 22:01	WG1584116
Hexachloro-1,3-butadiene	U		0.508	1.00	1	11/30/2020 22:01	WG1584116
Isopropylbenzene	U		0.0345	0.100	1	11/30/2020 22:01	WG1584116
p-Isopropyltoluene	U		0.0932	0.200	1	11/30/2020 22:01	WG1584116
2-Butanone (MEK)	U		0.500	1.00	1	11/30/2020 22:01	WG1584116
Methylene Chloride	U		0.265	1.00	1	11/30/2020 22:01	WG1584116
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	11/30/2020 22:01	WG1584116
Methyl tert-butyl ether	U		0.0118	0.0400	1	11/30/2020 22:01	WG1584116
Naphthalene	U	UJ C3	0.124	0.500	1	11/30/2020 22:01	WG1584116
n-Propylbenzene	U		0.0472	0.200	1	11/30/2020 22:01	WG1584116
Styrene	U		0.109	0.500	1	11/30/2020 22:01	WG1584116
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	11/30/2020 22:01	WG1584116
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	11/30/2020 22:01	WG1584116
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	11/30/2020 22:01	WG1584116
Tetrachloroethene	0.0480	J	0.0280	0.100	1	11/30/2020 22:01	WG1584116
Toluene	0.464		0.0500	0.200	1	11/30/2020 22:01	WG1584116
1,2,3-Trichlorobenzene	U	UJ C4	0.0250	0.500	1	11/30/2020 22:01	WG1584116
1,2,4-Trichlorobenzene	U		0.193	0.500	1	11/30/2020 22:01	WG1584116
1,1,1-Trichloroethane	U		0.0110	0.100	1	11/30/2020 22:01	WG1584116

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Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,1,2-Trichloroethane	U		0.0353	0.100	1	11/30/2020 22:01	WG1584116
Trichloroethene	U		0.0160	0.0400	1	11/30/2020 22:01	WG1584116
Trichlorofluoromethane	U		0.0200	0.100	1	11/30/2020 22:01	WG1584116
1,2,3-Trichloropropane	U		0.204	0.500	1	11/30/2020 22:01	WG1584116
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	11/30/2020 22:01	WG1584116
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	11/30/2020 22:01	WG1584116
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	11/30/2020 22:01	WG1584116
Vinyl chloride	U		0.0273	0.100	1	11/30/2020 22:01	WG1584116
Xylenes, Total	U		0.191	0.260	1	11/30/2020 22:01	WG1584116
Ethyl Ether	U		0.0170	0.100	1	11/30/2020 22:01	WG1584116
Tetrahydrofuran	U		0.0900	0.500	1	11/30/2020 22:01	WG1584116
Iodomethane	U		0.242	0.500	1	11/30/2020 22:01	WG1584116
Allyl chloride	U		0.580	1.00	1	11/30/2020 22:01	WG1584116
Trans-1,4-Dichloro-2-butene	U		0.0560	0.200	1	11/30/2020 22:01	WG1584116
(S) Toluene-d8	*106*			*75.0-131*		*11/30/2020 22:01*	WG1584116
(S) 4-Bromofluorobenzene	*91.8*			*67.0-138*		*11/30/2020 22:01*	WG1584116
(S) 1,2-Dichloroethane-d4	*114*			*70.0-130*		*11/30/2020 22:01*	WG1584116

JC 1/7/2021

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Sulfate	3720	J	594	5000	1	12/01/2020 06:18	WG1584160

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	1070		102	1000	1	11/28/2020 00:14	WG1583149

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	3640		140	500	5	11/25/2020 12:33	WG1581079
Manganese	255		3.52	25.0	5	11/25/2020 12:33	WG1581079

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	15.5		0.287	0.678	1	11/23/2020 15:51	WG1579664
Ethane	U		0.296	1.29	1	11/23/2020 15:51	WG1579664
Ethene	U		0.422	1.27	1	11/23/2020 15:51	WG1579664

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U		0.548	1.00	1	11/30/2020 22:20	WG1584116
Acrylonitrile	U		0.0760	0.500	1	11/30/2020 22:20	WG1584116
Benzene	U		0.0160	0.0400	1	11/30/2020 22:20	WG1584116
Bromobenzene	U		0.0420	0.500	1	11/30/2020 22:20	WG1584116
Bromodichloromethane	U		0.0315	0.100	1	11/30/2020 22:20	WG1584116
Bromoform	U		0.239	1.00	1	11/30/2020 22:20	WG1584116
Bromomethane	U		0.148	0.500	1	11/30/2020 22:20	WG1584116
n-Butylbenzene	U		0.153	0.500	1	11/30/2020 22:20	WG1584116
sec-Butylbenzene	U		0.101	0.500	1	11/30/2020 22:20	WG1584116
tert-Butylbenzene	U		0.0620	0.200	1	11/30/2020 22:20	WG1584116
Carbon tetrachloride	U		0.0432	0.200	1	11/30/2020 22:20	WG1584116
Chlorobenzene	U		0.0229	0.100	1	11/30/2020 22:20	WG1584116
Chlorodibromomethane	U		0.0180	0.100	1	11/30/2020 22:20	WG1584116
Chloroethane	U		0.0432	0.200	1	11/30/2020 22:20	WG1584116
Chloroform	U		0.0166	0.100	1	11/30/2020 22:20	WG1584116
Chloromethane	U		0.0556	0.500	1	11/30/2020 22:20	WG1584116
2-Chlorotoluene	U		0.0368	0.100	1	11/30/2020 22:20	WG1584116
4-Chlorotoluene	U		0.0452	0.200	1	11/30/2020 22:20	WG1584116
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	11/30/2020 22:20	WG1584116
1,2-Dibromoethane	U		0.0210	0.100	1	11/30/2020 22:20	WG1584116
Dibromomethane	U		0.0400	0.200	1	11/30/2020 22:20	WG1584116
1,2-Dichlorobenzene	U		0.0580	0.200	1	11/30/2020 22:20	WG1584116
1,3-Dichlorobenzene	U		0.0680	0.200	1	11/30/2020 22:20	WG1584116
1,4-Dichlorobenzene	U		0.0788	0.200	1	11/30/2020 22:20	WG1584116
Dichlorodifluoromethane	U		0.0327	0.100	1	11/30/2020 22:20	WG1584116
1,1-Dichloroethane	U		0.0230	0.100	1	11/30/2020 22:20	WG1584116
1,2-Dichloroethane	U		0.0190	0.100	1	11/30/2020 22:20	WG1584116
1,1-Dichloroethene	U		0.0200	0.100	1	11/30/2020 22:20	WG1584116
cis-1,2-Dichloroethene	U		0.0276	0.100	1	11/30/2020 22:20	WG1584116
trans-1,2-Dichloroethene	U		0.0572	0.200	1	11/30/2020 22:20	WG1584116
1,2-Dichloropropane	U		0.0508	0.200	1	11/30/2020 22:20	WG1584116

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Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,1-Dichloropropene	U		0.0280	0.100	1	11/30/2020 22:20	WG1584116
1,3-Dichloropropane	U		0.0700	0.200	1	11/30/2020 22:20	WG1584116
cis-1,3-Dichloropropene	U		0.0271	0.100	1	11/30/2020 22:20	WG1584116
trans-1,3-Dichloropropene	U		0.0612	0.200	1	11/30/2020 22:20	WG1584116
2,2-Dichloropropane	U		0.0317	0.100	1	11/30/2020 22:20	WG1584116
Di-isopropyl ether	U		0.0140	0.0400	1	11/30/2020 22:20	WG1584116
Ethylbenzene	U		0.0212	0.100	1	11/30/2020 22:20	WG1584116
Hexachloro-1,3-butadiene	U		0.508	1.00	1	11/30/2020 22:20	WG1584116
Isopropylbenzene	U		0.0345	0.100	1	11/30/2020 22:20	WG1584116
p-Isopropyltoluene	U		0.0932	0.200	1	11/30/2020 22:20	WG1584116
2-Butanone (MEK)	U		0.500	1.00	1	11/30/2020 22:20	WG1584116
Methylene Chloride	U		0.265	1.00	1	11/30/2020 22:20	WG1584116
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	11/30/2020 22:20	WG1584116
Methyl tert-butyl ether	U		0.0118	0.0400	1	11/30/2020 22:20	WG1584116
Naphthalene	U	UJ C3	0.124	0.500	1	11/30/2020 22:20	WG1584116
n-Propylbenzene	U		0.0472	0.200	1	11/30/2020 22:20	WG1584116
Styrene	U		0.109	0.500	1	11/30/2020 22:20	WG1584116
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	11/30/2020 22:20	WG1584116
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	11/30/2020 22:20	WG1584116
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	11/30/2020 22:20	WG1584116
Tetrachloroethene	U		0.0280	0.100	1	11/30/2020 22:20	WG1584116
Toluene	0.0710	J	0.0500	0.200	1	11/30/2020 22:20	WG1584116
1,2,3-Trichlorobenzene	U	UJ C4	0.0250	0.500	1	11/30/2020 22:20	WG1584116
1,2,4-Trichlorobenzene	U		0.193	0.500	1	11/30/2020 22:20	WG1584116
1,1,1-Trichloroethane	U		0.0110	0.100	1	11/30/2020 22:20	WG1584116
1,1,2-Trichloroethane	U		0.0353	0.100	1	11/30/2020 22:20	WG1584116
Trichloroethene	U		0.0160	0.0400	1	11/30/2020 22:20	WG1584116
Trichlorofluoromethane	U		0.0200	0.100	1	11/30/2020 22:20	WG1584116
1,2,3-Trichloropropane	U		0.204	0.500	1	11/30/2020 22:20	WG1584116
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	11/30/2020 22:20	WG1584116
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	11/30/2020 22:20	WG1584116
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	11/30/2020 22:20	WG1584116
Vinyl chloride	U		0.0273	0.100	1	11/30/2020 22:20	WG1584116
Xylenes, Total	U		0.191	0.260	1	11/30/2020 22:20	WG1584116
Ethyl Ether	U		0.0170	0.100	1	11/30/2020 22:20	WG1584116
Tetrahydrofuran	U		0.0900	0.500	1	11/30/2020 22:20	WG1584116
Iodomethane	U		0.242	0.500	1	11/30/2020 22:20	WG1584116
Allyl chloride	U		0.580	1.00	1	11/30/2020 22:20	WG1584116
Trans-1,4-Dichloro-2-butene	U		0.0560	0.200	1	11/30/2020 22:20	WG1584116
(S) Toluene-d8	*103*			*75.0-131*		*11/30/2020 22:20*	WG1584116
(S) 4-Bromofluorobenzene	*93.4*			*67.0-138*		*11/30/2020 22:20*	WG1584116
(S) 1,2-Dichloroethane-d4	*116*			*70.0-130*		*11/30/2020 22:20*	WG1584116

JC 1/7/2021

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Wet Chemistry by Method 9056A

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Sulfate	12700		594	5000	1	12/08/2020 06:42	WG1587717

Wet Chemistry by Method 9060A

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
TOC (Total Organic Carbon)	5490		102	1000	1	12/03/2020 18:58	WG1585506

Metals (ICPMS) by Method 6020B

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Iron	9600		28.1	100	1	12/03/2020 19:54	WG1585686
Manganese	412		0.704	5.00	1	12/03/2020 19:54	WG1585686

Volatile Organic Compounds (GC) by Method RSK175

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Methane	1110		0.287	0.678	1	12/01/2020 16:43	WG1584466
Ethane	U		0.296	1.29	1	12/01/2020 16:43	WG1584466
Ethene	U		0.422	1.27	1	12/01/2020 16:43	WG1584466

Volatile Organic Compounds (GC/MS) by Method 8260D

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Acetone	U		0.548	1.00	1	11/30/2020 23:55	WG1584116
Acrylonitrile	U		0.0760	0.500	1	11/30/2020 23:55	WG1584116
Benzene	0.0240	J	0.0160	0.0400	1	11/30/2020 23:55	WG1584116
Bromobenzene	U		0.0420	0.500	1	11/30/2020 23:55	WG1584116
Bromodichloromethane	U		0.0315	0.100	1	11/30/2020 23:55	WG1584116
Bromoform	U		0.239	1.00	1	11/30/2020 23:55	WG1584116
Bromomethane	U		0.148	0.500	1	11/30/2020 23:55	WG1584116
n-Butylbenzene	U		0.153	0.500	1	11/30/2020 23:55	WG1584116
sec-Butylbenzene	U		0.101	0.500	1	11/30/2020 23:55	WG1584116
tert-Butylbenzene	U		0.0620	0.200	1	11/30/2020 23:55	WG1584116
Carbon tetrachloride	U		0.0432	0.200	1	11/30/2020 23:55	WG1584116
Chlorobenzene	U		0.0229	0.100	1	11/30/2020 23:55	WG1584116
Chlorodibromomethane	U		0.0180	0.100	1	11/30/2020 23:55	WG1584116
Chloroethane	U		0.0432	0.200	1	11/30/2020 23:55	WG1584116
Chloroform	U		0.0166	0.100	1	11/30/2020 23:55	WG1584116
Chloromethane	U		0.0556	0.500	1	11/30/2020 23:55	WG1584116
2-Chlorotoluene	U		0.0368	0.100	1	11/30/2020 23:55	WG1584116
4-Chlorotoluene	U		0.0452	0.200	1	11/30/2020 23:55	WG1584116
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	11/30/2020 23:55	WG1584116
1,2-Dibromoethane	U		0.0210	0.100	1	11/30/2020 23:55	WG1584116
Dibromomethane	U		0.0400	0.200	1	11/30/2020 23:55	WG1584116
1,2-Dichlorobenzene	U		0.0580	0.200	1	11/30/2020 23:55	WG1584116
1,3-Dichlorobenzene	U		0.0680	0.200	1	11/30/2020 23:55	WG1584116
1,4-Dichlorobenzene	U		0.0788	0.200	1	11/30/2020 23:55	WG1584116
Dichlorodifluoromethane	U		0.0327	0.100	1	11/30/2020 23:55	WG1584116
1,1-Dichloroethane	U		0.0230	0.100	1	11/30/2020 23:55	WG1584116
1,2-Dichloroethane	U		0.0190	0.100	1	11/30/2020 23:55	WG1584116
1,1-Dichloroethene	U		0.0200	0.100	1	11/30/2020 23:55	WG1584116
cis-1,2-Dichloroethene	0.127		0.0276	0.100	1	11/30/2020 23:55	WG1584116
trans-1,2-Dichloroethene	U		0.0572	0.200	1	11/30/2020 23:55	WG1584116
1,2-Dichloropropane	U		0.0508	0.200	1	11/30/2020 23:55	WG1584116

JC 1/7/2021

Volatile Organic Compounds (GC/MS) by Method 8260D

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
1,1-Dichloropropene	U		0.0280	0.100	1	11/30/2020 23:55	WG1584116
1,3-Dichloropropane	U		0.0700	0.200	1	11/30/2020 23:55	WG1584116
cis-1,3-Dichloropropene	U		0.0271	0.100	1	11/30/2020 23:55	WG1584116
trans-1,3-Dichloropropene	U		0.0612	0.200	1	11/30/2020 23:55	WG1584116
2,2-Dichloropropane	U		0.0317	0.100	1	11/30/2020 23:55	WG1584116
Di-isopropyl ether	U		0.0140	0.0400	1	11/30/2020 23:55	WG1584116
Ethylbenzene	U		0.0212	0.100	1	11/30/2020 23:55	WG1584116
Hexachloro-1,3-butadiene	U		0.508	1.00	1	11/30/2020 23:55	WG1584116
Isopropylbenzene	U		0.0345	0.100	1	11/30/2020 23:55	WG1584116
p-Isopropyltoluene	U		0.0932	0.200	1	11/30/2020 23:55	WG1584116
2-Butanone (MEK)	U		0.500	1.00	1	11/30/2020 23:55	WG1584116
Methylene Chloride	U		0.265	1.00	1	11/30/2020 23:55	WG1584116
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	11/30/2020 23:55	WG1584116
Methyl tert-butyl ether	U		0.0118	0.0400	1	11/30/2020 23:55	WG1584116
Naphthalene	U	C3	0.124	0.500	1	11/30/2020 23:55	WG1584116
n-Propylbenzene	U		0.0472	0.200	1	11/30/2020 23:55	WG1584116
Styrene	U		0.109	0.500	1	11/30/2020 23:55	WG1584116
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	11/30/2020 23:55	WG1584116
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	11/30/2020 23:55	WG1584116
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	11/30/2020 23:55	WG1584116
Tetrachloroethene	U		0.0280	0.100	1	11/30/2020 23:55	WG1584116
Toluene	0.104	J	0.0500	0.200	1	11/30/2020 23:55	WG1584116
1,2,3-Trichlorobenzene	U	C4	0.0250	0.500	1	11/30/2020 23:55	WG1584116
1,2,4-Trichlorobenzene	U		0.193	0.500	1	11/30/2020 23:55	WG1584116
1,1,1-Trichloroethane	U		0.0110	0.100	1	11/30/2020 23:55	WG1584116
1,1,2-Trichloroethane	U		0.0353	0.100	1	11/30/2020 23:55	WG1584116
Trichloroethene	0.0840		0.0160	0.0400	1	11/30/2020 23:55	WG1584116
Trichlorofluoromethane	U		0.0200	0.100	1	11/30/2020 23:55	WG1584116
1,2,3-Trichloropropane	U		0.204	0.500	1	11/30/2020 23:55	WG1584116
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	11/30/2020 23:55	WG1584116
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	11/30/2020 23:55	WG1584116
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	11/30/2020 23:55	WG1584116
Vinyl chloride	0.447		0.0273	0.100	1	11/30/2020 23:55	WG1584116
Xylenes, Total	U		0.191	0.260	1	11/30/2020 23:55	WG1584116
Ethyl Ether	U		0.0170	0.100	1	11/30/2020 23:55	WG1584116
Tetrahydrofuran	U		0.0900	0.500	1	11/30/2020 23:55	WG1584116
Iodomethane	U		0.242	0.500	1	11/30/2020 23:55	WG1584116
Allyl chloride	U		0.580	1.00	1	11/30/2020 23:55	WG1584116
Trans-1,4-Dichloro-2-butene	U		0.0560	0.200	1	11/30/2020 23:55	WG1584116
(S) Toluene-d8	*103*			*75.0-131*		*11/30/2020 23:55*	WG1584116
(S) 4-Bromofluorobenzene	*93.8*			*67.0-138*		*11/30/2020 23:55*	WG1584116
(S) 1,2-Dichloroethane-d4	*117*			*70.0-130*		*11/30/2020 23:55*	WG1584116

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

JC 1/7/2021

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Sulfate	20000		594	5000	1	12/08/2020 06:57	WG1587717

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	3580000		10200	100000	100	12/03/2020 22:23	WG1585506

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	14200		28.1	100	1	12/03/2020 18:04	WG1585686
Manganese	1890		0.704	5.00	1	12/03/2020 18:04	WG1585686

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	2730		0.287	0.678	1	12/01/2020 16:53	WG1584466
Ethane	37.0		0.296	1.29	1	12/01/2020 16:53	WG1584466
Ethene	46.8		0.422	1.27	1	12/01/2020 16:53	WG1584466

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U		11.0	20.0	20	12/01/2020 02:47	WG1584116
Acrylonitrile	U		1.52	10.0	20	12/01/2020 02:47	WG1584116
Benzene	0.740	J	0.320	0.800	20	12/01/2020 02:47	WG1584116
Bromobenzene	U		0.840	10.0	20	12/01/2020 02:47	WG1584116
Bromodichloromethane	U		0.630	2.00	20	12/01/2020 02:47	WG1584116
Bromoform	U		4.78	20.0	20	12/01/2020 02:47	WG1584116
Bromomethane	U		2.96	10.0	20	12/01/2020 02:47	WG1584116
n-Butylbenzene	U		3.06	10.0	20	12/01/2020 02:47	WG1584116
sec-Butylbenzene	U		2.02	10.0	20	12/01/2020 02:47	WG1584116
tert-Butylbenzene	U		1.24	4.00	20	12/01/2020 02:47	WG1584116
Carbon tetrachloride	U		0.864	4.00	20	12/01/2020 02:47	WG1584116
Chlorobenzene	U		0.458	2.00	20	12/01/2020 02:47	WG1584116
Chlorodibromomethane	U		0.360	2.00	20	12/01/2020 02:47	WG1584116
Chloroethane	U		0.864	4.00	20	12/01/2020 02:47	WG1584116
Chloroform	U		0.332	2.00	20	12/01/2020 02:47	WG1584116
Chloromethane	U		1.11	10.0	20	12/01/2020 02:47	WG1584116
2-Chlorotoluene	U		0.736	2.00	20	12/01/2020 02:47	WG1584116
4-Chlorotoluene	U		0.904	4.00	20	12/01/2020 02:47	WG1584116
1,2-Dibromo-3-Chloropropane	U		4.08	20.0	20	12/01/2020 02:47	WG1584116
1,2-Dibromoethane	U		0.420	2.00	20	12/01/2020 02:47	WG1584116
Dibromomethane	U		0.800	4.00	20	12/01/2020 02:47	WG1584116
1,2-Dichlorobenzene	U		1.16	4.00	20	12/01/2020 02:47	WG1584116
1,3-Dichlorobenzene	U		1.36	4.00	20	12/01/2020 02:47	WG1584116
1,4-Dichlorobenzene	U		1.58	4.00	20	12/01/2020 02:47	WG1584116
Dichlorodifluoromethane	U		0.654	2.00	20	12/01/2020 02:47	WG1584116
1,1-Dichloroethane	U		0.460	2.00	20	12/01/2020 02:47	WG1584116
1,2-Dichloroethane	U		0.380	2.00	20	12/01/2020 02:47	WG1584116
1,1-Dichloroethene	15.6	C5	0.400	2.00	20	12/01/2020 02:47	WG1584116
cis-1,2-Dichloroethene	2770		2.76	10.0	100	12/02/2020 08:53	WG1584809
trans-1,2-Dichloroethene	9.98		1.14	4.00	20	12/01/2020 02:47	WG1584116
1,2-Dichloropropane	U		1.02	4.00	20	12/01/2020 02:47	WG1584116

JC 1/7/2021

MW-157-112320

Collected date/time: 11/23/20 13:20

SAMPLE RESULTS - 02

L1290496

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,1-Dichloropropene	U		0.560	2.00	20	12/01/2020 02:47	WG1584116
1,3-Dichloropropane	U		1.40	4.00	20	12/01/2020 02:47	WG1584116
cis-1,3-Dichloropropene	U		0.542	2.00	20	12/01/2020 02:47	WG1584116
trans-1,3-Dichloropropene	U		1.22	4.00	20	12/01/2020 02:47	WG1584116
2,2-Dichloropropane	U		0.634	2.00	20	12/01/2020 02:47	WG1584116
Di-isopropyl ether	U		0.280	0.800	20	12/01/2020 02:47	WG1584116
Ethylbenzene	U		0.424	2.00	20	12/01/2020 02:47	WG1584116
Hexachloro-1,3-butadiene	U		10.2	20.0	20	12/01/2020 02:47	WG1584116
Isopropylbenzene	U		0.690	2.00	20	12/01/2020 02:47	WG1584116
p-Isopropyltoluene	U		1.86	4.00	20	12/01/2020 02:47	WG1584116
2-Butanone (MEK)	456		10.0	20.0	20	12/01/2020 02:47	WG1584116
Methylene Chloride	U		5.30	20.0	20	12/01/2020 02:47	WG1584116
4-Methyl-2-pentanone (MIBK)	U		8.00	20.0	20	12/01/2020 02:47	WG1584116
Methyl tert-butyl ether	U		0.236	0.800	20	12/01/2020 02:47	WG1584116
Naphthalene	U	C3	2.48	10.0	20	12/01/2020 02:47	WG1584116
n-Propylbenzene	U		0.944	4.00	20	12/01/2020 02:47	WG1584116
Styrene	U		2.18	10.0	20	12/01/2020 02:47	WG1584116
1,1,1,2-Tetrachloroethane	U		0.400	2.00	20	12/01/2020 02:47	WG1584116
1,1,2,2-Tetrachloroethane	U		0.312	2.00	20	12/01/2020 02:47	WG1584116
1,1,2-Trichlorotrifluoroethane	U		0.540	2.00	20	12/01/2020 02:47	WG1584116
Tetrachloroethene	3.04		0.560	2.00	20	12/01/2020 02:47	WG1584116
Toluene	U		1.00	4.00	20	12/01/2020 02:47	WG1584116
1,2,3-Trichlorobenzene	U	C4	0.500	10.0	20	12/01/2020 02:47	WG1584116
1,2,4-Trichlorobenzene	U		3.86	10.0	20	12/01/2020 02:47	WG1584116
1,1,1-Trichloroethane	U		0.220	2.00	20	12/01/2020 02:47	WG1584116
1,1,2-Trichloroethane	U		0.706	2.00	20	12/01/2020 02:47	WG1584116
Trichloroethene	24.7		0.320	0.800	20	12/01/2020 02:47	WG1584116
Trichlorofluoromethane	U		0.400	2.00	20	12/01/2020 02:47	WG1584116
1,2,3-Trichloropropane	U		4.08	10.0	20	12/01/2020 02:47	WG1584116
1,2,4-Trimethylbenzene	U		0.928	4.00	20	12/01/2020 02:47	WG1584116
1,2,3-Trimethylbenzene	U		0.920	4.00	20	12/01/2020 02:47	WG1584116
1,3,5-Trimethylbenzene	U		0.864	4.00	20	12/01/2020 02:47	WG1584116
Vinyl chloride	528		0.546	2.00	20	12/01/2020 02:47	WG1584116
Xylenes, Total	U		3.82	5.20	20	12/01/2020 02:47	WG1584116
Ethyl Ether	U		0.340	2.00	20	12/01/2020 02:47	WG1584116
Tetrahydrofuran	U		1.80	10.0	20	12/01/2020 02:47	WG1584116
Iodomethane	U		4.84	10.0	20	12/01/2020 02:47	WG1584116
Allyl chloride	U		11.6	20.0	20	12/01/2020 02:47	WG1584116
Trans-1,4-Dichloro-2-butene	U		1.12	4.00	20	12/01/2020 02:47	WG1584116
(S) Toluene-d8	*103*			*75.0-131*		*12/01/2020 02:47*	WG1584116
(S) Toluene-d8	*109*			*75.0-131*		*12/02/2020 08:53*	WG1584809
(S) 4-Bromofluorobenzene	*93.8*			*67.0-138*		*12/01/2020 02:47*	WG1584116
(S) 4-Bromofluorobenzene	*111*			*67.0-138*		*12/02/2020 08:53*	WG1584809
(S) 1,2-Dichloroethane-d4	*117*			*70.0-130*		*12/01/2020 02:47*	WG1584116
(S) 1,2-Dichloroethane-d4	*90.1*			*70.0-130*		*12/02/2020 08:53*	WG1584809

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

JC 1/7/2021

MW-145R-112320

Collected date/time: 11/23/20 11:35

SAMPLE RESULTS - 03

L1290496

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Wet Chemistry by Method 9056A

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Sulfate	26900		594	5000	1	12/08/2020 07:13	WG1587717

Wet Chemistry by Method 9060A

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
TOC (Total Organic Carbon)	2890	P1	102	1000	1	12/03/2020 23:09	WG1585506

Metals (ICPMS) by Method 6020B

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Iron	4610		28.1	100	1	12/03/2020 18:07	WG1585686
Manganese	361		0.704	5.00	1	12/03/2020 18:07	WG1585686

Volatile Organic Compounds (GC) by Method RSK175

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Methane	1610		0.287	0.678	1	12/01/2020 17:00	WG1584466
Ethane	U		0.296	1.29	1	12/01/2020 17:00	WG1584466
Ethene	U		0.422	1.27	1	12/01/2020 17:00	WG1584466

Volatile Organic Compounds (GC/MS) by Method 8260D

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Acetone	U		0.548	1.00	1	12/01/2020 00:14	WG1584116
Acrylonitrile	U		0.0760	0.500	1	12/01/2020 00:14	WG1584116
Benzene	U		0.0160	0.0400	1	12/01/2020 00:14	WG1584116
Bromobenzene	U		0.0420	0.500	1	12/01/2020 00:14	WG1584116
Bromodichloromethane	U		0.0315	0.100	1	12/01/2020 00:14	WG1584116
Bromoform	U		0.239	1.00	1	12/01/2020 00:14	WG1584116
Bromomethane	U		0.148	0.500	1	12/01/2020 00:14	WG1584116
n-Butylbenzene	U		0.153	0.500	1	12/01/2020 00:14	WG1584116
sec-Butylbenzene	U		0.101	0.500	1	12/01/2020 00:14	WG1584116
tert-Butylbenzene	U		0.0620	0.200	1	12/01/2020 00:14	WG1584116
Carbon tetrachloride	U		0.0432	0.200	1	12/01/2020 00:14	WG1584116
Chlorobenzene	U		0.0229	0.100	1	12/01/2020 00:14	WG1584116
Chlorodibromomethane	U		0.0180	0.100	1	12/01/2020 00:14	WG1584116
Chloroethane	U		0.0432	0.200	1	12/01/2020 00:14	WG1584116
Chloroform	U		0.0166	0.100	1	12/01/2020 00:14	WG1584116
Chloromethane	U		0.0556	0.500	1	12/01/2020 00:14	WG1584116
2-Chlorotoluene	U		0.0368	0.100	1	12/01/2020 00:14	WG1584116
4-Chlorotoluene	U		0.0452	0.200	1	12/01/2020 00:14	WG1584116
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	12/01/2020 00:14	WG1584116
1,2-Dibromoethane	U		0.0210	0.100	1	12/01/2020 00:14	WG1584116
Dibromomethane	U		0.0400	0.200	1	12/01/2020 00:14	WG1584116
1,2-Dichlorobenzene	U		0.0580	0.200	1	12/01/2020 00:14	WG1584116
1,3-Dichlorobenzene	U		0.0680	0.200	1	12/01/2020 00:14	WG1584116
1,4-Dichlorobenzene	U		0.0788	0.200	1	12/01/2020 00:14	WG1584116
Dichlorodifluoromethane	U		0.0327	0.100	1	12/01/2020 00:14	WG1584116
1,1-Dichloroethane	U		0.0230	0.100	1	12/01/2020 00:14	WG1584116
1,2-Dichloroethane	U		0.0190	0.100	1	12/01/2020 00:14	WG1584116
1,1-Dichloroethene	U		0.0200	0.100	1	12/01/2020 00:14	WG1584116
cis-1,2-Dichloroethene	0.151		0.0276	0.100	1	12/01/2020 00:14	WG1584116
trans-1,2-Dichloroethene	U		0.0572	0.200	1	12/01/2020 00:14	WG1584116
1,2-Dichloropropane	U		0.0508	0.200	1	12/01/2020 00:14	WG1584116

JC 1/7/2021

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,1-Dichloropropene	U		0.0280	0.100	1	12/01/2020 00:14	WG1584116
1,3-Dichloropropane	U		0.0700	0.200	1	12/01/2020 00:14	WG1584116
cis-1,3-Dichloropropene	U		0.0271	0.100	1	12/01/2020 00:14	WG1584116
trans-1,3-Dichloropropene	U		0.0612	0.200	1	12/01/2020 00:14	WG1584116
2,2-Dichloropropane	U		0.0317	0.100	1	12/01/2020 00:14	WG1584116
Di-isopropyl ether	U		0.0140	0.0400	1	12/01/2020 00:14	WG1584116
Ethylbenzene	U		0.0212	0.100	1	12/01/2020 00:14	WG1584116
Hexachloro-1,3-butadiene	U		0.508	1.00	1	12/01/2020 00:14	WG1584116
Isopropylbenzene	U		0.0345	0.100	1	12/01/2020 00:14	WG1584116
p-Isopropyltoluene	U		0.0932	0.200	1	12/01/2020 00:14	WG1584116
2-Butanone (MEK)	U		0.500	1.00	1	12/01/2020 00:14	WG1584116
Methylene Chloride	U		0.265	1.00	1	12/01/2020 00:14	WG1584116
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	12/01/2020 00:14	WG1584116
Methyl tert-butyl ether	U		0.0118	0.0400	1	12/01/2020 00:14	WG1584116
Naphthalene	U	C3	0.124	0.500	1	12/01/2020 00:14	WG1584116
n-Propylbenzene	U		0.0472	0.200	1	12/01/2020 00:14	WG1584116
Styrene	U		0.109	0.500	1	12/01/2020 00:14	WG1584116
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	12/01/2020 00:14	WG1584116
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	12/01/2020 00:14	WG1584116
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	12/01/2020 00:14	WG1584116
Tetrachloroethene	U		0.0280	0.100	1	12/01/2020 00:14	WG1584116
Toluene	0.0570	J	0.0500	0.200	1	12/01/2020 00:14	WG1584116
1,2,3-Trichlorobenzene	U	C4	0.0250	0.500	1	12/01/2020 00:14	WG1584116
1,2,4-Trichlorobenzene	U		0.193	0.500	1	12/01/2020 00:14	WG1584116
1,1,1-Trichloroethane	U		0.0110	0.100	1	12/01/2020 00:14	WG1584116
1,1,2-Trichloroethane	U		0.0353	0.100	1	12/01/2020 00:14	WG1584116
Trichloroethene	U		0.0160	0.0400	1	12/01/2020 00:14	WG1584116
Trichlorofluoromethane	U		0.0200	0.100	1	12/01/2020 00:14	WG1584116
1,2,3-Trichloropropane	U		0.204	0.500	1	12/01/2020 00:14	WG1584116
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	12/01/2020 00:14	WG1584116
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	12/01/2020 00:14	WG1584116
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	12/01/2020 00:14	WG1584116
Vinyl chloride	U		0.0273	0.100	1	12/01/2020 00:14	WG1584116
Xylenes, Total	U		0.191	0.260	1	12/01/2020 00:14	WG1584116
Ethyl Ether	U		0.0170	0.100	1	12/01/2020 00:14	WG1584116
Tetrahydrofuran	U		0.0900	0.500	1	12/01/2020 00:14	WG1584116
Iodomethane	U		0.242	0.500	1	12/01/2020 00:14	WG1584116
Allyl chloride	U		0.580	1.00	1	12/01/2020 00:14	WG1584116
Trans-1,4-Dichloro-2-butene	U		0.0560	0.200	1	12/01/2020 00:14	WG1584116
(S) Toluene-d8	*102*			*75.0-131*		*12/01/2020 00:14*	WG1584116
(S) 4-Bromofluorobenzene	*95.7*			*67.0-138*		*12/01/2020 00:14*	WG1584116
(S) 1,2-Dichloroethane-d4	*116*			*70.0-130*		*12/01/2020 00:14*	WG1584116

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MW-144R-112320

Collected date/time: 11/23/20 13:03

SAMPLE RESULTS - 04

L1290496

Wet Chemistry by Method 9056A

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Sulfate	U		594	5000	1	12/08/2020 07:29	WG1587717

Wet Chemistry by Method 9060A

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
TOC (Total Organic Carbon)	3820		102	1000	1	12/04/2020 00:12	WG1585506

Metals (ICPMS) by Method 6020B

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Iron	5740		28.1	100	1	12/03/2020 18:10	WG1585686
Manganese	1070		0.704	5.00	1	12/03/2020 18:10	WG1585686

Volatile Organic Compounds (GC) by Method RSK175

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Methane	20400		2.87	6.78	10	12/02/2020 15:07	WG1585118
Ethane	414		0.296	1.29	1	12/01/2020 17:05	WG1584466
Ethene	33.8		0.422	1.27	1	12/01/2020 17:05	WG1584466

Volatile Organic Compounds (GC/MS) by Method 8260D

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Acetone	27.4	C5	0.548	1.00	1	12/01/2020 00:33	WG1584116
Acrylonitrile	U		0.0760	0.500	1	12/01/2020 00:33	WG1584116
Benzene	0.0440		0.0160	0.0400	1	12/01/2020 00:33	WG1584116
Bromobenzene	U		0.0420	0.500	1	12/01/2020 00:33	WG1584116
Bromodichloromethane	U		0.0315	0.100	1	12/01/2020 00:33	WG1584116
Bromoform	U		0.239	1.00	1	12/01/2020 00:33	WG1584116
Bromomethane	U		0.148	0.500	1	12/01/2020 00:33	WG1584116
n-Butylbenzene	U		0.153	0.500	1	12/01/2020 00:33	WG1584116
sec-Butylbenzene	U		0.101	0.500	1	12/01/2020 00:33	WG1584116
tert-Butylbenzene	U		0.0620	0.200	1	12/01/2020 00:33	WG1584116
Carbon tetrachloride	U		0.0432	0.200	1	12/01/2020 00:33	WG1584116
Chlorobenzene	U		0.0229	0.100	1	12/01/2020 00:33	WG1584116
Chlorodibromomethane	U		0.0180	0.100	1	12/01/2020 00:33	WG1584116
Chloroethane	U		0.0432	0.200	1	12/01/2020 00:33	WG1584116
Chloroform	U		0.0166	0.100	1	12/01/2020 00:33	WG1584116
Chloromethane	U		0.0556	0.500	1	12/01/2020 00:33	WG1584116
2-Chlorotoluene	U		0.0368	0.100	1	12/01/2020 00:33	WG1584116
4-Chlorotoluene	U		0.0452	0.200	1	12/01/2020 00:33	WG1584116
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	12/01/2020 00:33	WG1584116
1,2-Dibromoethane	U		0.0210	0.100	1	12/01/2020 00:33	WG1584116
Dibromomethane	U		0.0400	0.200	1	12/01/2020 00:33	WG1584116
1,2-Dichlorobenzene	U		0.0580	0.200	1	12/01/2020 00:33	WG1584116
1,3-Dichlorobenzene	U		0.0680	0.200	1	12/01/2020 00:33	WG1584116
1,4-Dichlorobenzene	U		0.0788	0.200	1	12/01/2020 00:33	WG1584116
Dichlorodifluoromethane	U		0.0327	0.100	1	12/01/2020 00:33	WG1584116
1,1-Dichloroethane	U		0.0230	0.100	1	12/01/2020 00:33	WG1584116
1,2-Dichloroethane	U		0.0190	0.100	1	12/01/2020 00:33	WG1584116
1,1-Dichloroethene	U		0.0200	0.100	1	12/01/2020 00:33	WG1584116
cis-1,2-Dichloroethene	0.500		0.0276	0.100	1	12/01/2020 00:33	WG1584116
trans-1,2-Dichloroethene	U		0.0572	0.200	1	12/01/2020 00:33	WG1584116
1,2-Dichloropropane	U		0.0508	0.200	1	12/01/2020 00:33	WG1584116

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Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,1-Dichloropropene	U		0.0280	0.100	1	12/01/2020 00:33	WG1584116
1,3-Dichloropropane	U		0.0700	0.200	1	12/01/2020 00:33	WG1584116
cis-1,3-Dichloropropene	U		0.0271	0.100	1	12/01/2020 00:33	WG1584116
trans-1,3-Dichloropropene	U		0.0612	0.200	1	12/01/2020 00:33	WG1584116
2,2-Dichloropropane	U		0.0317	0.100	1	12/01/2020 00:33	WG1584116
Di-isopropyl ether	U		0.0140	0.0400	1	12/01/2020 00:33	WG1584116
Ethylbenzene	U		0.0212	0.100	1	12/01/2020 00:33	WG1584116
Hexachloro-1,3-butadiene	U		0.508	1.00	1	12/01/2020 00:33	WG1584116
Isopropylbenzene	U		0.0345	0.100	1	12/01/2020 00:33	WG1584116
p-Isopropyltoluene	U		0.0932	0.200	1	12/01/2020 00:33	WG1584116
2-Butanone (MEK)	U		0.500	1.00	1	12/01/2020 00:33	WG1584116
Methylene Chloride	U		0.265	1.00	1	12/01/2020 00:33	WG1584116
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	12/01/2020 00:33	WG1584116
Methyl tert-butyl ether	U		0.0118	0.0400	1	12/01/2020 00:33	WG1584116
Naphthalene	U	C3	0.124	0.500	1	12/01/2020 00:33	WG1584116
n-Propylbenzene	U		0.0472	0.200	1	12/01/2020 00:33	WG1584116
Styrene	U		0.109	0.500	1	12/01/2020 00:33	WG1584116
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	12/01/2020 00:33	WG1584116
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	12/01/2020 00:33	WG1584116
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	12/01/2020 00:33	WG1584116
Tetrachloroethene	0.0420	J	0.0280	0.100	1	12/01/2020 00:33	WG1584116
Toluene	0.101	J	0.0500	0.200	1	12/01/2020 00:33	WG1584116
1,2,3-Trichlorobenzene	U	C4	0.0250	0.500	1	12/01/2020 00:33	WG1584116
1,2,4-Trichlorobenzene	U		0.193	0.500	1	12/01/2020 00:33	WG1584116
1,1,1-Trichloroethane	U		0.0110	0.100	1	12/01/2020 00:33	WG1584116
1,1,2-Trichloroethane	U		0.0353	0.100	1	12/01/2020 00:33	WG1584116
Trichloroethene	0.0840		0.0160	0.0400	1	12/01/2020 00:33	WG1584116
Trichlorofluoromethane	U		0.0200	0.100	1	12/01/2020 00:33	WG1584116
1,2,3-Trichloropropane	U		0.204	0.500	1	12/01/2020 00:33	WG1584116
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	12/01/2020 00:33	WG1584116
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	12/01/2020 00:33	WG1584116
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	12/01/2020 00:33	WG1584116
Vinyl chloride	0.411		0.0273	0.100	1	12/01/2020 00:33	WG1584116
Xylenes, Total	U		0.191	0.260	1	12/01/2020 00:33	WG1584116
Ethyl Ether	0.0360	J	0.0170	0.100	1	12/01/2020 00:33	WG1584116
Tetrahydrofuran	U		0.0900	0.500	1	12/01/2020 00:33	WG1584116
Iodomethane	U		0.242	0.500	1	12/01/2020 00:33	WG1584116
Allyl chloride	U		0.580	1.00	1	12/01/2020 00:33	WG1584116
Trans-1,4-Dichloro-2-butene	U		0.0560	0.200	1	12/01/2020 00:33	WG1584116
(S) Toluene-d8	*105*			*75.0-131*		*12/01/2020 00:33*	WG1584116
(S) 4-Bromofluorobenzene	*90.4*			*67.0-138*		*12/01/2020 00:33*	WG1584116
(S) 1,2-Dichloroethane-d4	*113*			*70.0-130*		*12/01/2020 00:33*	WG1584116

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1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U		0.548	1.00	1	12/01/2020 00:52	WG1584116
Acrylonitrile	U		0.0760	0.500	1	12/01/2020 00:52	WG1584116
Benzene	U		0.0160	0.0400	1	12/01/2020 00:52	WG1584116
Bromobenzene	U		0.0420	0.500	1	12/01/2020 00:52	WG1584116
Bromodichloromethane	U		0.0315	0.100	1	12/01/2020 00:52	WG1584116
Bromoform	U		0.239	1.00	1	12/01/2020 00:52	WG1584116
Bromomethane	U		0.148	0.500	1	12/01/2020 00:52	WG1584116
n-Butylbenzene	U		0.153	0.500	1	12/01/2020 00:52	WG1584116
sec-Butylbenzene	U		0.101	0.500	1	12/01/2020 00:52	WG1584116
tert-Butylbenzene	U		0.0620	0.200	1	12/01/2020 00:52	WG1584116
Carbon tetrachloride	U		0.0432	0.200	1	12/01/2020 00:52	WG1584116
Chlorobenzene	U		0.0229	0.100	1	12/01/2020 00:52	WG1584116
Chlorodibromomethane	U		0.0180	0.100	1	12/01/2020 00:52	WG1584116
Chloroethane	U		0.0432	0.200	1	12/01/2020 00:52	WG1584116
Chloroform	U		0.0166	0.100	1	12/01/2020 00:52	WG1584116
Chloromethane	U		0.0556	0.500	1	12/01/2020 00:52	WG1584116
2-Chlorotoluene	U		0.0368	0.100	1	12/01/2020 00:52	WG1584116
4-Chlorotoluene	U		0.0452	0.200	1	12/01/2020 00:52	WG1584116
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	12/01/2020 00:52	WG1584116
1,2-Dibromoethane	U		0.0210	0.100	1	12/01/2020 00:52	WG1584116
Dibromomethane	U		0.0400	0.200	1	12/01/2020 00:52	WG1584116
1,2-Dichlorobenzene	U		0.0580	0.200	1	12/01/2020 00:52	WG1584116
1,3-Dichlorobenzene	U		0.0680	0.200	1	12/01/2020 00:52	WG1584116
1,4-Dichlorobenzene	U		0.0788	0.200	1	12/01/2020 00:52	WG1584116
Dichlorodifluoromethane	U		0.0327	0.100	1	12/01/2020 00:52	WG1584116
1,1-Dichloroethane	U		0.0230	0.100	1	12/01/2020 00:52	WG1584116
1,2-Dichloroethane	U		0.0190	0.100	1	12/01/2020 00:52	WG1584116
1,1-Dichloroethene	U		0.0200	0.100	1	12/01/2020 00:52	WG1584116
cis-1,2-Dichloroethene	U		0.0276	0.100	1	12/01/2020 00:52	WG1584116
trans-1,2-Dichloroethene	U		0.0572	0.200	1	12/01/2020 00:52	WG1584116
1,2-Dichloropropane	U		0.0508	0.200	1	12/01/2020 00:52	WG1584116
1,1-Dichloropropene	U		0.0280	0.100	1	12/01/2020 00:52	WG1584116
1,3-Dichloropropane	U		0.0700	0.200	1	12/01/2020 00:52	WG1584116
cis-1,3-Dichloropropene	U		0.0271	0.100	1	12/01/2020 00:52	WG1584116
trans-1,3-Dichloropropene	U		0.0612	0.200	1	12/01/2020 00:52	WG1584116
2,2-Dichloropropane	U		0.0317	0.100	1	12/01/2020 00:52	WG1584116
Di-isopropyl ether	U		0.0140	0.0400	1	12/01/2020 00:52	WG1584116
Ethylbenzene	U		0.0212	0.100	1	12/01/2020 00:52	WG1584116
Hexachloro-1,3-butadiene	U		0.508	1.00	1	12/01/2020 00:52	WG1584116
Isopropylbenzene	U		0.0345	0.100	1	12/01/2020 00:52	WG1584116
p-Isopropyltoluene	U		0.0932	0.200	1	12/01/2020 00:52	WG1584116
2-Butanone (MEK)	U		0.500	1.00	1	12/01/2020 00:52	WG1584116
Methylene Chloride	U		0.265	1.00	1	12/01/2020 00:52	WG1584116
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	12/01/2020 00:52	WG1584116
Methyl tert-butyl ether	U		0.0118	0.0400	1	12/01/2020 00:52	WG1584116
Naphthalene	U	C3	0.124	0.500	1	12/01/2020 00:52	WG1584116
n-Propylbenzene	U		0.0472	0.200	1	12/01/2020 00:52	WG1584116
Styrene	U		0.109	0.500	1	12/01/2020 00:52	WG1584116
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	12/01/2020 00:52	WG1584116
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	12/01/2020 00:52	WG1584116
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	12/01/2020 00:52	WG1584116
Tetrachloroethene	U		0.0280	0.100	1	12/01/2020 00:52	WG1584116
Toluene	U		0.0500	0.200	1	12/01/2020 00:52	WG1584116
1,2,3-Trichlorobenzene	U	C4	0.0250	0.500	1	12/01/2020 00:52	WG1584116
1,2,4-Trichlorobenzene	U		0.193	0.500	1	12/01/2020 00:52	WG1584116
1,1,1-Trichloroethane	U		0.0110	0.100	1	12/01/2020 00:52	WG1584116

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Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,1,2-Trichloroethane	U		0.0353	0.100	1	12/01/2020 00:52	WG1584116
Trichloroethene	U		0.0160	0.0400	1	12/01/2020 00:52	WG1584116
Trichlorofluoromethane	U		0.0200	0.100	1	12/01/2020 00:52	WG1584116
1,2,3-Trichloropropane	U		0.204	0.500	1	12/01/2020 00:52	WG1584116
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	12/01/2020 00:52	WG1584116
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	12/01/2020 00:52	WG1584116
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	12/01/2020 00:52	WG1584116
Vinyl chloride	U		0.0273	0.100	1	12/01/2020 00:52	WG1584116
Xylenes, Total	U		0.191	0.260	1	12/01/2020 00:52	WG1584116
Ethyl Ether	U		0.0170	0.100	1	12/01/2020 00:52	WG1584116
Tetrahydrofuran	U		0.0900	0.500	1	12/01/2020 00:52	WG1584116
Iodomethane	U		0.242	0.500	1	12/01/2020 00:52	WG1584116
Allyl chloride	U		0.580	1.00	1	12/01/2020 00:52	WG1584116
Trans-1,4-Dichloro-2-butene	U		0.0560	0.200	1	12/01/2020 00:52	WG1584116
(S) Toluene-d8	*102*			*75.0-131*		*12/01/2020 00:52*	WG1584116
(S) 4-Bromofluorobenzene	*95.3*			*67.0-138*		*12/01/2020 00:52*	WG1584116
(S) 1,2-Dichloroethane-d4	*116*			*70.0-130*		*12/01/2020 00:52*	WG1584116

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Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U		0.548	1.00	1	12/01/2020 01:11	WG1584116
Acrylonitrile	U		0.0760	0.500	1	12/01/2020 01:11	WG1584116
Benzene	14.6		0.0160	0.0400	1	12/01/2020 01:11	WG1584116
Bromobenzene	U		0.0420	0.500	1	12/01/2020 01:11	WG1584116
Bromodichloromethane	U		0.0315	0.100	1	12/01/2020 01:11	WG1584116
Bromoform	U		0.239	1.00	1	12/01/2020 01:11	WG1584116
Bromomethane	U		0.148	0.500	1	12/01/2020 01:11	WG1584116
n-Butylbenzene	10.1		0.153	0.500	1	12/01/2020 01:11	WG1584116
sec-Butylbenzene	13.6		0.101	0.500	1	12/01/2020 01:11	WG1584116
tert-Butylbenzene	0.290		0.0620	0.200	1	12/01/2020 01:11	WG1584116
Carbon tetrachloride	U		0.0432	0.200	1	12/01/2020 01:11	WG1584116
Chlorobenzene	U		0.0229	0.100	1	12/01/2020 01:11	WG1584116
Chlorodibromomethane	U		0.0180	0.100	1	12/01/2020 01:11	WG1584116
Chloroethane	U		0.0432	0.200	1	12/01/2020 01:11	WG1584116
Chloroform	U		0.0166	0.100	1	12/01/2020 01:11	WG1584116
Chloromethane	U		0.0556	0.500	1	12/01/2020 01:11	WG1584116
2-Chlorotoluene	U		0.0368	0.100	1	12/01/2020 01:11	WG1584116
4-Chlorotoluene	U		0.0452	0.200	1	12/01/2020 01:11	WG1584116
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	12/01/2020 01:11	WG1584116
1,2-Dibromoethane	U		0.0210	0.100	1	12/01/2020 01:11	WG1584116
Dibromomethane	U		0.0400	0.200	1	12/01/2020 01:11	WG1584116
1,2-Dichlorobenzene	U		0.0580	0.200	1	12/01/2020 01:11	WG1584116
1,3-Dichlorobenzene	U		0.0680	0.200	1	12/01/2020 01:11	WG1584116
1,4-Dichlorobenzene	U		0.0788	0.200	1	12/01/2020 01:11	WG1584116
Dichlorodifluoromethane	U		0.0327	0.100	1	12/01/2020 01:11	WG1584116
1,1-Dichloroethane	U		0.0230	0.100	1	12/01/2020 01:11	WG1584116
1,2-Dichloroethane	U		0.0190	0.100	1	12/01/2020 01:11	WG1584116
1,1-Dichloroethene	U		0.0200	0.100	1	12/01/2020 01:11	WG1584116
cis-1,2-Dichloroethene	U		0.0276	0.100	1	12/01/2020 01:11	WG1584116
trans-1,2-Dichloroethene	U		0.0572	0.200	1	12/01/2020 01:11	WG1584116
1,2-Dichloropropane	U		0.0508	0.200	1	12/01/2020 01:11	WG1584116
1,1-Dichloropropene	U		0.0280	0.100	1	12/01/2020 01:11	WG1584116
1,3-Dichloropropane	U		0.0700	0.200	1	12/01/2020 01:11	WG1584116
cis-1,3-Dichloropropene	U		0.0271	0.100	1	12/01/2020 01:11	WG1584116
trans-1,3-Dichloropropene	U		0.0612	0.200	1	12/01/2020 01:11	WG1584116
2,2-Dichloropropane	U		0.0317	0.100	1	12/01/2020 01:11	WG1584116
Di-isopropyl ether	0.215	C5	0.0140	0.0400	1	12/01/2020 01:11	WG1584116
Ethylbenzene	3.53		0.0212	0.100	1	12/01/2020 01:11	WG1584116
Hexachloro-1,3-butadiene	U		0.508	1.00	1	12/01/2020 01:11	WG1584116
Isopropylbenzene	32.9		0.0345	0.100	1	12/01/2020 01:11	WG1584116
p-Isopropyltoluene	0.218		0.0932	0.200	1	12/01/2020 01:11	WG1584116
2-Butanone (MEK)	U		0.500	1.00	1	12/01/2020 01:11	WG1584116
Methylene Chloride	U		0.265	1.00	1	12/01/2020 01:11	WG1584116
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	12/01/2020 01:11	WG1584116
Methyl tert-butyl ether	U		0.0118	0.0400	1	12/01/2020 01:11	WG1584116
Naphthalene	14.7	C3	0.124	0.500	1	12/01/2020 01:11	WG1584116
n-Propylbenzene	88.9		0.236	1.00	5	12/02/2020 09:12	WG1584809
Styrene	U		0.109	0.500	1	12/01/2020 01:11	WG1584116
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	12/01/2020 01:11	WG1584116
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	12/01/2020 01:11	WG1584116
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	12/01/2020 01:11	WG1584116
Tetrachloroethene	U		0.0280	0.100	1	12/01/2020 01:11	WG1584116
Toluene	1.24		0.0500	0.200	1	12/01/2020 01:11	WG1584116
1,2,3-Trichlorobenzene	U	C4	0.0250	0.500	1	12/01/2020 01:11	WG1584116
1,2,4-Trichlorobenzene	U		0.193	0.500	1	12/01/2020 01:11	WG1584116
1,1,1-Trichloroethane	U		0.0110	0.100	1	12/01/2020 01:11	WG1584116

JC 1/7/2021

Volatile Organic Compounds (GC/MS) by Method 8260D

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
1,1,2-Trichloroethane	U		0.0353	0.100	1	12/01/2020 01:11	WG1584116
Trichloroethene	U		0.0160	0.0400	1	12/01/2020 01:11	WG1584116
Trichlorofluoromethane	U		0.0200	0.100	1	12/01/2020 01:11	WG1584116
1,2,3-Trichloropropane	U		0.204	0.500	1	12/01/2020 01:11	WG1584116
1,2,4-Trimethylbenzene	0.734		0.0464	0.200	1	12/01/2020 01:11	WG1584116
1,2,3-Trimethylbenzene	2.92		0.0460	0.200	1	12/01/2020 01:11	WG1584116
1,3,5-Trimethylbenzene	0.290		0.0432	0.200	1	12/01/2020 01:11	WG1584116
Vinyl chloride	U		0.0273	0.100	1	12/01/2020 01:11	WG1584116
Xylenes, Total	3.95		0.191	0.260	1	12/01/2020 01:11	WG1584116
Ethyl Ether	U		0.0170	0.100	1	12/01/2020 01:11	WG1584116
Tetrahydrofuran	U		0.0900	0.500	1	12/01/2020 01:11	WG1584116
Iodomethane	U		0.242	0.500	1	12/01/2020 01:11	WG1584116
Allyl chloride	U		0.580	1.00	1	12/01/2020 01:11	WG1584116
Trans-1,4-Dichloro-2-butene	U		0.0560	0.200	1	12/01/2020 01:11	WG1584116
(S) Toluene-d8	*101*			*75.0-131*		*12/01/2020 01:11*	WG1584116
(S) Toluene-d8	*107*			*75.0-131*		*12/02/2020 09:12*	WG1584809
(S) 4-Bromofluorobenzene	*95.3*			*67.0-138*		*12/01/2020 01:11*	WG1584116
(S) 4-Bromofluorobenzene	*110*			*67.0-138*		*12/02/2020 09:12*	WG1584809
(S) 1,2-Dichloroethane-d4	*118*			*70.0-130*		*12/01/2020 01:11*	WG1584116
(S) 1,2-Dichloroethane-d4	*88.9*			*70.0-130*		*12/02/2020 09:12*	WG1584809

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

JC 1/7/2021

FMW-137-112420
Collected date/time: 11/24/20 06:10

SAMPLE RESULTS - 07

L1290496

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U		0.548	1.00	1	12/01/2020 01:30	WG1584116
Acrylonitrile	U		0.0760	0.500	1	12/01/2020 01:30	WG1584116
Benzene	U		0.0160	0.0400	1	12/01/2020 01:30	WG1584116
Bromobenzene	U		0.0420	0.500	1	12/01/2020 01:30	WG1584116
Bromodichloromethane	U		0.0315	0.100	1	12/01/2020 01:30	WG1584116
Bromoform	U		0.239	1.00	1	12/01/2020 01:30	WG1584116
Bromomethane	U		0.148	0.500	1	12/01/2020 01:30	WG1584116
n-Butylbenzene	0.315	J	0.153	0.500	1	12/01/2020 01:30	WG1584116
sec-Butylbenzene	0.277	J	0.101	0.500	1	12/01/2020 01:30	WG1584116
tert-Butylbenzene	U		0.0620	0.200	1	12/01/2020 01:30	WG1584116
Carbon tetrachloride	U		0.0432	0.200	1	12/01/2020 01:30	WG1584116
Chlorobenzene	U		0.0229	0.100	1	12/01/2020 01:30	WG1584116
Chlorodibromomethane	U		0.0180	0.100	1	12/01/2020 01:30	WG1584116
Chloroethane	U		0.0432	0.200	1	12/01/2020 01:30	WG1584116
Chloroform	U		0.0166	0.100	1	12/01/2020 01:30	WG1584116
Chloromethane	U		0.0556	0.500	1	12/01/2020 01:30	WG1584116
2-Chlorotoluene	U		0.0368	0.100	1	12/01/2020 01:30	WG1584116
4-Chlorotoluene	U		0.0452	0.200	1	12/01/2020 01:30	WG1584116
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	12/01/2020 01:30	WG1584116
1,2-Dibromoethane	U		0.0210	0.100	1	12/01/2020 01:30	WG1584116
Dibromomethane	U		0.0400	0.200	1	12/01/2020 01:30	WG1584116
1,2-Dichlorobenzene	U		0.0580	0.200	1	12/01/2020 01:30	WG1584116
1,3-Dichlorobenzene	U		0.0680	0.200	1	12/01/2020 01:30	WG1584116
1,4-Dichlorobenzene	U		0.0788	0.200	1	12/01/2020 01:30	WG1584116
Dichlorodifluoromethane	U		0.0327	0.100	1	12/01/2020 01:30	WG1584116
1,1-Dichloroethane	U		0.0230	0.100	1	12/01/2020 01:30	WG1584116
1,2-Dichloroethane	U		0.0190	0.100	1	12/01/2020 01:30	WG1584116
1,1-Dichloroethene	U		0.0200	0.100	1	12/01/2020 01:30	WG1584116
cis-1,2-Dichloroethene	0.0540	J	0.0276	0.100	1	12/01/2020 01:30	WG1584116
trans-1,2-Dichloroethene	U		0.0572	0.200	1	12/01/2020 01:30	WG1584116
1,2-Dichloropropane	U		0.0508	0.200	1	12/01/2020 01:30	WG1584116
1,1-Dichloropropene	U		0.0280	0.100	1	12/01/2020 01:30	WG1584116
1,3-Dichloropropane	U		0.0700	0.200	1	12/01/2020 01:30	WG1584116
cis-1,3-Dichloropropene	U		0.0271	0.100	1	12/01/2020 01:30	WG1584116
trans-1,3-Dichloropropene	U		0.0612	0.200	1	12/01/2020 01:30	WG1584116
2,2-Dichloropropane	U		0.0317	0.100	1	12/01/2020 01:30	WG1584116
Di-isopropyl ether	U		0.0140	0.0400	1	12/01/2020 01:30	WG1584116
Ethylbenzene	0.0480	J	0.0212	0.100	1	12/01/2020 01:30	WG1584116
Hexachloro-1,3-butadiene	U		0.508	1.00	1	12/01/2020 01:30	WG1584116
Isopropylbenzene	0.119		0.0345	0.100	1	12/01/2020 01:30	WG1584116
p-Isopropyltoluene	U		0.0932	0.200	1	12/01/2020 01:30	WG1584116
2-Butanone (MEK)	U		0.500	1.00	1	12/01/2020 01:30	WG1584116
Methylene Chloride	U		0.265	1.00	1	12/01/2020 01:30	WG1584116
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	12/01/2020 01:30	WG1584116
Methyl tert-butyl ether	U		0.0118	0.0400	1	12/01/2020 01:30	WG1584116
Naphthalene	0.658	C3	0.124	0.500	1	12/01/2020 01:30	WG1584116
n-Propylbenzene	U		0.0472	0.200	1	12/02/2020 07:36	WG1584809
Styrene	U		0.109	0.500	1	12/01/2020 01:30	WG1584116
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	12/01/2020 01:30	WG1584116
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	12/01/2020 01:30	WG1584116
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	12/01/2020 01:30	WG1584116
Tetrachloroethene	U		0.0280	0.100	1	12/01/2020 01:30	WG1584116
Toluene	0.0900	J	0.0500	0.200	1	12/01/2020 01:30	WG1584116
1,2,3-Trichlorobenzene	U	C4	0.0250	0.500	1	12/01/2020 01:30	WG1584116
1,2,4-Trichlorobenzene	U		0.193	0.500	1	12/01/2020 01:30	WG1584116
1,1,1-Trichloroethane	U		0.0110	0.100	1	12/01/2020 01:30	WG1584116

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2 0 2 / 7 / 1 C J

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,1,2-Trichloroethane	U		0.0353	0.100	1	12/01/2020 01:30	WG1584116
Trichloroethene	U		0.0160	0.0400	1	12/01/2020 01:30	WG1584116
Trichlorofluoromethane	U		0.0200	0.100	1	12/01/2020 01:30	WG1584116
1,2,3-Trichloropropane	U		0.204	0.500	1	12/01/2020 01:30	WG1584116
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	12/01/2020 01:30	WG1584116
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	12/01/2020 01:30	WG1584116
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	12/01/2020 01:30	WG1584116
Vinyl chloride	U		0.0273	0.100	1	12/01/2020 01:30	WG1584116
Xylenes, Total	0.294		0.191	0.260	1	12/01/2020 01:30	WG1584116
Ethyl Ether	0.0460	J	0.0170	0.100	1	12/01/2020 01:30	WG1584116
Tetrahydrofuran	U		0.0900	0.500	1	12/01/2020 01:30	WG1584116
Iodomethane	U		0.242	0.500	1	12/01/2020 01:30	WG1584116
Allyl chloride	U		0.580	1.00	1	12/01/2020 01:30	WG1584116
Trans-1,4-Dichloro-2-butene	U		0.0560	0.200	1	12/01/2020 01:30	WG1584116
(S) Toluene-d8	*106*			*75.0-131*		*12/01/2020 01:30*	WG1584116
(S) Toluene-d8	*107*			*75.0-131*		*12/02/2020 07:36*	WG1584809
(S) 4-Bromofluorobenzene	*91.6*			*67.0-138*		*12/01/2020 01:30*	WG1584116
(S) 4-Bromofluorobenzene	*110*			*67.0-138*		*12/02/2020 07:36*	WG1584809
(S) 1,2-Dichloroethane-d4	*115*			*70.0-130*		*12/01/2020 01:30*	WG1584116
(S) 1,2-Dichloroethane-d4	*88.6*			*70.0-130*		*12/02/2020 07:36*	WG1584809

JC 1/7/2021

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U		0.548	1.00	1	12/01/2020 01:49	WG1584116
Acrylonitrile	U		0.0760	0.500	1	12/01/2020 01:49	WG1584116
Benzene	U		0.0160	0.0400	1	12/01/2020 01:49	WG1584116
Bromobenzene	U		0.0420	0.500	1	12/01/2020 01:49	WG1584116
Bromodichloromethane	U		0.0315	0.100	1	12/01/2020 01:49	WG1584116
Bromoform	U		0.239	1.00	1	12/01/2020 01:49	WG1584116
Bromomethane	U		0.148	0.500	1	12/01/2020 01:49	WG1584116
n-Butylbenzene	U		0.153	0.500	1	12/01/2020 01:49	WG1584116
sec-Butylbenzene	U		0.101	0.500	1	12/01/2020 01:49	WG1584116
tert-Butylbenzene	U		0.0620	0.200	1	12/01/2020 01:49	WG1584116
Carbon tetrachloride	U		0.0432	0.200	1	12/01/2020 01:49	WG1584116
Chlorobenzene	U		0.0229	0.100	1	12/01/2020 01:49	WG1584116
Chlorodibromomethane	U		0.0180	0.100	1	12/01/2020 01:49	WG1584116
Chloroethane	U		0.0432	0.200	1	12/01/2020 01:49	WG1584116
Chloroform	U		0.0166	0.100	1	12/01/2020 01:49	WG1584116
Chloromethane	U		0.0556	0.500	1	12/01/2020 01:49	WG1584116
2-Chlorotoluene	U		0.0368	0.100	1	12/01/2020 01:49	WG1584116
4-Chlorotoluene	U		0.0452	0.200	1	12/01/2020 01:49	WG1584116
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	12/01/2020 01:49	WG1584116
1,2-Dibromoethane	U		0.0210	0.100	1	12/01/2020 01:49	WG1584116
Dibromomethane	U		0.0400	0.200	1	12/01/2020 01:49	WG1584116
1,2-Dichlorobenzene	U		0.0580	0.200	1	12/01/2020 01:49	WG1584116
1,3-Dichlorobenzene	U		0.0680	0.200	1	12/01/2020 01:49	WG1584116
1,4-Dichlorobenzene	U		0.0788	0.200	1	12/01/2020 01:49	WG1584116
Dichlorodifluoromethane	U		0.0327	0.100	1	12/01/2020 01:49	WG1584116
1,1-Dichloroethane	U		0.0230	0.100	1	12/01/2020 01:49	WG1584116
1,2-Dichloroethane	U		0.0190	0.100	1	12/01/2020 01:49	WG1584116
1,1-Dichloroethene	0.0780	J	0.0200	0.100	1	12/01/2020 01:49	WG1584116
cis-1,2-Dichloroethene	2.68		0.0276	0.100	1	12/01/2020 01:49	WG1584116
trans-1,2-Dichloroethene	U		0.0572	0.200	1	12/01/2020 01:49	WG1584116
1,2-Dichloropropane	U		0.0508	0.200	1	12/01/2020 01:49	WG1584116
1,1-Dichloropropene	U		0.0280	0.100	1	12/01/2020 01:49	WG1584116
1,3-Dichloropropane	U		0.0700	0.200	1	12/01/2020 01:49	WG1584116
cis-1,3-Dichloropropene	U		0.0271	0.100	1	12/01/2020 01:49	WG1584116
trans-1,3-Dichloropropene	U		0.0612	0.200	1	12/01/2020 01:49	WG1584116
2,2-Dichloropropane	U		0.0317	0.100	1	12/01/2020 01:49	WG1584116
Di-isopropyl ether	U		0.0140	0.0400	1	12/01/2020 01:49	WG1584116
Ethylbenzene	U		0.0212	0.100	1	12/01/2020 01:49	WG1584116
Hexachloro-1,3-butadiene	U		0.508	1.00	1	12/01/2020 01:49	WG1584116
Isopropylbenzene	U		0.0345	0.100	1	12/01/2020 01:49	WG1584116
p-Isopropyltoluene	U		0.0932	0.200	1	12/01/2020 01:49	WG1584116
2-Butanone (MEK)	U		0.500	1.00	1	12/01/2020 01:49	WG1584116
Methylene Chloride	U		0.265	1.00	1	12/01/2020 01:49	WG1584116
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	12/01/2020 01:49	WG1584116
Methyl tert-butyl ether	U		0.0118	0.0400	1	12/01/2020 01:49	WG1584116
Naphthalene	U	C3	0.124	0.500	1	12/01/2020 01:49	WG1584116
n-Propylbenzene	U		0.0472	0.200	1	12/02/2020 07:55	WG1584809
Styrene	U		0.109	0.500	1	12/01/2020 01:49	WG1584116
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	12/01/2020 01:49	WG1584116
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	12/01/2020 01:49	WG1584116
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	12/01/2020 01:49	WG1584116
Tetrachloroethene	U		0.0280	0.100	1	12/01/2020 01:49	WG1584116
Toluene	0.0960	J	0.0500	0.200	1	12/01/2020 01:49	WG1584116
1,2,3-Trichlorobenzene	U	C4	0.0250	0.500	1	12/01/2020 01:49	WG1584116
1,2,4-Trichlorobenzene	U		0.193	0.500	1	12/01/2020 01:49	WG1584116
1,1,1-Trichloroethane	U		0.0110	0.100	1	12/01/2020 01:49	WG1584116

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Volatile Organic Compounds (GC/MS) by Method 8260D

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
1,1,2-Trichloroethane	U		0.0353	0.100	1	12/01/2020 01:49	WG1584116
Trichloroethene	0.0260	J	0.0160	0.0400	1	12/01/2020 01:49	WG1584116
Trichlorofluoromethane	U		0.0200	0.100	1	12/01/2020 01:49	WG1584116
1,2,3-Trichloropropane	U		0.204	0.500	1	12/01/2020 01:49	WG1584116
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	12/01/2020 01:49	WG1584116
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	12/01/2020 01:49	WG1584116
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	12/01/2020 01:49	WG1584116
Vinyl chloride	4.89		0.0273	0.100	1	12/01/2020 01:49	WG1584116
Xylenes, Total	U		0.191	0.260	1	12/01/2020 01:49	WG1584116
Ethyl Ether	U		0.0170	0.100	1	12/01/2020 01:49	WG1584116
Tetrahydrofuran	U		0.0900	0.500	1	12/01/2020 01:49	WG1584116
Iodomethane	U		0.242	0.500	1	12/01/2020 01:49	WG1584116
Allyl chloride	U		0.580	1.00	1	12/01/2020 01:49	WG1584116
Trans-1,4-Dichloro-2-butene	U		0.0560	0.200	1	12/01/2020 01:49	WG1584116
(S) Toluene-d8	*101*			*75.0-131*		*12/01/2020 01:49*	WG1584116
(S) Toluene-d8	*108*			*75.0-131*		*12/02/2020 07:55*	WG1584809
(S) 4-Bromofluorobenzene	*94.5*			*67.0-138*		*12/01/2020 01:49*	WG1584116
(S) 4-Bromofluorobenzene	*106*			*67.0-138*		*12/02/2020 07:55*	WG1584809
(S) 1,2-Dichloroethane-d4	*115*			*70.0-130*		*12/01/2020 01:49*	WG1584116
(S) 1,2-Dichloroethane-d4	*90.8*			*70.0-130*		*12/02/2020 07:55*	WG1584809

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1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Wet Chemistry by Method 9056A

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Sulfate	45900		594	5000	1	12/08/2020 07:45	WG1587717

Wet Chemistry by Method 9060A

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
TOC (Total Organic Carbon)	18500		102	1000	1	12/04/2020 00:38	WG1585506

Metals (ICPMS) by Method 6020B

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Iron	6620		28.1	100	1	12/03/2020 18:13	WG1585686
Manganese	3460		0.704	5.00	1	12/03/2020 18:13	WG1585686

Volatile Organic Compounds (GC) by Method RSK175

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Methane	1000		0.287	0.678	1	12/01/2020 17:11	WG1584466
Ethane	40.3		0.296	1.29	1	12/01/2020 17:11	WG1584466
Ethene	5.13		0.422	1.27	1	12/01/2020 17:11	WG1584466

Volatile Organic Compounds (GC/MS) by Method 8260D

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Acetone	U		0.548	1.00	1	12/01/2020 02:08	WG1584116
Acrylonitrile	U		0.0760	0.500	1	12/01/2020 02:08	WG1584116
Benzene	0.509		0.0160	0.0400	1	12/01/2020 02:08	WG1584116
Bromobenzene	U		0.0420	0.500	1	12/01/2020 02:08	WG1584116
Bromodichloromethane	U		0.0315	0.100	1	12/01/2020 02:08	WG1584116
Bromoform	U		0.239	1.00	1	12/01/2020 02:08	WG1584116
Bromomethane	U		0.148	0.500	1	12/01/2020 02:08	WG1584116
n-Butylbenzene	U		0.153	0.500	1	12/01/2020 02:08	WG1584116
sec-Butylbenzene	U		0.101	0.500	1	12/01/2020 02:08	WG1584116
tert-Butylbenzene	U		0.0620	0.200	1	12/01/2020 02:08	WG1584116
Carbon tetrachloride	U		0.0432	0.200	1	12/01/2020 02:08	WG1584116
Chlorobenzene	U		0.0229	0.100	1	12/01/2020 02:08	WG1584116
Chlorodibromomethane	U		0.0180	0.100	1	12/01/2020 02:08	WG1584116
Chloroethane	U		0.0432	0.200	1	12/01/2020 02:08	WG1584116
Chloroform	U		0.0166	0.100	1	12/01/2020 02:08	WG1584116
Chloromethane	U		0.0556	0.500	1	12/01/2020 02:08	WG1584116
2-Chlorotoluene	U		0.0368	0.100	1	12/01/2020 02:08	WG1584116
4-Chlorotoluene	U		0.0452	0.200	1	12/01/2020 02:08	WG1584116
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	12/01/2020 02:08	WG1584116
1,2-Dibromoethane	U		0.0210	0.100	1	12/01/2020 02:08	WG1584116
Dibromomethane	U		0.0400	0.200	1	12/01/2020 02:08	WG1584116
1,2-Dichlorobenzene	U		0.0580	0.200	1	12/01/2020 02:08	WG1584116
1,3-Dichlorobenzene	U		0.0680	0.200	1	12/01/2020 02:08	WG1584116
1,4-Dichlorobenzene	U		0.0788	0.200	1	12/01/2020 02:08	WG1584116
Dichlorodifluoromethane	U		0.0327	0.100	1	12/01/2020 02:08	WG1584116
1,1-Dichloroethane	0.0310	J	0.0230	0.100	1	12/01/2020 02:08	WG1584116
1,2-Dichloroethane	U		0.0190	0.100	1	12/01/2020 02:08	WG1584116
1,1-Dichloroethene	1.09	C5	0.0200	0.100	1	12/01/2020 02:08	WG1584116
cis-1,2-Dichloroethene	142		0.138	0.500	5	12/02/2020 09:31	WG1584809
trans-1,2-Dichloroethene	0.827		0.0572	0.200	1	12/01/2020 02:08	WG1584116
1,2-Dichloropropane	U		0.0508	0.200	1	12/01/2020 02:08	WG1584116

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Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,1-Dichloropropene	U		0.0280	0.100	1	12/01/2020 02:08	WG1584116
1,3-Dichloropropane	U		0.0700	0.200	1	12/01/2020 02:08	WG1584116
cis-1,3-Dichloropropene	U		0.0271	0.100	1	12/01/2020 02:08	WG1584116
trans-1,3-Dichloropropene	U		0.0612	0.200	1	12/01/2020 02:08	WG1584116
2,2-Dichloropropane	U		0.0317	0.100	1	12/01/2020 02:08	WG1584116
Di-isopropyl ether	0.0350	J	0.0140	0.0400	1	12/01/2020 02:08	WG1584116
Ethylbenzene	0.0340	J	0.0212	0.100	1	12/01/2020 02:08	WG1584116
Hexachloro-1,3-butadiene	U		0.508	1.00	1	12/01/2020 02:08	WG1584116
Isopropylbenzene	U		0.0345	0.100	1	12/01/2020 02:08	WG1584116
p-Isopropyltoluene	U		0.0932	0.200	1	12/01/2020 02:08	WG1584116
2-Butanone (MEK)	U		0.500	1.00	1	12/01/2020 02:08	WG1584116
Methylene Chloride	U		0.265	1.00	1	12/01/2020 02:08	WG1584116
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	12/01/2020 02:08	WG1584116
Methyl tert-butyl ether	U		0.0118	0.0400	1	12/01/2020 02:08	WG1584116
Naphthalene	U	C3	0.124	0.500	1	12/01/2020 02:08	WG1584116
n-Propylbenzene	0.0480	J	0.0472	0.200	1	12/01/2020 02:08	WG1584116
Styrene	U		0.109	0.500	1	12/01/2020 02:08	WG1584116
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	12/01/2020 02:08	WG1584116
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	12/01/2020 02:08	WG1584116
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	12/01/2020 02:08	WG1584116
Tetrachloroethene	0.163		0.0280	0.100	1	12/01/2020 02:08	WG1584116
Toluene	0.0930	J	0.0500	0.200	1	12/01/2020 02:08	WG1584116
1,2,3-Trichlorobenzene	U	C4	0.0250	0.500	1	12/01/2020 02:08	WG1584116
1,2,4-Trichlorobenzene	U		0.193	0.500	1	12/01/2020 02:08	WG1584116
1,1,1-Trichloroethane	U		0.0110	0.100	1	12/01/2020 02:08	WG1584116
1,1,2-Trichloroethane	U		0.0353	0.100	1	12/01/2020 02:08	WG1584116
Trichloroethene	22.2		0.0160	0.0400	1	12/01/2020 02:08	WG1584116
Trichlorofluoromethane	U		0.0200	0.100	1	12/01/2020 02:08	WG1584116
1,2,3-Trichloropropane	U		0.204	0.500	1	12/01/2020 02:08	WG1584116
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	12/01/2020 02:08	WG1584116
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	12/01/2020 02:08	WG1584116
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	12/01/2020 02:08	WG1584116
Vinyl chloride	46.1		0.0273	0.100	1	12/01/2020 02:08	WG1584116
Xylenes, Total	0.265		0.191	0.260	1	12/01/2020 02:08	WG1584116
Ethyl Ether	0.293		0.0170	0.100	1	12/01/2020 02:08	WG1584116
Tetrahydrofuran	2.81	C5	0.0900	0.500	1	12/01/2020 02:08	WG1584116
Iodomethane	U		0.242	0.500	1	12/01/2020 02:08	WG1584116
Allyl chloride	U		0.580	1.00	1	12/01/2020 02:08	WG1584116
Trans-1,4-Dichloro-2-butene	U		0.0560	0.200	1	12/01/2020 02:08	WG1584116
(S) Toluene-d8	*99.9*			*75.0-131*		*12/01/2020 02:08*	WG1584116
(S) Toluene-d8	*108*			*75.0-131*		*12/02/2020 09:31*	WG1584809
(S) 4-Bromofluorobenzene	*94.9*			*67.0-138*		*12/01/2020 02:08*	WG1584116
(S) 4-Bromofluorobenzene	*112*			*67.0-138*		*12/02/2020 09:31*	WG1584809
(S) 1,2-Dichloroethane-d4	*113*			*70.0-130*		*12/01/2020 02:08*	WG1584116
(S) 1,2-Dichloroethane-d4	*91.7*			*70.0-130*		*12/02/2020 09:31*	WG1584809

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

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Wet Chemistry by Method 9056A

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Sulfate	33300		594	5000	1	12/08/2020 08:01	WG1587717

Wet Chemistry by Method 9060A

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
TOC (Total Organic Carbon)	19900		102	1000	1	12/04/2020 01:05	WG1585506

Metals (ICPMS) by Method 6020B

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Iron	3680		28.1	100	1	12/03/2020 18:17	WG1585686
Manganese	501		0.704	5.00	1	12/03/2020 18:17	WG1585686

Volatile Organic Compounds (GC) by Method RSK175

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Methane	1120		0.287	0.678	1	12/01/2020 17:15	WG1584466
Ethane	U		0.296	1.29	1	12/01/2020 17:15	WG1584466
Ethene	U		0.422	1.27	1	12/01/2020 17:15	WG1584466

Volatile Organic Compounds (GC/MS) by Method 8260D

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Acetone	2.84	C5	0.548	1.00	1	12/01/2020 02:28	WG1584116
Acrylonitrile	U		0.0760	0.500	1	12/01/2020 02:28	WG1584116
Benzene	U		0.0160	0.0400	1	12/01/2020 02:28	WG1584116
Bromobenzene	U		0.0420	0.500	1	12/01/2020 02:28	WG1584116
Bromodichloromethane	U		0.0315	0.100	1	12/01/2020 02:28	WG1584116
Bromoform	U		0.239	1.00	1	12/01/2020 02:28	WG1584116
Bromomethane	U		0.148	0.500	1	12/01/2020 02:28	WG1584116
n-Butylbenzene	U		0.153	0.500	1	12/01/2020 02:28	WG1584116
sec-Butylbenzene	U		0.101	0.500	1	12/01/2020 02:28	WG1584116
tert-Butylbenzene	U		0.0620	0.200	1	12/01/2020 02:28	WG1584116
Carbon tetrachloride	U		0.0432	0.200	1	12/01/2020 02:28	WG1584116
Chlorobenzene	U		0.0229	0.100	1	12/01/2020 02:28	WG1584116
Chlorodibromomethane	U		0.0180	0.100	1	12/01/2020 02:28	WG1584116
Chloroethane	U		0.0432	0.200	1	12/01/2020 02:28	WG1584116
Chloroform	U		0.0166	0.100	1	12/01/2020 02:28	WG1584116
Chloromethane	U		0.0556	0.500	1	12/01/2020 02:28	WG1584116
2-Chlorotoluene	U		0.0368	0.100	1	12/01/2020 02:28	WG1584116
4-Chlorotoluene	U		0.0452	0.200	1	12/01/2020 02:28	WG1584116
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	12/01/2020 02:28	WG1584116
1,2-Dibromoethane	U		0.0210	0.100	1	12/01/2020 02:28	WG1584116
Dibromomethane	U		0.0400	0.200	1	12/01/2020 02:28	WG1584116
1,2-Dichlorobenzene	U		0.0580	0.200	1	12/01/2020 02:28	WG1584116
1,3-Dichlorobenzene	U		0.0680	0.200	1	12/01/2020 02:28	WG1584116
1,4-Dichlorobenzene	U		0.0788	0.200	1	12/01/2020 02:28	WG1584116
Dichlorodifluoromethane	U		0.0327	0.100	1	12/01/2020 02:28	WG1584116
1,1-Dichloroethane	U		0.0230	0.100	1	12/01/2020 02:28	WG1584116
1,2-Dichloroethane	U		0.0190	0.100	1	12/01/2020 02:28	WG1584116
1,1-Dichloroethene	0.0630	J	0.0200	0.100	1	12/01/2020 02:28	WG1584116
cis-1,2-Dichloroethene	0.451		0.0276	0.100	1	12/02/2020 08:14	WG1584809
trans-1,2-Dichloroethene	U		0.0572	0.200	1	12/01/2020 02:28	WG1584116
1,2-Dichloropropane	U		0.0508	0.200	1	12/01/2020 02:28	WG1584116

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Volatile Organic Compounds (GC/MS) by Method 8260D

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
1,1-Dichloropropene	U		0.0280	0.100	1	12/01/2020 02:28	WG1584116
1,3-Dichloropropane	U		0.0700	0.200	1	12/01/2020 02:28	WG1584116
cis-1,3-Dichloropropene	U		0.0271	0.100	1	12/01/2020 02:28	WG1584116
trans-1,3-Dichloropropene	U		0.0612	0.200	1	12/01/2020 02:28	WG1584116
2,2-Dichloropropane	U		0.0317	0.100	1	12/01/2020 02:28	WG1584116
Di-isopropyl ether	U		0.0140	0.0400	1	12/01/2020 02:28	WG1584116
Ethylbenzene	U		0.0212	0.100	1	12/01/2020 02:28	WG1584116
Hexachloro-1,3-butadiene	U		0.508	1.00	1	12/01/2020 02:28	WG1584116
Isopropylbenzene	U		0.0345	0.100	1	12/01/2020 02:28	WG1584116
p-Isopropyltoluene	U		0.0932	0.200	1	12/01/2020 02:28	WG1584116
2-Butanone (MEK)	2.98		0.500	1.00	1	12/01/2020 02:28	WG1584116
Methylene Chloride	U		0.265	1.00	1	12/01/2020 02:28	WG1584116
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	12/01/2020 02:28	WG1584116
Methyl tert-butyl ether	U		0.0118	0.0400	1	12/01/2020 02:28	WG1584116
Naphthalene	U	C3	0.124	0.500	1	12/01/2020 02:28	WG1584116
n-Propylbenzene	U		0.0472	0.200	1	12/01/2020 02:28	WG1584116
Styrene	U		0.109	0.500	1	12/01/2020 02:28	WG1584116
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	12/01/2020 02:28	WG1584116
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	12/01/2020 02:28	WG1584116
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	12/01/2020 02:28	WG1584116
Tetrachloroethene	U		0.0280	0.100	1	12/01/2020 02:28	WG1584116
Toluene	U		0.0500	0.200	1	12/01/2020 02:28	WG1584116
1,2,3-Trichlorobenzene	U	C4	0.0250	0.500	1	12/01/2020 02:28	WG1584116
1,2,4-Trichlorobenzene	U		0.193	0.500	1	12/01/2020 02:28	WG1584116
1,1,1-Trichloroethane	U		0.0110	0.100	1	12/01/2020 02:28	WG1584116
1,1,2-Trichloroethane	U		0.0353	0.100	1	12/01/2020 02:28	WG1584116
Trichloroethene	0.214		0.0160	0.0400	1	12/01/2020 02:28	WG1584116
Trichlorofluoromethane	U		0.0200	0.100	1	12/01/2020 02:28	WG1584116
1,2,3-Trichloropropane	U		0.204	0.500	1	12/01/2020 02:28	WG1584116
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	12/01/2020 02:28	WG1584116
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	12/01/2020 02:28	WG1584116
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	12/01/2020 02:28	WG1584116
Vinyl chloride	5.82		0.0273	0.100	1	12/01/2020 02:28	WG1584116
Xylenes, Total	U		0.191	0.260	1	12/01/2020 02:28	WG1584116
Ethyl Ether	U		0.0170	0.100	1	12/01/2020 02:28	WG1584116
Tetrahydrofuran	18.1	C5	0.0900	0.500	1	12/01/2020 02:28	WG1584116
Iodomethane	U		0.242	0.500	1	12/01/2020 02:28	WG1584116
Allyl chloride	U		0.580	1.00	1	12/01/2020 02:28	WG1584116
Trans-1,4-Dichloro-2-butene	U		0.0560	0.200	1	12/01/2020 02:28	WG1584116
(S) Toluene-d8	*106*			*75.0-131*		*12/01/2020 02:28*	WG1584116
(S) Toluene-d8	*107*			*75.0-131*		*12/02/2020 08:14*	WG1584809
(S) 4-Bromofluorobenzene	*93.1*			*67.0-138*		*12/01/2020 02:28*	WG1584116
(S) 4-Bromofluorobenzene	*109*			*67.0-138*		*12/02/2020 08:14*	WG1584809
(S) 1,2-Dichloroethane-d4	*112*			*70.0-130*		*12/01/2020 02:28*	WG1584116
(S) 1,2-Dichloroethane-d4	*90.2*			*70.0-130*		*12/02/2020 08:14*	WG1584809

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Wet Chemistry by Method 9056A

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Sulfate	5060		594	5000	1	12/08/2020 01:22	WG1587718

Wet Chemistry by Method 9060A

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
TOC (Total Organic Carbon)	6450		102	1000	1	12/04/2020 01:31	WG1585506

Metals (ICPMS) by Method 6020B

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Iron	7110		28.1	100	1	12/03/2020 18:20	WG1585686
Manganese	654		0.704	5.00	1	12/03/2020 18:20	WG1585686

Volatile Organic Compounds (GC) by Method RSK175

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Methane	10600		2.87	6.78	10	12/02/2020 15:13	WG1585118
Ethane	190		0.296	1.29	1	12/01/2020 17:19	WG1584466
Ethene	10.9		0.422	1.27	1	12/01/2020 17:19	WG1584466

Volatile Organic Compounds (GC/MS) by Method 8260D

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Acetone	1.24	C5	0.548	1.00	1	12/08/2020 13:14	WG1588230
Acrylonitrile	U		0.0760	0.500	1	12/08/2020 13:14	WG1588230
Benzene	0.584		0.0160	0.0400	1	12/08/2020 13:14	WG1588230
Bromobenzene	U		0.0420	0.500	1	12/08/2020 13:14	WG1588230
Bromodichloromethane	U		0.0315	0.100	1	12/08/2020 13:14	WG1588230
Bromoform	U		0.239	1.00	1	12/08/2020 13:14	WG1588230
Bromomethane	U		0.148	0.500	1	12/08/2020 13:14	WG1588230
n-Butylbenzene	U		0.153	0.500	1	12/08/2020 13:14	WG1588230
sec-Butylbenzene	U		0.101	0.500	1	12/08/2020 13:14	WG1588230
tert-Butylbenzene	U		0.0620	0.200	1	12/08/2020 13:14	WG1588230
Carbon tetrachloride	U		0.0432	0.200	1	12/08/2020 13:14	WG1588230
Chlorobenzene	U		0.0229	0.100	1	12/08/2020 13:14	WG1588230
Chlorodibromomethane	U		0.0180	0.100	1	12/08/2020 13:14	WG1588230
Chloroethane	U		0.0432	0.200	1	12/08/2020 13:14	WG1588230
Chloroform	U		0.0166	0.100	1	12/08/2020 13:14	WG1588230
Chloromethane	U		0.0556	0.500	1	12/08/2020 13:14	WG1588230
2-Chlorotoluene	U		0.0368	0.100	1	12/08/2020 13:14	WG1588230
4-Chlorotoluene	U		0.0452	0.200	1	12/08/2020 13:14	WG1588230
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	12/08/2020 13:14	WG1588230
1,2-Dibromoethane	U		0.0210	0.100	1	12/08/2020 13:14	WG1588230
Dibromomethane	U		0.0400	0.200	1	12/08/2020 13:14	WG1588230
1,2-Dichlorobenzene	U		0.0580	0.200	1	12/08/2020 13:14	WG1588230
1,3-Dichlorobenzene	U		0.0680	0.200	1	12/08/2020 13:14	WG1588230
1,4-Dichlorobenzene	U		0.0788	0.200	1	12/08/2020 13:14	WG1588230
Dichlorodifluoromethane	U		0.0327	0.100	1	12/08/2020 13:14	WG1588230
1,1-Dichloroethane	U		0.0230	0.100	1	12/08/2020 13:14	WG1588230
1,2-Dichloroethane	U		0.0190	0.100	1	12/08/2020 13:14	WG1588230
1,1-Dichloroethene	0.589		0.0200	0.100	1	12/08/2020 13:14	WG1588230
cis-1,2-Dichloroethene	113		0.138	0.500	5	12/08/2020 17:18	WG1588483
trans-1,2-Dichloroethene	0.633		0.0572	0.200	1	12/08/2020 13:14	WG1588230
1,2-Dichloropropane	U		0.0508	0.200	1	12/08/2020 13:14	WG1588230

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MW-143-112420 SAMPLE RESULTS - 11

Collected date/time: 11/24/20 09:50

L1290496

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,1-Dichloropropene	U		0.0280	0.100	1	12/08/2020 13:14	WG1588230
1,3-Dichloropropane	U		0.0700	0.200	1	12/08/2020 13:14	WG1588230
cis-1,3-Dichloropropene	U		0.0271	0.100	1	12/08/2020 13:14	WG1588230
trans-1,3-Dichloropropene	U		0.0612	0.200	1	12/08/2020 13:14	WG1588230
2,2-Dichloropropane	U		0.0317	0.100	1	12/08/2020 13:14	WG1588230
Di-isopropyl ether	U		0.0140	0.0400	1	12/08/2020 13:14	WG1588230
Ethylbenzene	0.0610	J	0.0212	0.100	1	12/08/2020 13:14	WG1588230
Hexachloro-1,3-butadiene	U		0.508	1.00	1	12/08/2020 13:14	WG1588230
Isopropylbenzene	U		0.0345	0.100	1	12/08/2020 13:14	WG1588230
p-Isopropyltoluene	U		0.0932	0.200	1	12/08/2020 13:14	WG1588230
2-Butanone (MEK)	U		0.500	1.00	1	12/08/2020 13:14	WG1588230
Methylene Chloride	U		0.265	1.00	1	12/08/2020 13:14	WG1588230
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	12/08/2020 13:14	WG1588230
Methyl tert-butyl ether	U		0.0118	0.0400	1	12/08/2020 13:14	WG1588230
Naphthalene	U		0.124	0.500	1	12/08/2020 13:14	WG1588230
n-Propylbenzene	U		0.0472	0.200	1	12/08/2020 13:14	WG1588230
Styrene	U		0.109	0.500	1	12/08/2020 13:14	WG1588230
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	12/08/2020 13:14	WG1588230
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	12/08/2020 13:14	WG1588230
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	12/08/2020 13:14	WG1588230
Tetrachloroethene	U		0.0280	0.100	1	12/08/2020 13:14	WG1588230
Toluene	0.203		0.0500	0.200	1	12/08/2020 13:14	WG1588230
1,2,3-Trichlorobenzene	U		0.0250	0.500	1	12/08/2020 13:14	WG1588230
1,2,4-Trichlorobenzene	U		0.193	0.500	1	12/08/2020 13:14	WG1588230
1,1,1-Trichloroethane	U		0.0110	0.100	1	12/08/2020 13:14	WG1588230
1,1,2-Trichloroethane	U		0.0353	0.100	1	12/08/2020 13:14	WG1588230
Trichloroethene	9.64		0.0160	0.0400	1	12/08/2020 13:14	WG1588230
Trichlorofluoromethane	U		0.0200	0.100	1	12/08/2020 13:14	WG1588230
1,2,3-Trichloropropane	U		0.204	0.500	1	12/08/2020 13:14	WG1588230
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	12/08/2020 13:14	WG1588230
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	12/08/2020 13:14	WG1588230
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	12/08/2020 13:14	WG1588230
Vinyl chloride	26.0		0.137	0.500	5	12/08/2020 17:18	WG1588483
Xylenes, Total	0.474		0.191	0.260	1	12/08/2020 13:14	WG1588230
Ethyl Ether	U		0.0170	0.100	1	12/08/2020 13:14	WG1588230
Tetrahydrofuran	U		0.0900	0.500	1	12/08/2020 13:14	WG1588230
Iodomethane	U		0.242	0.500	1	12/08/2020 13:14	WG1588230
Allyl chloride	U		0.580	1.00	1	12/08/2020 13:14	WG1588230
Trans-1,4-Dichloro-2-butene	U		0.0560	0.200	1	12/08/2020 13:14	WG1588230
(S) Toluene-d8	*101*			*75.0-131*		*12/08/2020 13:14*	WG1588230
(S) Toluene-d8	*103*			*75.0-131*		*12/08/2020 17:18*	WG1588483
(S) 4-Bromofluorobenzene	*100*			*67.0-138*		*12/08/2020 13:14*	WG1588230
(S) 4-Bromofluorobenzene	*100*			*67.0-138*		*12/08/2020 17:18*	WG1588483
(S) 1,2-Dichloroethane-d4	*108*			*70.0-130*		*12/08/2020 13:14*	WG1588230
(S) 1,2-Dichloroethane-d4	*109*			*70.0-130*		*12/08/2020 17:18*	WG1588483

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

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1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U		5.48	10.0	10	12/08/2020 14:11	WG1588230
Acrylonitrile	U		0.760	5.00	10	12/08/2020 14:11	WG1588230
Benzene	23.9		0.160	0.400	10	12/08/2020 14:11	WG1588230
Bromobenzene	U		0.420	5.00	10	12/08/2020 14:11	WG1588230
Bromodichloromethane	U		0.315	1.00	10	12/08/2020 14:11	WG1588230
Bromoform	U		2.39	10.0	10	12/08/2020 14:11	WG1588230
Bromomethane	U		1.48	5.00	10	12/08/2020 14:11	WG1588230
n-Butylbenzene	U		1.53	5.00	10	12/08/2020 14:11	WG1588230
sec-Butylbenzene	U		1.01	5.00	10	12/08/2020 14:11	WG1588230
tert-Butylbenzene	U		0.620	2.00	10	12/08/2020 14:11	WG1588230
Carbon tetrachloride	U		0.432	2.00	10	12/08/2020 14:11	WG1588230
Chlorobenzene	U		0.229	1.00	10	12/08/2020 14:11	WG1588230
Chlorodibromomethane	U		0.180	1.00	10	12/08/2020 14:11	WG1588230
Chloroethane	U		0.432	2.00	10	12/08/2020 14:11	WG1588230
Chloroform	U		0.166	1.00	10	12/08/2020 14:11	WG1588230
Chloromethane	U		0.556	5.00	10	12/08/2020 14:11	WG1588230
2-Chlorotoluene	U		0.368	1.00	10	12/08/2020 14:11	WG1588230
4-Chlorotoluene	U		0.452	2.00	10	12/08/2020 14:11	WG1588230
1,2-Dibromo-3-Chloropropane	U		2.04	10.0	10	12/08/2020 14:11	WG1588230
1,2-Dibromoethane	U		0.210	1.00	10	12/08/2020 14:11	WG1588230
Dibromomethane	U		0.400	2.00	10	12/08/2020 14:11	WG1588230
1,2-Dichlorobenzene	U		0.580	2.00	10	12/08/2020 14:11	WG1588230
1,3-Dichlorobenzene	U		0.680	2.00	10	12/08/2020 14:11	WG1588230
1,4-Dichlorobenzene	U		0.788	2.00	10	12/08/2020 14:11	WG1588230
Dichlorodifluoromethane	U		0.327	1.00	10	12/08/2020 14:11	WG1588230
1,1-Dichloroethane	0.510	J	0.230	1.00	10	12/08/2020 14:11	WG1588230
1,2-Dichloroethane	2.15		0.190	1.00	10	12/08/2020 14:11	WG1588230
1,1-Dichloroethene	3.17		0.200	1.00	10	12/08/2020 14:11	WG1588230
cis-1,2-Dichloroethene	257		0.276	1.00	10	12/08/2020 14:11	WG1588230
trans-1,2-Dichloroethene	1.35	J	0.572	2.00	10	12/08/2020 14:11	WG1588230
1,2-Dichloropropane	U		0.508	2.00	10	12/08/2020 14:11	WG1588230
1,1-Dichloropropene	U		0.280	1.00	10	12/08/2020 14:11	WG1588230
1,3-Dichloropropane	U		0.700	2.00	10	12/08/2020 14:11	WG1588230
cis-1,3-Dichloropropene	U		0.271	1.00	10	12/08/2020 14:11	WG1588230
trans-1,3-Dichloropropene	U		0.612	2.00	10	12/08/2020 14:11	WG1588230
2,2-Dichloropropane	U		0.317	1.00	10	12/08/2020 14:11	WG1588230
Di-isopropyl ether	U		0.140	0.400	10	12/08/2020 14:11	WG1588230
Ethylbenzene	U		0.212	1.00	10	12/08/2020 14:11	WG1588230
Hexachloro-1,3-butadiene	U		5.08	10.0	10	12/08/2020 14:11	WG1588230
Isopropylbenzene	U		0.345	1.00	10	12/08/2020 14:11	WG1588230
p-Isopropyltoluene	U		0.932	2.00	10	12/08/2020 14:11	WG1588230
2-Butanone (MEK)	U		5.00	10.0	10	12/08/2020 14:11	WG1588230
Methylene Chloride	U		2.65	10.0	10	12/08/2020 14:11	WG1588230
4-Methyl-2-pentanone (MIBK)	U		4.00	10.0	10	12/08/2020 14:11	WG1588230
Methyl tert-butyl ether	U		0.118	0.400	10	12/08/2020 14:11	WG1588230
Naphthalene	U		1.24	5.00	10	12/08/2020 14:11	WG1588230
n-Propylbenzene	U		0.472	2.00	10	12/08/2020 14:11	WG1588230
Styrene	U		1.09	5.00	10	12/08/2020 14:11	WG1588230
1,1,1,2-Tetrachloroethane	U		0.200	1.00	10	12/08/2020 14:11	WG1588230
1,1,2,2-Tetrachloroethane	U		0.156	1.00	10	12/08/2020 14:11	WG1588230
1,1,2-Trichlorotrifluoroethane	U		0.270	1.00	10	12/08/2020 14:11	WG1588230
Tetrachloroethene	3.35		0.280	1.00	10	12/08/2020 14:11	WG1588230
Toluene	0.550	J	0.500	2.00	10	12/08/2020 14:11	WG1588230
1,2,3-Trichlorobenzene	U		0.250	5.00	10	12/08/2020 14:11	WG1588230
1,2,4-Trichlorobenzene	U		1.93	5.00	10	12/08/2020 14:11	WG1588230
1,1,1-Trichloroethane	U		0.110	1.00	10	12/08/2020 14:11	WG1588230

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Volatile Organic Compounds (GC/MS) by Method 8260D

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
1,1,2-Trichloroethane	U		0.353	1.00	10	12/08/2020 14:11	WG1588230
Trichloroethene	70.9		0.160	0.400	10	12/08/2020 14:11	WG1588230
Trichlorofluoromethane	U		0.200	1.00	10	12/08/2020 14:11	WG1588230
1,2,3-Trichloropropane	U		2.04	5.00	10	12/08/2020 14:11	WG1588230
1,2,4-Trimethylbenzene	U		0.464	2.00	10	12/08/2020 14:11	WG1588230
1,2,3-Trimethylbenzene	U		0.460	2.00	10	12/08/2020 14:11	WG1588230
1,3,5-Trimethylbenzene	U		0.432	2.00	10	12/08/2020 14:11	WG1588230
Vinyl chloride	41.2		0.273	1.00	10	12/08/2020 14:11	WG1588230
Xylenes, Total	U		1.91	2.60	10	12/08/2020 14:11	WG1588230
Ethyl Ether	U		0.170	1.00	10	12/08/2020 14:11	WG1588230
Tetrahydrofuran	U		0.900	5.00	10	12/08/2020 14:11	WG1588230
Iodomethane	U		2.42	5.00	10	12/08/2020 14:11	WG1588230
Allyl chloride	U		5.80	10.0	10	12/08/2020 14:11	WG1588230
Trans-1,4-Dichloro-2-butene	U		0.560	2.00	10	12/08/2020 14:11	WG1588230
(S) Toluene-d8	*99.9*			*75.0-131*		*12/08/2020 14:11*	WG1588230
(S) 4-Bromofluorobenzene	*99.9*			*67.0-138*		*12/08/2020 14:11*	WG1588230
(S) 1,2-Dichloroethane-d4	*110*			*70.0-130*		*12/08/2020 14:11*	WG1588230

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

JC 1/7/2021

Wet Chemistry by Method 9056A

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Sulfate	45800		594	5000	1	12/08/2020 01:34	WG1587718

Wet Chemistry by Method 9060A

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
TOC (Total Organic Carbon)	18600		102	1000	1	12/04/2020 01:58	WG1585506

Metals (ICPMS) by Method 6020B

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Iron	7100		28.1	100	1	12/03/2020 18:23	WG1585686
Manganese	3500		0.704	5.00	1	12/03/2020 18:23	WG1585686

Volatile Organic Compounds (GC) by Method RSK175

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Methane	871		0.287	0.678	1	12/01/2020 17:23	WG1584466
Ethane	35.5		0.296	1.29	1	12/01/2020 17:23	WG1584466
Ethene	U		0.422	1.27	1	12/01/2020 17:23	WG1584466

Volatile Organic Compounds (GC/MS) by Method 8260D

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Acetone	1.69	C5	0.548	1.00	1	12/08/2020 13:33	WG1588230
Acrylonitrile	U		0.0760	0.500	1	12/08/2020 13:33	WG1588230
Benzene	0.408		0.0160	0.0400	1	12/08/2020 13:33	WG1588230
Bromobenzene	U		0.0420	0.500	1	12/08/2020 13:33	WG1588230
Bromodichloromethane	U		0.0315	0.100	1	12/08/2020 13:33	WG1588230
Bromoform	U		0.239	1.00	1	12/08/2020 13:33	WG1588230
Bromomethane	U		0.148	0.500	1	12/08/2020 13:33	WG1588230
n-Butylbenzene	U		0.153	0.500	1	12/08/2020 13:33	WG1588230
sec-Butylbenzene	U		0.101	0.500	1	12/08/2020 13:33	WG1588230
tert-Butylbenzene	U		0.0620	0.200	1	12/08/2020 13:33	WG1588230
Carbon tetrachloride	U		0.0432	0.200	1	12/08/2020 13:33	WG1588230
Chlorobenzene	U		0.0229	0.100	1	12/08/2020 13:33	WG1588230
Chlorodibromomethane	U		0.0180	0.100	1	12/08/2020 13:33	WG1588230
Chloroethane	U		0.0432	0.200	1	12/08/2020 13:33	WG1588230
Chloroform	U		0.0166	0.100	1	12/08/2020 13:33	WG1588230
Chloromethane	U		0.0556	0.500	1	12/08/2020 13:33	WG1588230
2-Chlorotoluene	U		0.0368	0.100	1	12/08/2020 13:33	WG1588230
4-Chlorotoluene	U		0.0452	0.200	1	12/08/2020 13:33	WG1588230
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	12/08/2020 13:33	WG1588230
1,2-Dibromoethane	U		0.0210	0.100	1	12/08/2020 13:33	WG1588230
Dibromomethane	U		0.0400	0.200	1	12/08/2020 13:33	WG1588230
1,2-Dichlorobenzene	U		0.0580	0.200	1	12/08/2020 13:33	WG1588230
1,3-Dichlorobenzene	U		0.0680	0.200	1	12/08/2020 13:33	WG1588230
1,4-Dichlorobenzene	U		0.0788	0.200	1	12/08/2020 13:33	WG1588230
Dichlorodifluoromethane	U		0.0327	0.100	1	12/08/2020 13:33	WG1588230
1,1-Dichloroethane	0.0250	J	0.0230	0.100	1	12/08/2020 13:33	WG1588230
1,2-Dichloroethane	U		0.0190	0.100	1	12/08/2020 13:33	WG1588230
1,1-Dichloroethene	0.905		0.0200	0.100	1	12/08/2020 13:33	WG1588230
cis-1,2-Dichloroethene	136		0.138	0.500	5	12/08/2020 17:37	WG1588483
trans-1,2-Dichloroethene	0.734		0.0572	0.200	1	12/08/2020 13:33	WG1588230
1,2-Dichloropropane	U		0.0508	0.200	1	12/08/2020 13:33	WG1588230

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Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,1-Dichloropropene	U		0.0280	0.100	1	12/08/2020 13:33	WG1588230
1,3-Dichloropropane	U		0.0700	0.200	1	12/08/2020 13:33	WG1588230
cis-1,3-Dichloropropene	U		0.0271	0.100	1	12/08/2020 13:33	WG1588230
trans-1,3-Dichloropropene	U		0.0612	0.200	1	12/08/2020 13:33	WG1588230
2,2-Dichloropropane	U		0.0317	0.100	1	12/08/2020 13:33	WG1588230
Di-isopropyl ether	U		0.0140	0.0400	1	12/08/2020 13:33	WG1588230
Ethylbenzene	0.0390	J	0.0212	0.100	1	12/08/2020 13:33	WG1588230
Hexachloro-1,3-butadiene	U		0.508	1.00	1	12/08/2020 13:33	WG1588230
Isopropylbenzene	U		0.0345	0.100	1	12/08/2020 13:33	WG1588230
p-Isopropyltoluene	U		0.0932	0.200	1	12/08/2020 13:33	WG1588230
2-Butanone (MEK)	U		0.500	1.00	1	12/08/2020 13:33	WG1588230
Methylene Chloride	U		0.265	1.00	1	12/08/2020 13:33	WG1588230
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	12/08/2020 13:33	WG1588230
Methyl tert-butyl ether	U		0.0118	0.0400	1	12/08/2020 13:33	WG1588230
Naphthalene	U		0.124	0.500	1	12/08/2020 13:33	WG1588230
n-Propylbenzene	U		0.0472	0.200	1	12/08/2020 13:33	WG1588230
Styrene	U		0.109	0.500	1	12/08/2020 13:33	WG1588230
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	12/08/2020 13:33	WG1588230
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	12/08/2020 13:33	WG1588230
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	12/08/2020 13:33	WG1588230
Tetrachloroethene	0.164		0.0280	0.100	1	12/08/2020 13:33	WG1588230
Toluene	0.0850	J	0.0500	0.200	1	12/08/2020 13:33	WG1588230
1,2,3-Trichlorobenzene	U		0.0250	0.500	1	12/08/2020 13:33	WG1588230
1,2,4-Trichlorobenzene	U		0.193	0.500	1	12/08/2020 13:33	WG1588230
1,1,1-Trichloroethane	U		0.0110	0.100	1	12/08/2020 13:33	WG1588230
1,1,2-Trichloroethane	U		0.0353	0.100	1	12/08/2020 13:33	WG1588230
Trichloroethene	24.5		0.0160	0.0400	1	12/08/2020 13:33	WG1588230
Trichlorofluoromethane	U		0.0200	0.100	1	12/08/2020 13:33	WG1588230
1,2,3-Trichloropropane	U		0.204	0.500	1	12/08/2020 13:33	WG1588230
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	12/08/2020 13:33	WG1588230
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	12/08/2020 13:33	WG1588230
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	12/08/2020 13:33	WG1588230
Vinyl chloride	34.6		0.137	0.500	5	12/08/2020 17:37	WG1588483
Xylenes, Total	0.258	J	0.191	0.260	1	12/08/2020 13:33	WG1588230
Ethyl Ether	U		0.0170	0.100	1	12/08/2020 13:33	WG1588230
Tetrahydrofuran	2.53		0.0900	0.500	1	12/08/2020 13:33	WG1588230
Iodomethane	U		0.242	0.500	1	12/08/2020 13:33	WG1588230
Allyl chloride	U		0.580	1.00	1	12/08/2020 13:33	WG1588230
Trans-1,4-Dichloro-2-butene	U		0.0560	0.200	1	12/08/2020 13:33	WG1588230
(S) Toluene-d8	*101*			*75.0-131*		*12/08/2020 13:33*	WG1588230
(S) Toluene-d8	*101*			*75.0-131*		*12/08/2020 17:37*	WG1588483
(S) 4-Bromofluorobenzene	*99.7*			*67.0-138*		*12/08/2020 13:33*	WG1588230
(S) 4-Bromofluorobenzene	*98.6*			*67.0-138*		*12/08/2020 17:37*	WG1588483
(S) 1,2-Dichloroethane-d4	*110*			*70.0-130*		*12/08/2020 13:33*	WG1588230
(S) 1,2-Dichloroethane-d4	*112*			*70.0-130*		*12/08/2020 17:37*	WG1588483

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

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Wet Chemistry by Method 9056A

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Sulfate	110000		2970	25000	5	12/08/2020 07:32	WG1587718

Wet Chemistry by Method 9060A

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
TOC (Total Organic Carbon)	3020		102	1000	1	12/04/2020 04:43	WG1585506

Metals (ICPMS) by Method 6020B

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Iron	5160		28.1	100	1	12/03/2020 19:32	WG1585686
Manganese	420		0.704	5.00	1	12/03/2020 19:32	WG1585686

Volatile Organic Compounds (GC) by Method RSK175

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Methane	575		0.287	0.678	1	12/01/2020 17:26	WG1584466
Ethane	13.0		0.296	1.29	1	12/01/2020 17:26	WG1584466
Ethene	U		0.422	1.27	1	12/01/2020 17:26	WG1584466

Volatile Organic Compounds (GC/MS) by Method 8260D

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Acetone	U		54.8	100	100	12/08/2020 14:29	WG1588230
Acrylonitrile	U		7.60	50.0	100	12/08/2020 14:29	WG1588230
Benzene	U		1.60	4.00	100	12/08/2020 14:29	WG1588230
Bromobenzene	U		4.20	50.0	100	12/08/2020 14:29	WG1588230
Bromodichloromethane	U		3.15	10.0	100	12/08/2020 14:29	WG1588230
Bromoform	U		23.9	100	100	12/08/2020 14:29	WG1588230
Bromomethane	U		14.8	50.0	100	12/08/2020 14:29	WG1588230
n-Butylbenzene	U		15.3	50.0	100	12/08/2020 14:29	WG1588230
sec-Butylbenzene	U		10.1	50.0	100	12/08/2020 14:29	WG1588230
tert-Butylbenzene	U		6.20	20.0	100	12/08/2020 14:29	WG1588230
Carbon tetrachloride	U		4.32	20.0	100	12/08/2020 14:29	WG1588230
Chlorobenzene	U		2.29	10.0	100	12/08/2020 14:29	WG1588230
Chlorodibromomethane	U		1.80	10.0	100	12/08/2020 14:29	WG1588230
Chloroethane	U		4.32	20.0	100	12/08/2020 14:29	WG1588230
Chloroform	U		1.66	10.0	100	12/08/2020 14:29	WG1588230
Chloromethane	U		5.56	50.0	100	12/08/2020 14:29	WG1588230
2-Chlorotoluene	U		3.68	10.0	100	12/08/2020 14:29	WG1588230
4-Chlorotoluene	U		4.52	20.0	100	12/08/2020 14:29	WG1588230
1,2-Dibromo-3-Chloropropane	U		20.4	100	100	12/08/2020 14:29	WG1588230
1,2-Dibromoethane	U		2.10	10.0	100	12/08/2020 14:29	WG1588230
Dibromomethane	U		4.00	20.0	100	12/08/2020 14:29	WG1588230
1,2-Dichlorobenzene	U		5.80	20.0	100	12/08/2020 14:29	WG1588230
1,3-Dichlorobenzene	U		6.80	20.0	100	12/08/2020 14:29	WG1588230
1,4-Dichlorobenzene	U		7.88	20.0	100	12/08/2020 14:29	WG1588230
Dichlorodifluoromethane	U		3.27	10.0	100	12/08/2020 14:29	WG1588230
1,1-Dichloroethane	U		2.30	10.0	100	12/08/2020 14:29	WG1588230
1,2-Dichloroethane	U		1.90	10.0	100	12/08/2020 14:29	WG1588230
1,1-Dichloroethene	3.00	J	2.00	10.0	100	12/08/2020 14:29	WG1588230
cis-1,2-Dichloroethene	1290		2.76	10.0	100	12/08/2020 14:29	WG1588230
trans-1,2-Dichloroethene	8.30	J	5.72	20.0	100	12/08/2020 14:29	WG1588230
1,2-Dichloropropane	U		5.08	20.0	100	12/08/2020 14:29	WG1588230

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Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,1-Dichloropropene	U		2.80	10.0	100	12/08/2020 14:29	WG1588230
1,3-Dichloropropane	U		7.00	20.0	100	12/08/2020 14:29	WG1588230
cis-1,3-Dichloropropene	U		2.71	10.0	100	12/08/2020 14:29	WG1588230
trans-1,3-Dichloropropene	U		6.12	20.0	100	12/08/2020 14:29	WG1588230
2,2-Dichloropropane	U		3.17	10.0	100	12/08/2020 14:29	WG1588230
Di-isopropyl ether	U		1.40	4.00	100	12/08/2020 14:29	WG1588230
Ethylbenzene	U		2.12	10.0	100	12/08/2020 14:29	WG1588230
Hexachloro-1,3-butadiene	U		50.8	100	100	12/08/2020 14:29	WG1588230
Isopropylbenzene	U		3.45	10.0	100	12/08/2020 14:29	WG1588230
p-Isopropyltoluene	U		9.32	20.0	100	12/08/2020 14:29	WG1588230
2-Butanone (MEK)	U		50.0	100	100	12/08/2020 14:29	WG1588230
Methylene Chloride	U		26.5	100	100	12/08/2020 14:29	WG1588230
4-Methyl-2-pentanone (MIBK)	U		40.0	100	100	12/08/2020 14:29	WG1588230
Methyl tert-butyl ether	U		1.18	4.00	100	12/08/2020 14:29	WG1588230
Naphthalene	U		12.4	50.0	100	12/08/2020 14:29	WG1588230
n-Propylbenzene	U		4.72	20.0	100	12/08/2020 14:29	WG1588230
Styrene	U		10.9	50.0	100	12/08/2020 14:29	WG1588230
1,1,1,2-Tetrachloroethane	U		2.00	10.0	100	12/08/2020 14:29	WG1588230
1,1,2,2-Tetrachloroethane	U		1.56	10.0	100	12/08/2020 14:29	WG1588230
1,1,2-Trichlorotrifluoroethane	U		2.70	10.0	100	12/08/2020 14:29	WG1588230
Tetrachloroethene	706		2.80	10.0	100	12/08/2020 14:29	WG1588230
Toluene	U		5.00	20.0	100	12/08/2020 14:29	WG1588230
1,2,3-Trichlorobenzene	U		2.50	50.0	100	12/08/2020 14:29	WG1588230
1,2,4-Trichlorobenzene	U		19.3	50.0	100	12/08/2020 14:29	WG1588230
1,1,1-Trichloroethane	U		1.10	10.0	100	12/08/2020 14:29	WG1588230
1,1,2-Trichloroethane	U		3.53	10.0	100	12/08/2020 14:29	WG1588230
Trichloroethene	1380		1.60	4.00	100	12/08/2020 14:29	WG1588230
Trichlorofluoromethane	U		2.00	10.0	100	12/08/2020 14:29	WG1588230
1,2,3-Trichloropropane	U		20.4	50.0	100	12/08/2020 14:29	WG1588230
1,2,4-Trimethylbenzene	U		4.64	20.0	100	12/08/2020 14:29	WG1588230
1,2,3-Trimethylbenzene	U		4.60	20.0	100	12/08/2020 14:29	WG1588230
1,3,5-Trimethylbenzene	U		4.32	20.0	100	12/08/2020 14:29	WG1588230
Vinyl chloride	11.9		2.73	10.0	100	12/08/2020 14:29	WG1588230
Xylenes, Total	U		19.1	26.0	100	12/08/2020 14:29	WG1588230
Ethyl Ether	U		1.70	10.0	100	12/08/2020 14:29	WG1588230
Tetrahydrofuran	U		9.00	50.0	100	12/08/2020 14:29	WG1588230
Iodomethane	U		24.2	50.0	100	12/08/2020 14:29	WG1588230
Allyl chloride	U		58.0	100	100	12/08/2020 14:29	WG1588230
Trans-1,4-Dichloro-2-butene	U		5.60	20.0	100	12/08/2020 14:29	WG1588230
(S) Toluene-d8	*100*			*75.0-131*		*12/08/2020 14:29*	WG1588230
(S) 4-Bromofluorobenzene	*99.0*			*67.0-138*		*12/08/2020 14:29*	WG1588230
(S) 1,2-Dichloroethane-d4	*110*			*70.0-130*		*12/08/2020 14:29*	WG1588230

JC 1/7/2021

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Wet Chemistry by Method 9056A

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Sulfate	879	J	594	5000	1	12/08/2020 02:25	WG1587718

Wet Chemistry by Method 9060A

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
TOC (Total Organic Carbon)	4940		102	1000	1	12/04/2020 05:42	WG1585506

Metals (ICPMS) by Method 6020B

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Iron	20800		28.1	100	1	12/03/2020 19:39	WG1585686
Manganese	2350		0.704	5.00	1	12/03/2020 19:39	WG1585686

Volatile Organic Compounds (GC) by Method NWTPHGX

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Gasoline Range Organics-NWTPH	41.0	J	31.6	100	1	12/07/2020 08:07	WG1587412
(S) a,a,a-Trifluorotoluene(FID)	*96.3*			*78.0-120*		*12/07/2020 08:07*	WG1587412

Volatile Organic Compounds (GC) by Method RSK175

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Methane	786		0.287	0.678	1	12/01/2020 17:37	WG1584466
Ethane	3.94		0.296	1.29	1	12/01/2020 17:37	WG1584466
Ethene	U		0.422	1.27	1	12/01/2020 17:37	WG1584466

Volatile Organic Compounds (GC/MS) by Method 8260D

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Acetone	6.84	C5	0.548	1.00	1	12/08/2020 13:52	WG1588230
Acrylonitrile	U		0.0760	0.500	1	12/08/2020 13:52	WG1588230
Benzene	0.0250	J	0.0160	0.0400	1	12/08/2020 13:52	WG1588230
Bromobenzene	U		0.0420	0.500	1	12/08/2020 13:52	WG1588230
Bromodichloromethane	U		0.0315	0.100	1	12/08/2020 13:52	WG1588230
Bromoform	U		0.239	1.00	1	12/08/2020 13:52	WG1588230
Bromomethane	U		0.148	0.500	1	12/08/2020 13:52	WG1588230
n-Butylbenzene	U		0.153	0.500	1	12/08/2020 13:52	WG1588230
sec-Butylbenzene	U		0.101	0.500	1	12/08/2020 13:52	WG1588230
tert-Butylbenzene	U		0.0620	0.200	1	12/08/2020 13:52	WG1588230
Carbon tetrachloride	U		0.0432	0.200	1	12/08/2020 13:52	WG1588230
Chlorobenzene	U		0.0229	0.100	1	12/08/2020 13:52	WG1588230
Chlorodibromomethane	U		0.0180	0.100	1	12/08/2020 13:52	WG1588230
Chloroethane	U		0.0432	0.200	1	12/08/2020 13:52	WG1588230
Chloroform	U		0.0166	0.100	1	12/08/2020 13:52	WG1588230
Chloromethane	U		0.0556	0.500	1	12/08/2020 13:52	WG1588230
2-Chlorotoluene	U		0.0368	0.100	1	12/08/2020 13:52	WG1588230
4-Chlorotoluene	U		0.0452	0.200	1	12/08/2020 13:52	WG1588230
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	12/08/2020 13:52	WG1588230
1,2-Dibromoethane	U		0.0210	0.100	1	12/08/2020 13:52	WG1588230
Dibromomethane	U		0.0400	0.200	1	12/08/2020 13:52	WG1588230
1,2-Dichlorobenzene	U		0.0580	0.200	1	12/08/2020 13:52	WG1588230
1,3-Dichlorobenzene	U		0.0680	0.200	1	12/08/2020 13:52	WG1588230

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MW-9-112420

Collected date/time: 11/24/20 13:45

SAMPLE RESULTS - 16

L1290496

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Volatile Organic Compounds (GC/MS) by Method 8260D

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
1,4-Dichlorobenzene	U		0.0788	0.200	1	12/08/2020 13:52	WG1588230
Dichlorodifluoromethane	U		0.0327	0.100	1	12/08/2020 13:52	WG1588230
1,1-Dichloroethane	U		0.0230	0.100	1	12/08/2020 13:52	WG1588230
1,2-Dichloroethane	U		0.0190	0.100	1	12/08/2020 13:52	WG1588230
1,1-Dichloroethene	U		0.0200	0.100	1	12/08/2020 13:52	WG1588230
cis-1,2-Dichloroethene	0.221		0.0276	0.100	1	12/08/2020 16:59	WG1588483
trans-1,2-Dichloroethene	U		0.0572	0.200	1	12/08/2020 13:52	WG1588230
1,2-Dichloropropane	U		0.0508	0.200	1	12/08/2020 13:52	WG1588230
1,1-Dichloropropene	U		0.0280	0.100	1	12/08/2020 13:52	WG1588230
1,3-Dichloropropane	U		0.0700	0.200	1	12/08/2020 13:52	WG1588230
cis-1,3-Dichloropropene	U		0.0271	0.100	1	12/08/2020 13:52	WG1588230
trans-1,3-Dichloropropene	U		0.0612	0.200	1	12/08/2020 13:52	WG1588230
2,2-Dichloropropane	U		0.0317	0.100	1	12/08/2020 13:52	WG1588230
Di-isopropyl ether	U		0.0140	0.0400	1	12/08/2020 13:52	WG1588230
Ethylbenzene	U		0.0212	0.100	1	12/08/2020 13:52	WG1588230
Hexachloro-1,3-butadiene	U		0.508	1.00	1	12/08/2020 13:52	WG1588230
Isopropylbenzene	U		0.0345	0.100	1	12/08/2020 13:52	WG1588230
p-Isopropyltoluene	U		0.0932	0.200	1	12/08/2020 13:52	WG1588230
2-Butanone (MEK)	U		0.500	1.00	1	12/08/2020 13:52	WG1588230
Methylene Chloride	U		0.265	1.00	1	12/08/2020 13:52	WG1588230
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	12/08/2020 13:52	WG1588230
Methyl tert-butyl ether	U		0.0118	0.0400	1	12/08/2020 13:52	WG1588230
Naphthalene	U		0.124	0.500	1	12/08/2020 13:52	WG1588230
n-Propylbenzene	U		0.0472	0.200	1	12/08/2020 13:52	WG1588230
Styrene	U		0.109	0.500	1	12/08/2020 13:52	WG1588230
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	12/08/2020 13:52	WG1588230
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	12/08/2020 13:52	WG1588230
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	12/08/2020 13:52	WG1588230
Tetrachloroethene	U		0.0280	0.100	1	12/08/2020 13:52	WG1588230
Toluene	0.0800	J	0.0500	0.200	1	12/08/2020 13:52	WG1588230
1,2,3-Trichlorobenzene	U		0.0250	0.500	1	12/08/2020 13:52	WG1588230
1,2,4-Trichlorobenzene	U		0.193	0.500	1	12/08/2020 13:52	WG1588230
1,1,1-Trichloroethane	U		0.0110	0.100	1	12/08/2020 13:52	WG1588230
1,1,2-Trichloroethane	U		0.0353	0.100	1	12/08/2020 13:52	WG1588230
Trichloroethene	U		0.0160	0.0400	1	12/08/2020 13:52	WG1588230
Trichlorofluoromethane	U		0.0200	0.100	1	12/08/2020 13:52	WG1588230
1,2,3-Trichloropropane	U		0.204	0.500	1	12/08/2020 13:52	WG1588230
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	12/08/2020 13:52	WG1588230
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	12/08/2020 13:52	WG1588230
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	12/08/2020 13:52	WG1588230
Vinyl chloride	0.288		0.0273	0.100	1	12/08/2020 16:59	WG1588483
Xylenes, Total	U		0.191	0.260	1	12/08/2020 13:52	WG1588230
Ethyl Ether	U		0.0170	0.100	1	12/08/2020 13:52	WG1588230
Tetrahydrofuran	U		0.0900	0.500	1	12/08/2020 13:52	WG1588230
Iodomethane	U		0.242	0.500	1	12/08/2020 13:52	WG1588230
Allyl chloride	U		0.580	1.00	1	12/08/2020 13:52	WG1588230
Trans-1,4-Dichloro-2-butene	U		0.0560	0.200	1	12/08/2020 13:52	WG1588230
(S) Toluene-d8	*101*			*75.0-131*		*12/08/2020 13:52*	WG1588230
(S) Toluene-d8	*99.9*			*75.0-131*		*12/08/2020 16:59*	WG1588483
(S) 4-Bromofluorobenzene	*101*			*67.0-138*		*12/08/2020 13:52*	WG1588230
(S) 4-Bromofluorobenzene	*99.5*			*67.0-138*		*12/08/2020 16:59*	WG1588483
(S) 1,2-Dichloroethane-d4	*109*			*70.0-130*		*12/08/2020 13:52*	WG1588230
(S) 1,2-Dichloroethane-d4	*112*			*70.0-130*		*12/08/2020 16:59*	WG1588483

JC 1/7/2021

MEMORANDUM

TO:	Project File	**DATE:**	January 6, 2021
FROM:	Jessie Compeau		
SUBJECT:	Laboratory Data Validation Review		
PROJECT:	American Linen Data Validation		
PROJECT #:	1413.001.02.501G		
TASK:	EIM Data Validation Level EPA2A for November and December 2020 – Soil Vapor Samples		
LAB:	Pace Sample Delivery Groups (SDGs): L1281467, L1283734, L1283738, L1283743, L1285029, L1288942, and L1292152		

Twenty-eight (28) soil vapor samples (including two field duplicates) were collected as part of the ongoing sampling monitoring event at the Former American Linen Supply Site, in Seattle, Washington on November 2, 8-10, 19, and December 2, 2020. The samples were shipped and delivered to Pace Lab Sciences (Pace) of Mount Juliet, TN for laboratory analysis. Samples were analyzed for the following:

- Volatile organic compounds (VOCs) by United States Environmental Protection Agency (USEPA) Method TO-15

The quality assurance review of the sample data associated with SDGs L1281467, L1283734, L1283738, L1283743, L1285029, L1288942, and L1292152.

DATA QUALIFICATIONS

Guidelines established by USEPA for a limited data validation review of analytical data along with PACE control limit criteria were used to validate the data. The comments presented in this memorandum refer to the laboratory's performance in meeting the quality control criteria outlined in the USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (USEPA, 2017). Following Guidelines, non-project-specific laboratory duplicates and matrix spike results were not evaluated as part of this data validation.

DATA VALIDATION

Completeness

All samples were collected and analyzed as requested with the following discussions:

- SDG L1283738: Pace confirmed with PES that samples SV-10-110820, SV-01-110820, and SV-11-110820 should be analyzed for VOCs by Method TO-15.

- SDG L1283743: Pace confirmed with PES that sample SV-12-110820 should be analyzed for VOCs by Method TO-15.

Sample Collection and Preservation

The laboratory supplied a Summa Canister ^{TM} canister (1Liter) for the air samples. The samples were shipped, delivered by FedEx, and received in good condition by the laboratory. The sample was collected, handled, and delivered in an appropriate manner. No data qualifications were warranted based upon sampling techniques or preservation.

Holding Times

The analyses for VOCs by Method TO-15 were performed within the 30-day recommended holding time limit for the air samples collected in Summa canisters. All holding time criteria are met.

Initial and Continuing Calibration

Initial and continuing calibration data for this project are retained by the laboratory and available for review if necessary. Case narrative and laboratory notes do not indicate that there are any issues with calibration.

Method Blank Results

A laboratory method blank is included with the analytical batch per method requirement. The target analytes were not detected in the method blank at or above the RDLs with one exception:

- SDGs L1283734, L1283738, and L1283743: Analytical Batch WG1575955: A low level of propene below the RDL was detected in the method blank. No action is needed since propene was not detected in the associated samples.

- SDG L1283738 Analytical Batch WG1575352: A low level of benzyl chloride below the RDL was detected in the method blank. No action is needed since benzyl chloride was not detected in the associated samples.

- SDG L1285029 Analytical Batch WG1577217: Low levels of benzyl chloride, 1,4-dichlorobenzene, propene, and 1,2,4-trichlorobenzene were detected, below the RDL, were detected in the method blank. No action is needed for benzyl chloride, 1,4-dichlorobenzene, and 1,2,4-trichlorobenzene as these were not detected in the associated samples. Propene is detected slightly above the reporting limit in samples SV-06-111020, SV-04-111020, SV-27-110920, and SV-903-110920. No action is taken other than to note this.

- SDG L1292152 Analytical Batch WG1587433: Low levels of benzyl chloride, 1,4-dichlorobenzene, and propene were detected, below the RDL, were detected in the method blank. No action is needed since these compounds are not detected in the associated samples.

Trip Blank Results

A trip blank was not required for the VOCs by TO-15 analyses. No action is taken other than to note this.

Field Duplicate Analyses

Field duplicate sample pairs are as follows:

- SDG L1283738: Sample SV-11-110820 and field duplicate sample SV-902-110820 (field duplicate samples collected contemporaneously using a t-joint attached to tubing coming out of the probe valve).

- SDG L1285029: Sample SV-25-110920 and field duplicate sample SV-903-110920 (field duplicate samples collected contemporaneously using a t-joint attached to tubing coming out of the probe valve).

Target analyte results are comparable and within a relative percent difference (RPD) of 30% for the field duplicate pair with the following exceptions:

- SDG L1283738: Samples SV-11-110820 and field duplicate sample SV-902-110820: Three VOC compounds (acetone, ethanol, and methylene chloride) results are not comparable with RPDs greater than 30% (or for results < 5X RDL the absolute difference < 1X RDL). **Field duplicate results for acetone ethanol, and methylene chloride are estimated and qualified (J).**

- SDG L1285029: Sample SV-25-110920 and field duplicate sample SV-903-110920: Twelve VOC compounds (1,2,4-trimethylbenzene, 1,3,5-trimethylbenzene, 1-propene, 2,2,4-trimethylpentane, acetone, carbon disulfide, CFC-11, chloromethane, ethanol, isopropanol, p-ethyltoluene, and tetrachloroethene) results are not comparable with RPDs greater than 30% (or for results < 5X RDL the absolute difference < 1X RDL). **Field duplicate results for these compounds are estimated and qualified (UJ/J).**

Laboratory Duplicate/Replicate Analyses

A laboratory replicate was not performed. Refer to the Laboratory Control Sample section for additional information.

Surrogate Recoveries

The surrogate percent recovery (% R) results for the VOCs by TO-15 air samples, method blank, and laboratory control samples are within the laboratory surrogate control limits of 60 -140% R with the following exceptions:

- SDG L1283734: Sample SV-24-110920 (batch WG1575955 analyzed on 11/13/2020) surrogate 1,4-bromofluorobenzene was recovered high and above control limit criteria. **All sample SV-24-110920 detects associated with batch WG1575955 are qualified as estimated (J).**

Laboratory Control Samples

A laboratory control sample or laboratory control sample/laboratory control sample duplicate (LCS/LCSD) were analyzed for the VOCs by TO-15 along with each analytical batch. The LCS or LCS/LCSD recoveries and relative percent differences (RPDs) for all control compounds met laboratory control limit criteria with the following discussion:

- SDG L1292152: LCS/LCSD recoveries for bromoform are greater than laboratory acceptance criteria and laboratory qualified (J4). No action is taken since bromoform is not detected in the associated samples.

- Multiple SDGs: LCSD analyses were not performed. Refer to field duplicate results for precision data.

Matrix Spike/Matrix Spike Duplicates

A matrix spike/matrix spike duplicate (MS/MSD) is not required for the VOCs by TO-15 method.

Other Quality Control Issues

No laboratory quality control issues were identified in the laboratory report with the following discussion:

- Electronic data deliverables (EDDs) for these SDGs were provided by the laboratory and data validator qualifiers were entered.   In some cases, different chemical synonyms are used between the EDD and the hardcopy however associated Chemical Abstracts Service (CAS) numbers are provided in the EDD to confirm chemical identifications.

Quantitation Limits

Results of the VOCs by TO-15 analysis are reported based on laboratory MRLs (assuming standard temperature and pressure is equal to 24.45) and reported in units of ppbv and µg/m^3.

The RDLs indicate the minimum quantity of a target analyte that can be confidently determined by the reference method. The RDLs were acceptable for the project; therefore, no data qualifications were warranted.

Data Assessment

The laboratory data reported for this project were reviewed based on the criteria outlined in:

- USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (USEPA, 2017).

Data qualifiers are assigned and laboratory report pages with qualifiers are attached. All data, including qualified data, are judged to be acceptable for their intended use.

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
Acetone	67-64-1	58.10	1.25	2.97	1.72 J	4.09 J		1	WG1575955
Allyl chloride	107-05-1	76.53	0.200	0.626	ND	ND		1	WG1575955
Benzene	71-43-2	78.10	0.200	0.639	ND	ND		1	WG1575955
Benzyl Chloride	100-44-7	127	0.200	1.04	ND	ND		1	WG1575955
Bromodichloromethane	75-27-4	164	0.200	1.34	ND	ND		1	WG1575955
Bromoform	75-25-2	253	0.600	6.21	ND	ND		1	WG1575955
Bromomethane	74-83-9	94.90	0.200	0.776	ND	ND		1	WG1575955
1,3-Butadiene	106-99-0	54.10	2.00	4.43	ND	ND		1	WG1575955
Carbon disulfide	75-15-0	76.10	0.200	0.622	ND	ND		1	WG1575955
Carbon tetrachloride	56-23-5	154	0.200	1.26	ND	ND		1	WG1575955
Chlorobenzene	108-90-7	113	0.200	0.924	ND	ND		1	WG1575955
Chloroethane	75-00-3	64.50	0.200	0.528	ND	ND		1	WG1575955
Chloroform	67-66-3	119	0.200	0.973	ND	ND		1	WG1575955
Chloromethane	74-87-3	50.50	0.200	0.413	ND	ND		1	WG1575955
2-Chlorotoluene	95-49-8	126	0.200	1.03	ND	ND		1	WG1575955
Cyclohexane	110-82-7	84.20	0.200	0.689	ND	ND		1	WG1575955
Dibromochloromethane	124-48-1	208	0.200	1.70	ND	ND		1	WG1575955
1,2-Dibromoethane	106-93-4	188	0.200	1.54	ND	ND		1	WG1575955
1,2-Dichlorobenzene	95-50-1	147	0.200	1.20	ND	ND		1	WG1575955
1,3-Dichlorobenzene	541-73-1	147	0.200	1.20	ND	ND		1	WG1575955
1,4-Dichlorobenzene	106-46-7	147	0.200	1.20	ND	ND		1	WG1575955
1,2-Dichloroethane	107-06-2	99	0.200	0.810	ND	ND		1	WG1575955
1,1-Dichloroethane	75-34-3	98	0.200	0.802	ND	ND		1	WG1575955
1,1-Dichloroethene	75-35-4	96.90	0.200	0.793	ND	ND		1	WG1575955
cis-1,2-Dichloroethene	156-59-2	96.90	0.200	0.793	ND	ND		1	WG1575955
trans-1,2-Dichloroethene	156-60-5	96.90	0.200	0.793	ND	ND		1	WG1575955
1,2-Dichloropropane	78-87-5	113	0.200	0.924	ND	ND		1	WG1575955
cis-1,3-Dichloropropene	10061-01-5	111	0.200	0.908	ND	ND		1	WG1575955
trans-1,3-Dichloropropene	10061-02-6	111	0.200	0.908	ND	ND		1	WG1575955
1,4-Dioxane	123-91-1	88.10	0.200	0.721	ND	ND		1	WG1575955
Ethanol	64-17-5	46.10	0.630	1.19	5.82 J	11.0 J		1	WG1575955
Ethylbenzene	100-41-4	106	0.200	0.867	ND	ND		1	WG1575955
4-Ethyltoluene	622-96-8	120	0.200	0.982	ND	ND		1	WG1575955
Trichlorofluoromethane	75-69-4	137.40	0.200	1.12	ND	ND		1	WG1575955
Dichlorodifluoromethane	75-71-8	120.92	0.200	0.989	ND	ND		1	WG1575955
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	0.200	1.53	ND	ND		1	WG1575955
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.200	1.40	ND	ND		1	WG1575955
Heptane	142-82-5	100	0.200	0.818	ND	ND		1	WG1575955
Hexachloro-1,3-butadiene	87-68-3	261	0.630	6.73	ND	ND		1	WG1575955
n-Hexane	110-54-3	86.20	0.630	2.22	5.57 J	19.6 J		1	WG1575955
Isopropylbenzene	98-82-8	120.20	0.200	0.983	ND	ND		1	WG1575955
Methylene Chloride	75-09-2	84.90	0.200	0.694	ND	ND		1	WG1575955
Methyl Butyl Ketone	591-78-6	100	1.25	5.11	ND	ND		1	WG1575955
2-Butanone (MEK)	78-93-3	72.10	1.25	3.69	ND	ND		1	WG1575955
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	1.25	5.12	ND	ND		1	WG1575955
Methyl methacrylate	80-62-6	100.12	0.200	0.819	ND	ND		1	WG1575955
MTBE	1634-04-4	88.10	0.200	0.721	ND	ND		1	WG1575955
Naphthalene	91-20-3	128	0.630	3.30	3.76 J	19.7 J		1	WG1575955
2-Propanol	67-63-0	60.10	1.25	3.07	ND	ND		1	WG1575955
Propene	115-07-1	42.10	0.400	0.689	ND	ND		1	WG1575955
Styrene	100-42-5	104	0.200	0.851	ND	ND		1	WG1575955
1,1,2,2-Tetrachloroethane	79-34-5	168	0.200	1.37	ND	ND		1	WG1575955
Tetrachloroethylene	127-18-4	166	0.200	1.36	ND	ND		1	WG1575955
Tetrahydrofuran	109-99-9	72.10	0.200	0.590	ND	ND		1	WG1575955
Toluene	108-88-3	92.10	0.500	1.88	ND	ND	JC 1/6/2021	1	WG1575955
1,2,4-Trichlorobenzene	120-82-1	181	0.630	4.66	ND	ND		1	WG1575955

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
1,1,1-Trichloroethane	71-55-6	133	0.200	1.09	ND	ND		1	WG1575955
1,1,2-Trichloroethane	79-00-5	133	0.200	1.09	ND	ND		1	WG1575955
Trichloroethylene	79-01-6	131	0.200	1.07	ND	ND		1	WG1575955
1,2,4-Trimethylbenzene	95-63-6	120	0.200	0.982	ND	ND		1	WG1575955
1,3,5-Trimethylbenzene	108-67-8	120	0.200	0.982	ND	ND		1	WG1575955
2,2,4-Trimethylpentane	540-84-1	114.22	40.0	187	1710	7990		200	WG1577277
Vinyl chloride	75-01-4	62.50	0.200	0.511	ND	ND		1	WG1575955
Vinyl Bromide	593-60-2	106.95	0.200	0.875	ND	ND		1	WG1575955
Vinyl acetate	108-05-4	86.10	0.200	0.704	ND	ND		1	WG1575955
m&p-Xylene	1330-20-7	106	0.400	1.73	ND	ND		1	WG1575955
o-Xylene	95-47-6	106	0.200	0.867	ND	ND		1	WG1575955
(S) 1,4-Bromofluorobenzene	*460-00-4*	*175*	*60.0-140*		*199*		J1		WG1575955
(S) 1,4-Bromofluorobenzene	*460-00-4*	*175*	*60.0-140*		*94.0*				WG1577277

Sample Narrative:

L1283734-04 WG1575955: Surrogate failure due to matrix interference

JC 1/6/2021

SV-902-110820

Collected date/time: 11/08/20 09:05

SAMPLE RESULTS - 01

L1283738

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
Acetone	67-64-1	58.10	1.25	2.97	1.79 J	4.25 J		1	WG1575352
Allyl chloride	107-05-1	76.53	0.200	0.626	ND	ND		1	WG1575352
Benzene	71-43-2	78.10	0.200	0.639	ND	ND		1	WG1575352
Benzyl Chloride	100-44-7	127	0.200	1.04	ND	ND		1	WG1575352
Bromodichloromethane	75-27-4	164	0.200	1.34	ND	ND		1	WG1575352
Bromoform	75-25-2	253	0.600	6.21	ND	ND		1	WG1575352
Bromomethane	74-83-9	94.90	0.200	0.776	ND	ND		1	WG1575352
1,3-Butadiene	106-99-0	54.10	2.00	4.43	ND	ND		1	WG1575352
Carbon disulfide	75-15-0	76.10	0.200	0.622	1.35	4.20		1	WG1575352
Carbon tetrachloride	56-23-5	154	0.200	1.26	ND	ND		1	WG1575352
Chlorobenzene	108-90-7	113	0.200	0.924	ND	ND		1	WG1575352
Chloroethane	75-00-3	64.50	0.200	0.528	ND	ND		1	WG1575352
Chloroform	67-66-3	119	0.200	0.973	ND	ND		1	WG1575352
Chloromethane	74-87-3	50.50	0.200	0.413	ND	ND		1	WG1575352
2-Chlorotoluene	95-49-8	126	0.200	1.03	ND	ND		1	WG1575352
Cyclohexane	110-82-7	84.20	0.200	0.689	ND	ND		1	WG1575352
Dibromochloromethane	124-48-1	208	0.200	1.70	ND	ND		1	WG1575352
1,2-Dibromoethane	106-93-4	188	0.200	1.54	ND	ND		1	WG1575352
1,2-Dichlorobenzene	95-50-1	147	0.200	1.20	ND	ND		1	WG1575352
1,3-Dichlorobenzene	541-73-1	147	0.200	1.20	ND	ND		1	WG1575352
1,4-Dichlorobenzene	106-46-7	147	0.200	1.20	ND	ND		1	WG1575352
1,2-Dichloroethane	107-06-2	99	0.200	0.810	ND	ND		1	WG1575352
1,1-Dichloroethane	75-34-3	98	0.200	0.802	ND	ND		1	WG1575352
1,1-Dichloroethene	75-35-4	96.90	0.200	0.793	ND	ND		1	WG1575352
cis-1,2-Dichloroethene	156-59-2	96.90	0.200	0.793	ND	ND		1	WG1575352
trans-1,2-Dichloroethene	156-60-5	96.90	0.200	0.793	ND	ND		1	WG1575352
1,2-Dichloropropane	78-87-5	113	0.200	0.924	ND	ND		1	WG1575352
cis-1,3-Dichloropropene	10061-01-5	111	0.200	0.908	ND	ND		1	WG1575352
trans-1,3-Dichloropropene	10061-02-6	111	0.200	0.908	ND	ND		1	WG1575352
1,4-Dioxane	123-91-1	88.10	0.200	0.721	ND	ND		1	WG1575352
Ethanol	64-17-5	46.10	0.630	1.19	6.74 J	12.7 J		1	WG1575352
Ethylbenzene	100-41-4	106	0.200	0.867	ND	ND		1	WG1575352
4-Ethyltoluene	622-96-8	120	0.200	0.982	ND	ND		1	WG1575352
Trichlorofluoromethane	75-69-4	137.40	0.200	1.12	ND	ND		1	WG1575352
Dichlorodifluoromethane	75-71-8	120.92	0.200	0.989	ND	ND		1	WG1575352
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	0.200	1.53	ND	ND		1	WG1575352
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.200	1.40	ND	ND		1	WG1575352
Heptane	142-82-5	100	0.200	0.818	ND	ND		1	WG1575352
Hexachloro-1,3-butadiene	87-68-3	261	0.630	6.73	ND	ND		1	WG1575352
n-Hexane	110-54-3	86.20	0.630	2.22	ND	ND		1	WG1575352
Isopropylbenzene	98-82-8	120.20	0.200	0.983	ND	ND		1	WG1575352
Methylene Chloride	75-09-2	84.90	0.200	0.694	0.516 J	1.79 J		1	WG1575352
Methyl Butyl Ketone	591-78-6	100	1.25	5.11	ND	ND		1	WG1575352
2-Butanone (MEK)	78-93-3	72.10	1.25	3.69	ND	ND		1	WG1575352
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	1.25	5.12	ND	ND		1	WG1575352
Methyl methacrylate	80-62-6	100.12	0.200	0.819	ND	ND		1	WG1575352
MTBE	1634-04-4	88.10	0.200	0.721	ND	ND		1	WG1575352
Naphthalene	91-20-3	128	0.630	3.30	ND	ND		1	WG1575352
2-Propanol	67-63-0	60.10	1.25	3.07	ND	ND		1	WG1575352
Propene	115-07-1	42.10	0.400	0.689	ND	ND		1	WG1575352
Styrene	100-42-5	104	0.200	0.851	ND	ND		1	WG1575352
1,1,2,2-Tetrachloroethane	79-34-5	168	0.200	1.37	ND	ND		1	WG1575352
Tetrachloroethylene	127-18-4	166	0.200	1.36	ND	ND		1	WG1575352
Tetrahydrofuran	109-99-9	72.10	0.200	0.590	ND	ND		1	WG1575352
Toluene	108-88-3	92.10	0.500	1.88	ND	ND		1	WG1575352
1,2,4-Trichlorobenzene	120-82-1	181	0.630	4.66	ND	ND		1	WG1575352

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Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
1,1,1-Trichloroethane	71-55-6	133	0.200	1.09	ND	ND		1	WG1575352
1,1,2-Trichloroethane	79-00-5	133	0.200	1.09	ND	ND		1	WG1575352
Trichloroethylene	79-01-6	131	0.200	1.07	ND	ND		1	WG1575352
1,2,4-Trimethylbenzene	95-63-6	120	0.200	0.982	ND	ND		1	WG1575352
1,3,5-Trimethylbenzene	108-67-8	120	0.200	0.982	ND	ND		1	WG1575352
2,2,4-Trimethylpentane	540-84-1	114.22	0.200	0.934	0.833	3.89		1	WG1575352
Vinyl chloride	75-01-4	62.50	0.200	0.511	ND	ND		1	WG1575352
Vinyl Bromide	593-60-2	106.95	0.200	0.875	ND	ND		1	WG1575352
Vinyl acetate	108-05-4	86.10	0.200	0.704	ND	ND		1	WG1575352
m&p-Xylene	1330-20-7	106	0.400	1.73	ND	ND		1	WG1575352
o-Xylene	95-47-6	106	0.200	0.867	ND	ND		1	WG1575352
(S) 1,4-Bromofluorobenzene	*460-00-4*	*175*	*60.0-140*		*103*				WG1575352

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

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1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
Acetone	67-64-1	58.10	1.25	2.97	6.16	14.6		1	WG1575955
Allyl chloride	107-05-1	76.53	0.200	0.626	ND	ND		1	WG1575955
Benzene	71-43-2	78.10	0.200	0.639	ND	ND		1	WG1575955
Benzyl Chloride	100-44-7	127	0.200	1.04	ND	ND		1	WG1575955
Bromodichloromethane	75-27-4	164	0.200	1.34	ND	ND		1	WG1575955
Bromoform	75-25-2	253	0.600	6.21	ND	ND		1	WG1575955
Bromomethane	74-83-9	94.90	0.200	0.776	ND	ND		1	WG1575955
1,3-Butadiene	106-99-0	54.10	2.00	4.43	ND	ND		1	WG1575955
Carbon disulfide	75-15-0	76.10	0.200	0.622	1.76	5.48		1	WG1575955
Carbon tetrachloride	56-23-5	154	0.200	1.26	0.403	2.54		1	WG1575955
Chlorobenzene	108-90-7	113	0.200	0.924	ND	ND		1	WG1575955
Chloroethane	75-00-3	64.50	0.200	0.528	ND	ND		1	WG1575955
Chloroform	67-66-3	119	0.200	0.973	ND	ND		1	WG1575955
Chloromethane	74-87-3	50.50	0.200	0.413	ND	ND		1	WG1575955
2-Chlorotoluene	95-49-8	126	0.200	1.03	ND	ND		1	WG1575955
Cyclohexane	110-82-7	84.20	0.200	0.689	ND	ND		1	WG1575955
Dibromochloromethane	124-48-1	208	0.200	1.70	ND	ND		1	WG1575955
1,2-Dibromoethane	106-93-4	188	0.200	1.54	ND	ND		1	WG1575955
1,2-Dichlorobenzene	95-50-1	147	0.200	1.20	ND	ND		1	WG1575955
1,3-Dichlorobenzene	541-73-1	147	0.200	1.20	ND	ND		1	WG1575955
1,4-Dichlorobenzene	106-46-7	147	0.200	1.20	ND	ND		1	WG1575955
1,2-Dichloroethane	107-06-2	99	0.200	0.810	ND	ND		1	WG1575955
1,1-Dichloroethane	75-34-3	98	0.200	0.802	ND	ND		1	WG1575955
1,1-Dichloroethene	75-35-4	96.90	0.200	0.793	ND	ND		1	WG1575955
cis-1,2-Dichloroethene	156-59-2	96.90	0.200	0.793	ND	ND		1	WG1575955
trans-1,2-Dichloroethene	156-60-5	96.90	0.200	0.793	ND	ND		1	WG1575955
1,2-Dichloropropane	78-87-5	113	0.200	0.924	ND	ND		1	WG1575955
cis-1,3-Dichloropropene	10061-01-5	111	0.200	0.908	ND	ND		1	WG1575955
trans-1,3-Dichloropropene	10061-02-6	111	0.200	0.908	ND	ND		1	WG1575955
1,4-Dioxane	123-91-1	88.10	0.200	0.721	ND	ND		1	WG1575955
Ethanol	64-17-5	46.10	0.630	1.19	12.4	23.4		1	WG1575955
Ethylbenzene	100-41-4	106	0.200	0.867	ND	ND		1	WG1575955
4-Ethyltoluene	622-96-8	120	0.200	0.982	ND	ND		1	WG1575955
Trichlorofluoromethane	75-69-4	137.40	0.200	1.12	0.262	1.47		1	WG1575955
Dichlorodifluoromethane	75-71-8	120.92	0.200	0.989	0.468	2.31		1	WG1575955
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	0.200	1.53	ND	ND		1	WG1575955
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.200	1.40	ND	ND		1	WG1575955
Heptane	142-82-5	100	0.200	0.818	ND	ND		1	WG1575955
Hexachloro-1,3-butadiene	87-68-3	261	0.630	6.73	ND	ND		1	WG1575955
n-Hexane	110-54-3	86.20	0.630	2.22	ND	ND		1	WG1575955
Isopropylbenzene	98-82-8	120.20	0.200	0.983	ND	ND		1	WG1575955
Methylene Chloride	75-09-2	84.90	0.200	0.694	0.716	2.49		1	WG1575955
Methyl Butyl Ketone	591-78-6	100	1.25	5.11	ND	ND		1	WG1575955
2-Butanone (MEK)	78-93-3	72.10	1.25	3.69	ND	ND		1	WG1575955
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	1.25	5.12	ND	ND		1	WG1575955
Methyl methacrylate	80-62-6	100.12	0.200	0.819	ND	ND		1	WG1575955
MTBE	1634-04-4	88.10	0.200	0.721	ND	ND		1	WG1575955
Naphthalene	91-20-3	128	0.630	3.30	ND	ND		1	WG1575955
2-Propanol	67-63-0	60.10	1.25	3.07	4.15	10.2		1	WG1575955
Propene	115-07-1	42.10	0.400	0.689	ND	ND		1	WG1575955
Styrene	100-42-5	104	0.200	0.851	ND	ND		1	WG1575955
1,1,2,2-Tetrachloroethane	79-34-5	168	0.200	1.37	ND	ND		1	WG1575955
Tetrachloroethylene	127-18-4	166	0.200	1.36	0.761	5.17		1	WG1575955
Tetrahydrofuran	109-99-9	72.10	0.200	0.590	ND	ND		1	WG1575955
Toluene	108-88-3	92.10	0.500	1.88	ND	ND		1	WG1575955
1,2,4-Trichlorobenzene	120-82-1	181	0.630	4.66	ND	ND		1	WG1575955

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Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
1,1,1-Trichloroethane	71-55-6	133	0.200	1.09	ND	ND		1	WG1575955
1,1,2-Trichloroethane	79-00-5	133	0.200	1.09	ND	ND		1	WG1575955
Trichloroethylene	79-01-6	131	0.200	1.07	ND	ND		1	WG1575955
1,2,4-Trimethylbenzene	95-63-6	120	0.200	0.982	0.273	1.34		1	WG1575955
1,3,5-Trimethylbenzene	108-67-8	120	0.200	0.982	ND	ND		1	WG1575955
2,2,4-Trimethylpentane	540-84-1	114.22	0.200	0.934	ND	ND		1	WG1575955
Vinyl chloride	75-01-4	62.50	0.200	0.511	ND	ND		1	WG1575955
Vinyl Bromide	593-60-2	106.95	0.200	0.875	ND	ND		1	WG1575955
Vinyl acetate	108-05-4	86.10	0.200	0.704	ND	ND		1	WG1575955
m&p-Xylene	1330-20-7	106	0.400	1.73	ND	ND		1	WG1575955
o-Xylene	95-47-6	106	0.200	0.867	ND	ND		1	WG1575955
(S) 1,4-Bromofluorobenzene	*460-00-4*	*175*	*60.0-140*		*102*				WG1575955

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Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
Acetone	67-64-1	58.10	1.25	2.97	2.92	6.94		1	WG1575955
Allyl chloride	107-05-1	76.53	0.200	0.626	ND	ND		1	WG1575955
Benzene	71-43-2	78.10	0.200	0.639	ND	ND		1	WG1575955
Benzyl Chloride	100-44-7	127	0.200	1.04	ND	ND		1	WG1575955
Bromodichloromethane	75-27-4	164	0.200	1.34	ND	ND		1	WG1575955
Bromoform	75-25-2	253	0.600	6.21	ND	ND		1	WG1575955
Bromomethane	74-83-9	94.90	0.200	0.776	ND	ND		1	WG1575955
1,3-Butadiene	106-99-0	54.10	2.00	4.43	ND	ND		1	WG1575955
Carbon disulfide	75-15-0	76.10	0.200	0.622	1.30	4.05		1	WG1575955
Carbon tetrachloride	56-23-5	154	0.200	1.26	ND	ND		1	WG1575955
Chlorobenzene	108-90-7	113	0.200	0.924	ND	ND		1	WG1575955
Chloroethane	75-00-3	64.50	0.200	0.528	ND	ND		1	WG1575955
Chloroform	67-66-3	119	0.200	0.973	ND	ND		1	WG1575955
Chloromethane	74-87-3	50.50	0.200	0.413	ND	ND		1	WG1575955
2-Chlorotoluene	95-49-8	126	0.200	1.03	ND	ND		1	WG1575955
Cyclohexane	110-82-7	84.20	0.200	0.689	ND	ND		1	WG1575955
Dibromochloromethane	124-48-1	208	0.200	1.70	ND	ND		1	WG1575955
1,2-Dibromoethane	106-93-4	188	0.200	1.54	ND	ND		1	WG1575955
1,2-Dichlorobenzene	95-50-1	147	0.200	1.20	ND	ND		1	WG1575955
1,3-Dichlorobenzene	541-73-1	147	0.200	1.20	ND	ND		1	WG1575955
1,4-Dichlorobenzene	106-46-7	147	0.200	1.20	ND	ND		1	WG1575955
1,2-Dichloroethane	107-06-2	99	0.200	0.810	ND	ND		1	WG1575955
1,1-Dichloroethane	75-34-3	98	0.200	0.802	0.774	3.10		1	WG1575955
1,1-Dichloroethene	75-35-4	96.90	0.200	0.793	ND	ND		1	WG1575955
cis-1,2-Dichloroethene	156-59-2	96.90	0.200	0.793	ND	ND		1	WG1575955
trans-1,2-Dichloroethene	156-60-5	96.90	0.200	0.793	ND	ND		1	WG1575955
1,2-Dichloropropane	78-87-5	113	0.200	0.924	ND	ND		1	WG1575955
cis-1,3-Dichloropropene	10061-01-5	111	0.200	0.908	ND	ND		1	WG1575955
trans-1,3-Dichloropropene	10061-02-6	111	0.200	0.908	ND	ND		1	WG1575955
1,4-Dioxane	123-91-1	88.10	0.200	0.721	ND	ND		1	WG1575955
Ethanol	64-17-5	46.10	0.630	1.19	15.0	28.3		1	WG1575955
Ethylbenzene	100-41-4	106	0.200	0.867	ND	ND		1	WG1575955
4-Ethyltoluene	622-96-8	120	0.200	0.982	ND	ND		1	WG1575955
Trichlorofluoromethane	75-69-4	137.40	0.200	1.12	ND	ND		1	WG1575955
Dichlorodifluoromethane	75-71-8	120.92	0.200	0.989	0.290	1.43		1	WG1575955
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	0.200	1.53	ND	ND		1	WG1575955
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.200	1.40	ND	ND		1	WG1575955
Heptane	142-82-5	100	0.200	0.818	ND	ND		1	WG1575955
Hexachloro-1,3-butadiene	87-68-3	261	0.630	6.73	ND	ND		1	WG1575955
n-Hexane	110-54-3	86.20	0.630	2.22	1.07	3.77		1	WG1575955
Isopropylbenzene	98-82-8	120.20	0.200	0.983	ND	ND		1	WG1575955
Methylene Chloride	75-09-2	84.90	0.200	0.694	0.894	3.10		1	WG1575955
Methyl Butyl Ketone	591-78-6	100	1.25	5.11	ND	ND		1	WG1575955
2-Butanone (MEK)	78-93-3	72.10	1.25	3.69	ND	ND		1	WG1575955
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	1.25	5.12	ND	ND		1	WG1575955
Methyl methacrylate	80-62-6	100.12	0.200	0.819	ND	ND		1	WG1575955
MTBE	1634-04-4	88.10	0.200	0.721	ND	ND		1	WG1575955
Naphthalene	91-20-3	128	0.630	3.30	ND	ND		1	WG1575955
2-Propanol	67-63-0	60.10	1.25	3.07	4.27	10.5		1	WG1575955
Propene	115-07-1	42.10	0.400	0.689	ND	ND		1	WG1575955
Styrene	100-42-5	104	0.200	0.851	ND	ND		1	WG1575955
1,1,2,2-Tetrachloroethane	79-34-5	168	0.200	1.37	ND	ND		1	WG1575955
Tetrachloroethylene	127-18-4	166	0.200	1.36	0.229	1.55		1	WG1575955
Tetrahydrofuran	109-99-9	72.10	0.200	0.590	ND	ND		1	WG1575955
Toluene	108-88-3	92.10	0.500	1.88	ND	1.88		1	WG1575955
1,2,4-Trichlorobenzene	120-82-1	181	0.630	4.66	ND	ND		1	WG1575955

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Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
1,1,1-Trichloroethane	71-55-6	133	0.200	1.09	9.61	52.3		1	WG1575955
1,1,2-Trichloroethane	79-00-5	133	0.200	1.09	ND	ND		1	WG1575955
Trichloroethylene	79-01-6	131	0.200	1.07	ND	ND		1	WG1575955
1,2,4-Trimethylbenzene	95-63-6	120	0.200	0.982	0.467	2.29		1	WG1575955
1,3,5-Trimethylbenzene	108-67-8	120	0.200	0.982	ND	ND		1	WG1575955
2,2,4-Trimethylpentane	540-84-1	114.22	0.200	0.934	ND	ND		1	WG1575955
Vinyl chloride	75-01-4	62.50	0.200	0.511	ND	ND		1	WG1575955
Vinyl Bromide	593-60-2	106.95	0.200	0.875	ND	ND		1	WG1575955
Vinyl acetate	108-05-4	86.10	0.200	0.704	ND	ND		1	WG1575955
m&p-Xylene	1330-20-7	106	0.400	1.73	ND	ND		1	WG1575955
o-Xylene	95-47-6	106	0.200	0.867	ND	ND		1	WG1575955
(S) 1,4-Bromofluorobenzene	*460-00-4*	*175*	*60.0-140*		*101*				WG1575955

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

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Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
Acetone	67-64-1	58.10	1.25	2.97	3.33 J	7.91 J		1	WG1575955
Allyl chloride	107-05-1	76.53	0.200	0.626	ND	ND		1	WG1575955
Benzene	71-43-2	78.10	0.200	0.639	0.225	0.719		1	WG1575955
Benzyl Chloride	100-44-7	127	0.200	1.04	ND	ND		1	WG1575955
Bromodichloromethane	75-27-4	164	0.200	1.34	ND	ND		1	WG1575955
Bromoform	75-25-2	253	0.600	6.21	ND	ND		1	WG1575955
Bromomethane	74-83-9	94.90	0.200	0.776	ND	ND		1	WG1575955
1,3-Butadiene	106-99-0	54.10	2.00	4.43	ND	ND		1	WG1575955
Carbon disulfide	75-15-0	76.10	0.200	0.622	1.21	3.77		1	WG1575955
Carbon tetrachloride	56-23-5	154	0.200	1.26	ND	ND		1	WG1575955
Chlorobenzene	108-90-7	113	0.200	0.924	ND	ND		1	WG1575955
Chloroethane	75-00-3	64.50	0.200	0.528	ND	ND		1	WG1575955
Chloroform	67-66-3	119	0.200	0.973	ND	ND		1	WG1575955
Chloromethane	74-87-3	50.50	0.200	0.413	ND	ND		1	WG1575955
2-Chlorotoluene	95-49-8	126	0.200	1.03	ND	ND		1	WG1575955
Cyclohexane	110-82-7	84.20	0.200	0.689	ND	ND		1	WG1575955
Dibromochloromethane	124-48-1	208	0.200	1.70	ND	ND		1	WG1575955
1,2-Dibromoethane	106-93-4	188	0.200	1.54	ND	ND		1	WG1575955
1,2-Dichlorobenzene	95-50-1	147	0.200	1.20	ND	ND		1	WG1575955
1,3-Dichlorobenzene	541-73-1	147	0.200	1.20	ND	ND		1	WG1575955
1,4-Dichlorobenzene	106-46-7	147	0.200	1.20	ND	ND		1	WG1575955
1,2-Dichloroethane	107-06-2	99	0.200	0.810	ND	ND		1	WG1575955
1,1-Dichloroethane	75-34-3	98	0.200	0.802	ND	ND		1	WG1575955
1,1-Dichloroethene	75-35-4	96.90	0.200	0.793	ND	ND		1	WG1575955
cis-1,2-Dichloroethene	156-59-2	96.90	0.200	0.793	ND	ND		1	WG1575955
trans-1,2-Dichloroethene	156-60-5	96.90	0.200	0.793	ND	ND		1	WG1575955
1,2-Dichloropropane	78-87-5	113	0.200	0.924	ND	ND		1	WG1575955
cis-1,3-Dichloropropene	10061-01-5	111	0.200	0.908	ND	ND		1	WG1575955
trans-1,3-Dichloropropene	10061-02-6	111	0.200	0.908	ND	ND		1	WG1575955
1,4-Dioxane	123-91-1	88.10	0.200	0.721	ND	ND		1	WG1575955
Ethanol	64-17-5	46.10	0.630	1.19	25.6 J	48.3 J		1	WG1575955
Ethylbenzene	100-41-4	106	0.200	0.867	0.287	1.24		1	WG1575955
4-Ethyltoluene	622-96-8	120	0.200	0.982	ND	ND		1	WG1575955
Trichlorofluoromethane	75-69-4	137.40	0.200	1.12	ND	ND		1	WG1575955
Dichlorodifluoromethane	75-71-8	120.92	0.200	0.989	ND	ND		1	WG1575955
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	0.200	1.53	ND	ND		1	WG1575955
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.200	1.40	ND	ND		1	WG1575955
Heptane	142-82-5	100	0.200	0.818	0.204	0.834		1	WG1575955
Hexachloro-1,3-butadiene	87-68-3	261	0.630	6.73	ND	ND		1	WG1575955
n-Hexane	110-54-3	86.20	0.630	2.22	ND	2.22		1	WG1575955
Isopropylbenzene	98-82-8	120.20	0.200	0.983	ND	ND		1	WG1575955
Methylene Chloride	75-09-2	84.90	0.200	0.694	1.01 J	3.51 J		1	WG1575955
Methyl Butyl Ketone	591-78-6	100	1.25	5.11	ND	ND		1	WG1575955
2-Butanone (MEK)	78-93-3	72.10	1.25	3.69	ND	ND		1	WG1575955
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	1.25	5.12	ND	ND		1	WG1575955
Methyl methacrylate	80-62-6	100.12	0.200	0.819	ND	ND		1	WG1575955
MTBE	1634-04-4	88.10	0.200	0.721	ND	ND		1	WG1575955
Naphthalene	91-20-3	128	0.630	3.30	ND	ND		1	WG1575955
2-Propanol	67-63-0	60.10	1.25	3.07	2.21	5.43		1	WG1575955
Propene	115-07-1	42.10	0.400	0.689	ND	ND		1	WG1575955
Styrene	100-42-5	104	0.200	0.851	ND	ND		1	WG1575955
1,1,2,2-Tetrachloroethane	79-34-5	168	0.200	1.37	ND	ND		1	WG1575955
Tetrachloroethylene	127-18-4	166	0.200	1.36	ND	ND		1	WG1575955
Tetrahydrofuran	109-99-9	72.10	0.200	0.590	ND	ND		1	WG1575955
Toluene	108-88-3	92.10	0.500	1.88	0.756	2.85		1	WG1575955
1,2,4-Trichlorobenzene	120-82-1	181	0.630	4.66	ND	ND		1	WG1575955

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Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
1,1,1-Trichloroethane	71-55-6	133	0.200	1.09	ND	ND		1	WG1575955
1,1,2-Trichloroethane	79-00-5	133	0.200	1.09	ND	ND		1	WG1575955
Trichloroethylene	79-01-6	131	0.200	1.07	ND	ND		1	WG1575955
1,2,4-Trimethylbenzene	95-63-6	120	0.200	0.982	ND	ND		1	WG1575955
1,3,5-Trimethylbenzene	108-67-8	120	0.200	0.982	ND	ND		1	WG1575955
2,2,4-Trimethylpentane	540-84-1	114.22	0.200	0.934	0.678	3.17		1	WG1575955
Vinyl chloride	75-01-4	62.50	0.200	0.511	ND	ND		1	WG1575955
Vinyl Bromide	593-60-2	106.95	0.200	0.875	ND	ND		1	WG1575955
Vinyl acetate	108-05-4	86.10	0.200	0.704	ND	ND		1	WG1575955
m&p-Xylene	1330-20-7	106	0.400	1.73	ND	ND		1	WG1575955
o-Xylene	95-47-6	106	0.200	0.867	ND	ND		1	WG1575955
(S) 1,4-Bromofluorobenzene	*460-00-4*	*175*	*60.0-140*		*104*				WG1575955

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Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
Acetone	67-64-1	58.10	1.25	2.97	3.80 J	9.03 J		1	WG1577217
Allyl chloride	107-05-1	76.53	0.200	0.626	ND	ND		1	WG1577217
Benzene	71-43-2	78.10	0.200	0.639	0.315	1.01		1	WG1577217
Benzyl Chloride	100-44-7	127	0.200	1.04	ND	ND		1	WG1577217
Bromodichloromethane	75-27-4	164	0.200	1.34	ND	ND		1	WG1577217
Bromoform	75-25-2	253	0.600	6.21	ND	ND		1	WG1577217
Bromomethane	74-83-9	94.90	0.200	0.776	ND	ND		1	WG1577217
1,3-Butadiene	106-99-0	54.10	2.00	4.43	ND	ND		1	WG1577217
Carbon disulfide	75-15-0	76.10	0.200	0.622	ND UJ	ND UJ		1	WG1577217
Carbon tetrachloride	56-23-5	154	0.200	1.26	ND	ND		1	WG1577217
Chlorobenzene	108-90-7	113	0.200	0.924	ND	ND		1	WG1577217
Chloroethane	75-00-3	64.50	0.200	0.528	ND	ND		1	WG1577217
Chloroform	67-66-3	119	0.200	0.973	ND	ND		1	WG1577217
Chloromethane	74-87-3	50.50	0.200	0.413	0.606 J	1.25 J		1	WG1577217
2-Chlorotoluene	95-49-8	126	0.200	1.03	ND	ND		1	WG1577217
Cyclohexane	110-82-7	84.20	0.200	0.689	0.252	0.868		1	WG1577217
Dibromochloromethane	124-48-1	208	0.200	1.70	ND	ND		1	WG1577217
1,2-Dibromoethane	106-93-4	188	0.200	1.54	ND	ND		1	WG1577217
1,2-Dichlorobenzene	95-50-1	147	0.200	1.20	ND	ND		1	WG1577217
1,3-Dichlorobenzene	541-73-1	147	0.200	1.20	ND	ND		1	WG1577217
1,4-Dichlorobenzene	106-46-7	147	0.200	1.20	ND	ND		1	WG1577217
1,2-Dichloroethane	107-06-2	99	0.200	0.810	ND	ND		1	WG1577217
1,1-Dichloroethane	75-34-3	98	0.200	0.802	ND	ND		1	WG1577217
1,1-Dichloroethene	75-35-4	96.90	0.200	0.793	ND	ND		1	WG1577217
cis-1,2-Dichloroethene	156-59-2	96.90	0.200	0.793	ND	ND		1	WG1577217
trans-1,2-Dichloroethene	156-60-5	96.90	0.200	0.793	ND	ND		1	WG1577217
1,2-Dichloropropane	78-87-5	113	0.200	0.924	ND	ND		1	WG1577217
cis-1,3-Dichloropropene	10061-01-5	111	0.200	0.908	ND	ND		1	WG1577217
trans-1,3-Dichloropropene	10061-02-6	111	0.200	0.908	ND	ND		1	WG1577217
1,4-Dioxane	123-91-1	88.10	0.200	0.721	ND	ND		1	WG1577217
Ethanol	64-17-5	46.10	0.630	1.19	13.7 J	25.8 J		1	WG1577217
Ethylbenzene	100-41-4	106	0.200	0.867	ND	ND		1	WG1577217
4-Ethyltoluene	622-96-8	120	0.200	0.982	0.531 J	2.61 J		1	WG1577217
Trichlorofluoromethane	75-69-4	137.40	0.200	1.12	0.263 J	1.48 J		1	WG1577217
Dichlorodifluoromethane	75-71-8	120.92	0.200	0.989	0.522	2.58		1	WG1577217
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	0.200	1.53	ND	ND		1	WG1577217
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.200	1.40	ND	ND		1	WG1577217
Heptane	142-82-5	100	0.200	0.818	ND	ND		1	WG1577217
Hexachloro-1,3-butadiene	87-68-3	261	0.630	6.73	ND	ND		1	WG1577217
n-Hexane	110-54-3	86.20	0.630	2.22	ND	ND		1	WG1577217
Isopropylbenzene	98-82-8	120.20	0.200	0.983	ND	ND		1	WG1577217
Methylene Chloride	75-09-2	84.90	0.200	0.694	0.335	1.16		1	WG1577217
Methyl Butyl Ketone	591-78-6	100	1.25	5.11	ND	ND		1	WG1577217
2-Butanone (MEK)	78-93-3	72.10	1.25	3.69	ND	ND		1	WG1577217
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	1.25	5.12	ND	ND		1	WG1577217
Methyl methacrylate	80-62-6	100.12	0.200	0.819	ND	ND		1	WG1577217
MTBE	1634-04-4	88.10	0.200	0.721	ND	ND		1	WG1577217
Naphthalene	91-20-3	128	0.630	3.30	ND	ND		1	WG1577217
2-Propanol	67-63-0	60.10	1.25	3.07	ND UJ	ND UJ		1	WG1577217
Propene	115-07-1	42.10	0.400	0.689	ND UJ	ND UJ		1	WG1577217
Styrene	100-42-5	104	0.200	0.851	ND	ND		1	WG1577217
1,1,2,2-Tetrachloroethane	79-34-5	168	0.200	1.37	ND	ND		1	WG1577217
Tetrachloroethylene	127-18-4	166	0.200	1.36	2.18 J	14.8 J		1	WG1577217
Tetrahydrofuran	109-99-9	72.10	0.200	0.590	0.323	0.952		1	WG1577217
Toluene	108-88-3	92.10	0.500	1.88	0.538	2.03		1	WG1577217
1,2,4-Trichlorobenzene	120-82-1	181	0.630	4.66	ND	ND		1	WG1577217

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SAMPLE RESULTS - 05

L1285029

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
1,1,1-Trichloroethane	71-55-6	133	0.200	1.09	ND	ND		1	WG1577217
1,1,2-Trichloroethane	79-00-5	133	0.200	1.09	ND	ND		1	WG1577217
Trichloroethylene	79-01-6	131	0.200	1.07	ND	ND		1	WG1577217
1,2,4-Trimethylbenzene	95-63-6	120	0.200	0.982	2.14 J	10.5 J		1	WG1577217
1,3,5-Trimethylbenzene	108-67-8	120	0.200	0.982	0.431 J	2.12 J		1	WG1577217
2,2,4-Trimethylpentane	540-84-1	114.22	0.200	0.934	0.559 J	2.61 J		1	WG1577217
Vinyl chloride	75-01-4	62.50	0.200	0.511	ND	ND		1	WG1577217
Vinyl Bromide	593-60-2	106.95	0.200	0.875	ND	ND		1	WG1577217
Vinyl acetate	108-05-4	86.10	0.200	0.704	ND	ND		1	WG1577217
m&p-Xylene	1330-20-7	106	0.400	1.73	ND	ND		1	WG1577217
o-Xylene	95-47-6	106	0.200	0.867	ND	ND		1	WG1577217
(S) 1,4-Bromofluorobenzene	*460-00-4*	*175*	*60.0-140*		*91.6*				WG1577217

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SAMPLE RESULTS - 08

L1285029

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
Acetone	67-64-1	58.10	1.25	2.97	7.57 J	18.0 J		1	WG1577217
Allyl chloride	107-05-1	76.53	0.200	0.626	ND	ND		1	WG1577217
Benzene	71-43-2	78.10	0.200	0.639	0.256	0.818		1	WG1577217
Benzyl Chloride	100-44-7	127	0.200	1.04	ND	ND		1	WG1577217
Bromodichloromethane	75-27-4	164	0.200	1.34	ND	ND		1	WG1577217
Bromoform	75-25-2	253	0.600	6.21	ND	ND		1	WG1577217
Bromomethane	74-83-9	94.90	0.200	0.776	ND	ND		1	WG1577217
1,3-Butadiene	106-99-0	54.10	2.00	4.43	ND	ND		1	WG1577217
Carbon disulfide	75-15-0	76.10	0.200	0.622	1.43 J	4.45 J		1	WG1577217
Carbon tetrachloride	56-23-5	154	0.200	1.26	ND	ND		1	WG1577217
Chlorobenzene	108-90-7	113	0.200	0.924	ND	ND		1	WG1577217
Chloroethane	75-00-3	64.50	0.200	0.528	ND	ND		1	WG1577217
Chloroform	67-66-3	119	0.200	0.973	ND	ND		1	WG1577217
Chloromethane	74-87-3	50.50	0.200	0.413	0.419 J	0.865 J		1	WG1577217
2-Chlorotoluene	95-49-8	126	0.200	1.03	ND	ND		1	WG1577217
Cyclohexane	110-82-7	84.20	0.200	0.689	ND	ND		1	WG1577217
Dibromochloromethane	124-48-1	208	0.200	1.70	ND	ND		1	WG1577217
1,2-Dibromoethane	106-93-4	188	0.200	1.54	ND	ND		1	WG1577217
1,2-Dichlorobenzene	95-50-1	147	0.200	1.20	ND	ND		1	WG1577217
1,3-Dichlorobenzene	541-73-1	147	0.200	1.20	ND	ND		1	WG1577217
1,4-Dichlorobenzene	106-46-7	147	0.200	1.20	ND	ND		1	WG1577217
1,2-Dichloroethane	107-06-2	99	0.200	0.810	ND	ND		1	WG1577217
1,1-Dichloroethane	75-34-3	98	0.200	0.802	ND	ND		1	WG1577217
1,1-Dichloroethene	75-35-4	96.90	0.200	0.793	ND	ND		1	WG1577217
cis-1,2-Dichloroethene	156-59-2	96.90	0.200	0.793	ND	ND		1	WG1577217
trans-1,2-Dichloroethene	156-60-5	96.90	0.200	0.793	ND	ND		1	WG1577217
1,2-Dichloropropane	78-87-5	113	0.200	0.924	ND	ND		1	WG1577217
cis-1,3-Dichloropropene	10061-01-5	111	0.200	0.908	ND	ND		1	WG1577217
trans-1,3-Dichloropropene	10061-02-6	111	0.200	0.908	ND	ND		1	WG1577217
1,4-Dioxane	123-91-1	88.10	0.200	0.721	0.219	0.789		1	WG1577217
Ethanol	64-17-5	46.10	0.630	1.19	46.4 J	87.5 J		1	WG1577217
Ethylbenzene	100-41-4	106	0.200	0.867	ND	ND		1	WG1577217
4-Ethyltoluene	622-96-8	120	0.200	0.982	0.385 J	1.89 J		1	WG1577217
Trichlorofluoromethane	75-69-4	137.40	0.200	1.12	0.414 J	2.33 J		1	WG1577217
Dichlorodifluoromethane	75-71-8	120.92	0.200	0.989	0.521	2.58		1	WG1577217
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	0.200	1.53	ND	ND		1	WG1577217
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.200	1.40	ND	ND		1	WG1577217
Heptane	142-82-5	100	0.200	0.818	ND	ND		1	WG1577217
Hexachloro-1,3-butadiene	87-68-3	261	0.630	6.73	ND	ND		1	WG1577217
n-Hexane	110-54-3	86.20	0.630	2.22	ND	ND		1	WG1577217
Isopropylbenzene	98-82-8	120.20	0.200	0.983	ND	ND		1	WG1577217
Methylene Chloride	75-09-2	84.90	0.200	0.694	0.440	1.53		1	WG1577217
Methyl Butyl Ketone	591-78-6	100	1.25	5.11	ND	ND		1	WG1577217
2-Butanone (MEK)	78-93-3	72.10	1.25	3.69	ND	ND		1	WG1577217
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	1.25	5.12	ND	ND		1	WG1577217
Methyl methacrylate	80-62-6	100.12	0.200	0.819	ND	ND		1	WG1577217
MTBE	1634-04-4	88.10	0.200	0.721	ND	ND		1	WG1577217
Naphthalene	91-20-3	128	0.630	3.30	ND	ND		1	WG1577217
2-Propanol	67-63-0	60.10	1.25	3.07	3.30 J	8.11 J		1	WG1577217
Propene	115-07-1	42.10	0.400	0.689	0.917 J	1.58 J	~~B~~	1	WG1577217
Styrene	100-42-5	104	0.200	0.851	ND	ND		1	WG1577217
1,1,2,2-Tetrachloroethane	79-34-5	168	0.200	1.37	ND	ND		1	WG1577217
Tetrachloroethylene	127-18-4	166	0.200	1.36	7.95 J	54.0 J		1	WG1577217
Tetrahydrofuran	109-99-9	72.10	0.200	0.590	0.240	0.708		1	WG1577217
Toluene	108-88-3	92.10	0.500	1.88	0.554	2.09		1	WG1577217
1,2,4-Trichlorobenzene	120-82-1	181	0.630	4.66	ND	ND		1	WG1577217

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SAMPLE RESULTS - 08

L1285029

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
1,1,1-Trichloroethane	71-55-6	133	0.200	1.09	ND	ND		1	WG1577217
1,1,2-Trichloroethane	79-00-5	133	0.200	1.09	ND	ND		1	WG1577217
Trichloroethylene	79-01-6	131	0.200	1.07	ND	ND		1	WG1577217
1,2,4-Trimethylbenzene	95-63-6	120	0.200	0.982	1.30 J	6.38 J		1	WG1577217
1,3,5-Trimethylbenzene	108-67-8	120	0.200	0.982	0.303 J	1.49 J		1	WG1577217
2,2,4-Trimethylpentane	540-84-1	114.22	0.200	0.934	0.364 J	1.70 J		1	WG1577217
Vinyl chloride	75-01-4	62.50	0.200	0.511	ND	ND		1	WG1577217
Vinyl Bromide	593-60-2	106.95	0.200	0.875	ND	ND		1	WG1577217
Vinyl acetate	108-05-4	86.10	0.200	0.704	ND	ND		1	WG1577217
m&p-Xylene	1330-20-7	106	0.400	1.73	ND	ND		1	WG1577217
o-Xylene	95-47-6	106	0.200	0.867	ND	ND		1	WG1577217
(S) 1,4-Bromofluorobenzene	*460-00-4*	*175*	*60.0-140*		*94.2*				WG1577217

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